Appendix J
Long-Term Water Quality Monitoring Plan

Troy Mine
Long-Term Water Quality Monitoring Plan
January 17, 2012

Contents

Section 1 Introduction 1-1

Section 2 Surface Water Monitoring.....2-1

Section 3 Groundwater Monitoring.....3-1

Section 4 Seep and Spring Monitoring 4-1

Section 5 References 5-1

Figures

Figure 2-1 Surface water, spring, and seep monitoring site locations 2-2

Figure 3-1 Groundwater monitoring locations.....3-2

Tables

Table 2-1 Surface Water Monitoring Sites and Schedule 2-1

Table 2-2 Analytical Parameters for Water Samples.....2-3

Table 3-1 Groundwater Monitoring Sites and Schedule 3-2

Table 3-2 Analytical Parameters for Monitored Natural Attenuation (MNA).....3-3

Table 4-1 Seep and Spring Monitoring Sites and Schedule.....4-1

Section 1
INTRODUCTION

This proposed template for the Troy Mine Long-Term Water Quality Monitoring Plan is prepared to accompany the Environmental Impact Statement (EIS) being prepared for reclamation of the Troy Mine. Its purpose is to clarify what water quality monitoring is expected to be performed at the mine after the mine is closed, and to detail the expected locations of surface and groundwater stations and wells as well as the parameters to be sampled and the expected sampling frequency. At the time of closure, the Department of Environmental Quality and the USDA Forest Service expect that a final Long-Term Water Quality Monitoring Plan, prepared by the mine and approved by the Agencies, will reflect knowledge of the site current at that time and it may, therefore, differ from this document. It is also expected that the final document will contain additional detail such as standard operating procedures, quality assurance procedures, data reporting requirements, data validation procedures, and analytical methods.

The long-term water quality monitoring identified in this document is derived from the current operational monitoring procedures at the Troy Mine, including additional requirements which are detailed in the Agency Mitigated Alternative of the Troy Mine Revised Reclamation Plan EIS, and Monitored Natural Attenuation (MNA). Sampling locations are shown on attached maps and monitoring frequency and parameter lists are presented in the text. The extent of water quality monitoring includes surface water, groundwater, and seeps and springs. Provision is also made in this plan to expand the seeps and springs monitoring should additional springs or seeps be discovered post-closure.

MNA is included in this monitoring plan to evaluate the effectiveness of the geologic materials beneath the decant ponds for attenuation of metals and nutrients in the mine discharge water. Procedures for monitoring natural attenuation are taken from EPA guidance (EPA 2007). The MNA program accounts for site heterogeneity and variations in seasonal mine water discharge, groundwater levels, and biological activity. Five wells in the area of the decant ponds as well as the decant ponds will be monitored three times per year for additional parameters that allow complete assessment of natural attenuation mechanisms. In addition to monitoring of water chemistry, the MNA program would include monitoring of the rate of accumulation of sediment and organic material within the decant ponds, initially at an annual frequency. Redox conditions within this sediment would also be documented.

Section 2
Surface Water Monitoring

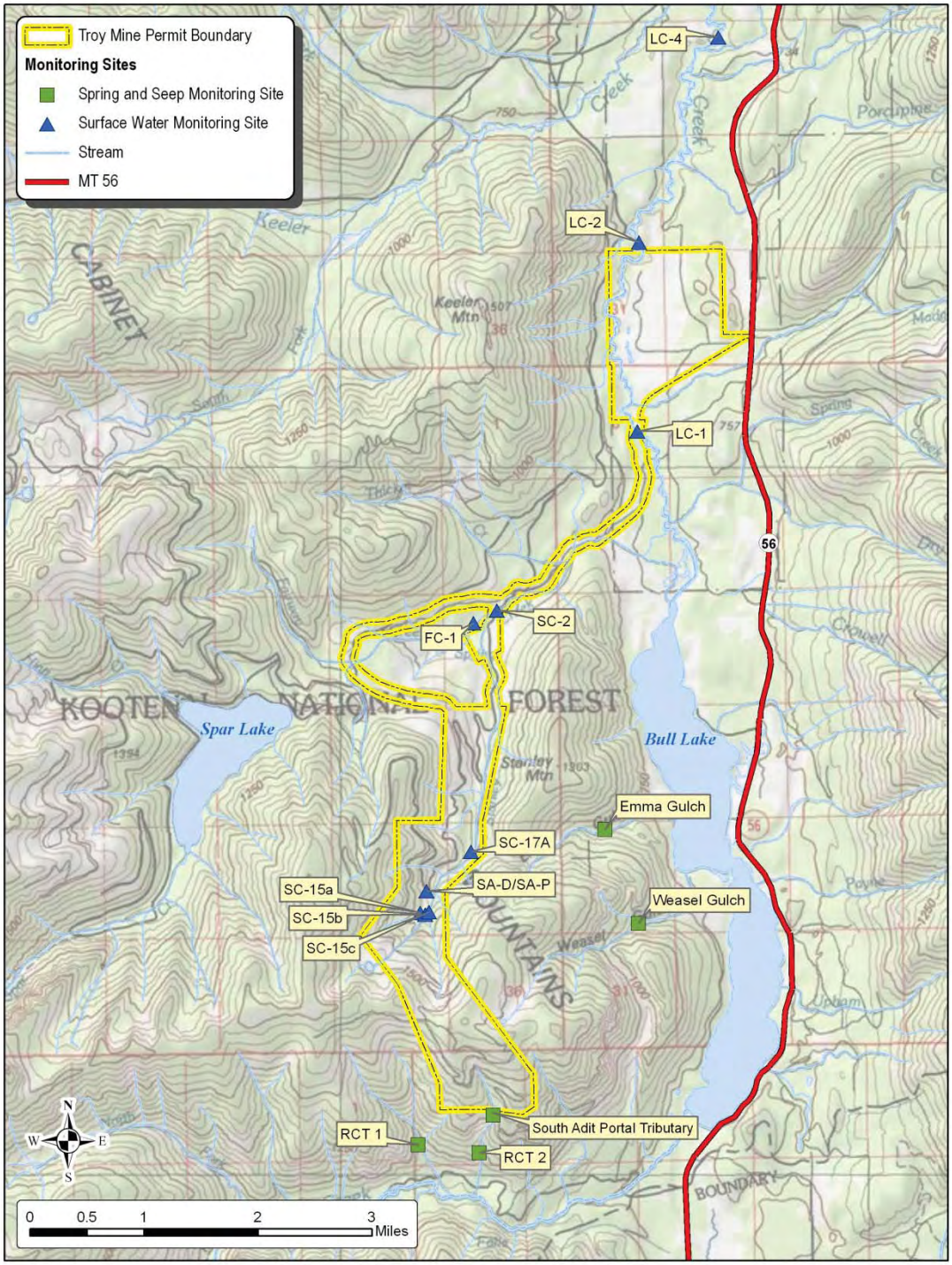
Surface water monitoring of Lake Creek has been conducted since 1979 and monitoring of Stanley and Fairway creeks has been conducted since 1986. The program included bioassay testing, macroinvertebrate monitoring, and water quality and flow monitoring three times per year (Genesis 2006, Appendix F, page 5). Water quality monitoring is described in this plan, whereas bioassay testing and macroinvertebrate testing are described in the *Comprehensive Water Quality Monitoring Program for Streams Adjacent to Asarco's Troy*, *Montana*, *Unit* (Parametrix 2000a, 2000b).

The Proposed Action detailed that all three sites at SC-15 (SC-15A, SC-15B, and SC15-C) be sampled bringing the total number of surface water sites to be sampled to nine. The water quality monitoring stations listed in **Table 2-1** would continue to be sampled post-reclamation for flow and water quality three times per year for at least five years after discharge of mine water commences. Monitoring would continue until the Agencies agree that monitoring is no longer necessary (Genesis 2006, Appendix F, pages 5-6). Sampling locations are shown on **Figure 2-1**.

Table 2-1. Surface Water Monitoring Sites and Schedule

Monitoring Site	Monitoring Parameters	Monitoring Frequency
Lake Creek		
LC-1	Quality and flow	Spring, summer, fall
LC-2	Quality and flow	Spring, summer, fall
LC-4	Quality and flow	Spring, summer, fall
Fairway Creek		
FC-1	Quality	Spring, summer, fall
Stanley Creek		
SC-2	Quality and flow	Spring, summer, fall
SC-15A	Quality and flow	Spring, summer, fall
SC-15B	Quality and flow	Spring, summer, fall
SC-15C	Quality and flow	Spring, summer, fall
SC-17A	Quality and flow	Spring, summer, fall

Analytical parameters for all water samples collected at the Troy Mine site are listed in **Table 2-2**.



Z:\gis\Public\Troy\MXD\SW_Seep_MonitoringSites.mxd

Figure 2-1. Surface water, spring, and seep monitoring site locations.

Table 2-2. Analytical Parameters for Water Samples.

Common Ions	***Field Parameters***
Sulfate	Temperature (°C)
Chloride	
Carbonate	***Miscellaneous Parameters***
Bicarbonate	pH
Total Alkalinity as $CaCO_3$	Total Suspended Solids (TSS)
Sodium	Total Dissolved Solids (TDS)
Magnesium	
Potassium	***Trace Metals***
Total Hardness as $CaCO_3$	Antimony (Sb) (0.003 mg/L)
	Arsenic (As) (0.003 mg/L)
Nutrients	Cadmium (Cd) (0.00008 mg/L)
Ammonia (0.05 mg/L)	Copper (Cu) (0.001 mg/L)
Nitrate + Nitrite (0.01 mg/L)	Iron (Fe) (0.05 mg/L)
Total Phosphorus as P (0.001 mg/L)	Lead (Pb) (0.0005 mg/L)
	Manganese (Mn) (0.005 mg/L)
	Zinc (Zn) (0.01 mg/L)

Notes: 1. DEQ Water Quality Bureau Circular DEQ-7 (August 2010) Required Reporting Value (RRV) for trace metals are shown in parentheses. All metal analyses must meet the current effective DEQ-7 RRVs.

2. Metals in surface water samples are analyzed for dissolved and total recoverable constituents. Metals in groundwater samples are analyzed for dissolved constituents.

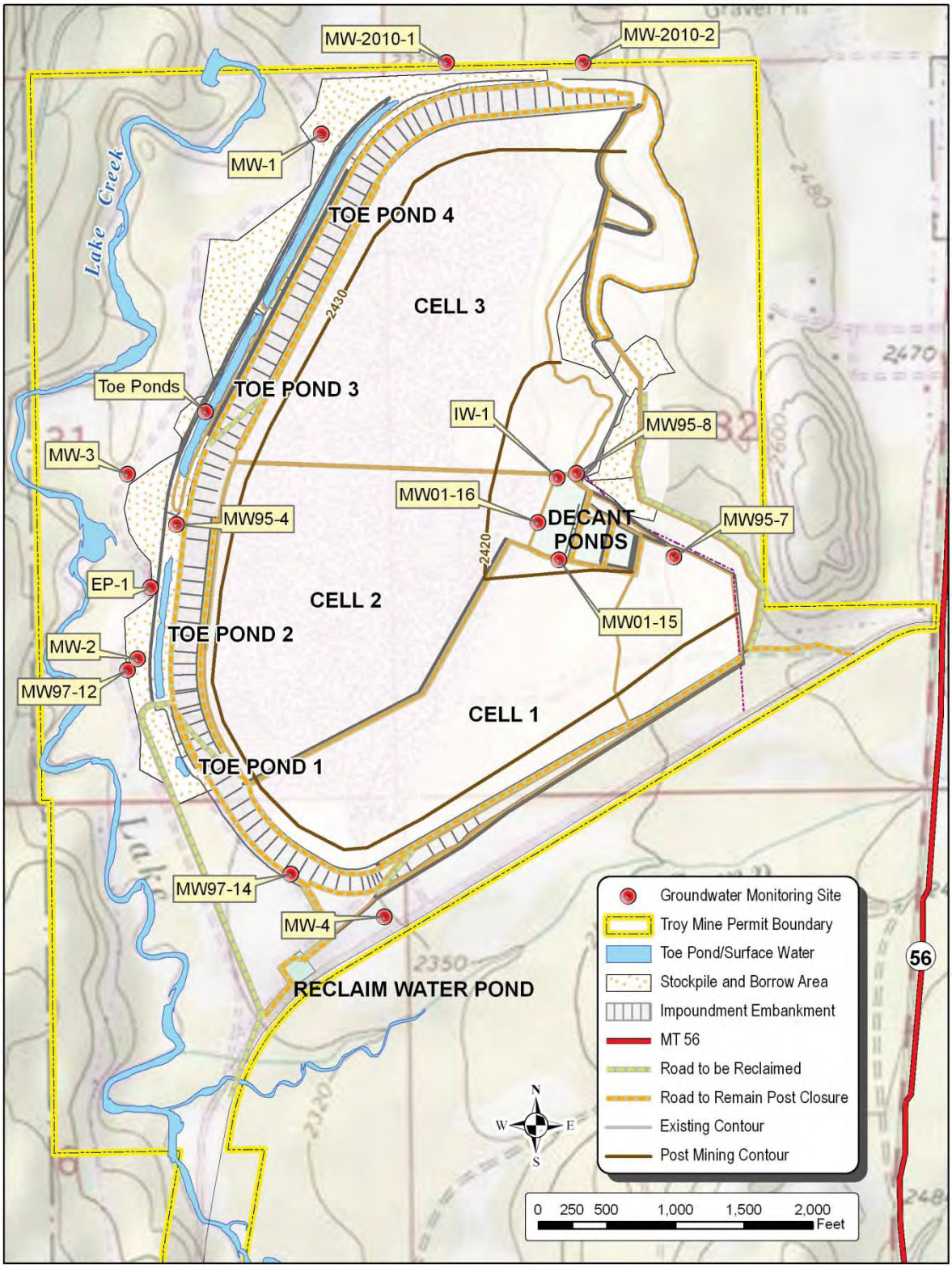
Section 3
Groundwater Monitoring

Groundwater has been monitored during operations at wells and surface expressions primarily in the vicinity of the tailings pond. These same locations would be monitored after mine discharge begins for a minimum of five years. Monitoring would continue until the Agencies agree that monitoring is no longer necessary (Genesis 2006, Appendix F, pages 5-6). **Table 3-1** lists the mine site monitoring locations and the frequency of sampling for locations in the vicinity of the tailings pond. **Figure 3-1** shows the location of these sampling points. Sampling parameters for these locations are listed in **Table 2-2**.

Table 3-1. Groundwater Monitoring Sites and Schedule.

Monitoring Site	Monitoring Parameter	Monitoring Frequency
MW-1	Water level and quality	Annually
MW-2	Water level and quality	Annually
MW-3	Water level and quality	Annually
MW-4	Water level and quality	Annually
IW-1	Water level and quality (MNA)	Annually
Toe Pond 2	Water level and quality	Quarterly
Toe Pond 3	Water level and quality	Quarterly
Toe Pond 4	Water level and quality	Quarterly
Decant Ponds	Water level and quality (MNA)	Quarterly
EP-1	Water level and quality	Quarterly
MW-95-4	Water level and quality	Spring, summer, fall
MW-95-7	Water level and quality (MNA)	Spring, summer, fall
MW-95-8	Water level and quality (MNA)	Spring, summer, fall
MW-97-12	Water level and quality	Spring, summer, fall
MW-97-14	Water level and quality	Spring, summer, fall
MW-01-15	Water level and quality (MNA)	Spring, summer, fall
MW-01-16	Water level and quality (MNA)	Spring, summer, fall
MW-2010-1	Water level and quality	Spring, summer, fall
MW-2010-2	Water level and quality	Spring, summer, fall

Note: (MNA) - Monitoring for parameters in Table 3-2 required in addition to Table 2-2 parameters.



Z:\gis\Public\Troy\MXD\GW_MonitoringSites.mxd

Figure 3-1. Groundwater monitoring locations.

Most groundwater monitoring sites in the vicinity of the tailings pond are monitoring wells although there is one irrigation well (IW-1) that is sampled. Four toe ponds were installed in 1983 on the downgradient side of the tailings embankment to contain storm water runoff (Genesis 2006, page 7-10) and also capture seepage from the tailings impoundment. The three northern toe ponds usually contain standing water, but the southernmost toe pond is typically dry. A sump and pumping system is currently used to capture groundwater that emerges downhill from the toe ponds. During operations, water is continuously pumped from the sump (site EP-1) to toe pond #2 to prevent downgradient migration of nitrate. The decant ponds will continue to be used for disposal of mine water after mine closure. Sampling of the decant ponds will provide information on the quality of mine discharge before treatment.

The parameter list for five wells and the decant ponds has been expanded to included parameters critical to evaluation of MNA. The five wells and the decant ponds will be monitored for the additional parameters listed in **Table 3-2** as well as those in **Table 2-2**.

Table 3-2. Analytical Parameters for Monitored Natural Attenuation (MNA).

Field Parameters	*Laboratory Parameters*
pH	Ferrous/Ferric Iron
Eh/ORP	Dissolved Silica
Dissolved Oxygen	Dissolved Organic Carbon

ORP = Oxidation Reduction Potential

Section 4
Spring and Seep Monitoring

The farthest upgradient expressions of groundwater are in drainages around the mine and were chosen to monitor changes in the quality of groundwater discharging to these drainages (Genesis 2006, Appendix F, page 2). In coordination with the Agencies, Troy Mine has also monitored groundwater in a tributary below the South Adit portal to evaluate effects on groundwater seepage as the mine floods. These monitoring sites would continue to be evaluated to determine potential mine water influence on surface and groundwater. Post-closure water quality monitoring of seeps and springs would verify whether state water quality standards are met. The monitoring schedule for springs and seeps is presented in **Table 4-1**, and the monitoring parameters are the same as for surface water (**Table 2-2**). The sampling locations are shown in **Figure 2-1.**

Table 4-1. Seep and Spring Monitoring Sites and Schedule.

Monitoring Site	Monitoring Parameter	Monitoring Frequency
Ross Ck RCT 1	Quality and flow	Annually – during low flow
Ross Ck RCT 2	Quality and flow	Annually – during low flow
South Adit Portal tributary	Quality and flow	Annually – during low flow
Emma Gulch	Quality and flow	Annually – during low flow
Weasel Gulch	Quality and flow	Annually – during low flow

Section 5
References

Environmental Protection Agency. 2007. Monitored Natural Attenuation of Inorganic Contaminants in Ground Water, Volume 1 – Technical Basis for Assessment. EPA/600/R-07/139, October 2007. http://www.epa.gov/nrmrl/pubs/600R07139/600R07139.pdf.

Genesis, Inc. 2006. Genesis Incorporated Troy Mine Revised Reclamation Plan. March 2006.

Parametrix, 2000a. Final Draft Annual Report – Year Fifteen. Comprehensive Water Quality Monitoring Program for Streams Adjacent to Asarco's Troy, Montana, Unit. October, 2000.

Parametrix, 2000b. Recommendations to Modify the Surface Water Quality Monitoring Program for Streams Adjacent to Genesis' Troy, Montana, Unit. September 2000.

Appendix K
Draft EIS Comment Summary and Responses

Due to the volume of comments received on the Draft EIS, comments are summarized below. The following tables identify each commenter and which topic areas the comments address. The general topic or resource area is identified across the top and the sub comment is identified within the table. The comment responses are organized in the same manner. For example, under the column heading General comments "A", subcomment "5" would be found in the first section of the comment responses under Comment A5. Table 1 lists agency and elected official comments and the official comments of organizations. Table 2 lists individual comments.

Table 1. Agency, elected official, organization comments

First Name	Last Name	Organization	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Robert	Stewart	Department of the Interior	2011-06-24 StewartR_DOI											
Julia	DalSoglio	Environmental Protection Agency	2011-06-29 DalsoglioJ_EPA		A-EPA 1			A-EPA #1-21				A-EPA 1		A-EPA 1
James	Mayo	Lincoln County Port Authority	2011-08-01 JMayoLincolnCoPortAuthority		1	4		1, 2, 3			1, 2	1		
Marianne	Roose	Lincoln County Commissioners	2011-08-03 LincolnCoCommissioners		1, 2			1, 2, 3			1, 2, 3	1		
Tonya	Chilton Radandt	Montana Fish Wildlife and Parks	2011-08-04 Chilton-Radandt_FWP											A-FWP-CR #1-4
Chas	Vincent	Lincoln County Delegation	2011-08-05 BennetG_CuffeM_and_VincentC		A-LCD 1			A-LCD #1-2	A-LCD 1		A-LCD 1	A-LCD 1		A-LCD 1
T.O.	Smith	Montana Fish, Wildlife & Parks	2011-08-05 SmithTO_FWP				A-FWP-							

First Name	Last Name	Organization	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
							S #1-3							
Howard	Bakke	Cabinet Resource Group	2011-08-05 BakkeH_and_MartinB_CRG		CRG 1-3			CRG 1-11			CRG 1	CRG 1		
Douglas	Miller	Troy Mine, Inc.	2011-07-26 TroyMineRevettCommentsDEIS	TMI 1-3	TMI 1-6	TMI 1		TMI 1-6			TMI 1-2	TMI 1		

Table 2. Individual Comments

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Bob	Bernhart	2011-06-07 BernhartB					1			3			1
Issac	Erickson	2011-06-07 EricksonI					1, 2, 7		3				2
Earlene	Jellesed	2011-06-07 JellesedE					1			1			1
Steve	Lloyd	2011-06-08 LloydS		1			1			1, 3	1		
Howard	Morkert	2011-06-08 MorkertH							2				
Jill	Blomdahl	2011-06-09 BlomdahlJ							3	2			
Soraya	Garcia	2011-06-09 GarciaS					2						

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Cary	Brus	2011-06-12 BrusC	5	3			2, 4, 6, 9	1	1	1, 3, 4	1	1	
Tim	Brus	2011-06-12 BrusT					1, 7						
Hank	Bailey	2011-06-13 BaileyH	5				2, 4, 6, 9	1	1	1, 3, 4	1	1	
Howard	Bakke	2011-06-13 BakkeH_CRG	1										
Kim	DeVore	2011-06-13 DeVoreK_a					1		3				
Kim	DeVore	2011-06-13 DeVoreK_b	5	3			2, 4, 6, 9	1	1	1, 3, 4	1	1	
Debbie	Lyman	2011-06-13 LymanDe	1										
Bill	Thompson	2011-06-13 ThompsonB	5	3			2, 4, 6, 9	1	1	1, 3, 4	1	1	
Tom	Swanson	2011-06-14 SwansonT	5						1, 2				
Ron	Waeckerlin	2011-06-14 WaekerlinR	5										
Dave	Lyman	2011-06-15 LymanDa	1										
Dave	Ballard	2011-06-16 BallardD	5						2				
Phil	Hough	2011-06-17 HoughP_FSPW	1										
Larry	Coryell	2011-06-21 CoryellL		1, 5			5			5	1		
Sam	Ziegler	2011-06-22 ZieglerS					1, 2, 7		3				
Patti	Vincent	2011-06-23 VincentP					1, 2, 7		3				
George	Byers	2011-06-24 ByersG					1, 7		1, 3				
Cort	Freeman	2011-06-24 FreemanC					1, 3				1		
Martin	Johnson	2011-06-24 JohnsonM					1, 7						
Nancy	Schlepp	2011-06-24 SchleppN								1, 2			1
Barry	Stang	2011-06-24 StangB					1, 7						
Eric	Williams	2011-06-24 WilliamsE		1			1			1	1		
Holly	Harper	2011-06-25 HarperH								1, 2			1

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Steve	McCall	2011-06-25 McCallS					1			1			1
Dave	Shorten	2011-06-25 ShortenD	5				1				1		
Timothy	Ware	2011-06-25 WareT					1, 2, 7		3				
Ralph	Yant	2011-06-25 YantR							3	2			
Frank	Blair	2011-06-27 BlairF					1						
Clint	Chapman	2011-06-27 ChapmanC							3	2			
Mark	Compton	2011-06-27 ComptonM					1		3				
Joseph	Dillon	2011-06-27 DillonJ	5										
James	Ebisch	2011-06-27 EbischJ					1, 2			1			1
Tom	Harrington	2011-06-27 HarringtonT_JLDC		1			1			2	1		
Paul	Kaplan	2011-06-27 KaplanP											
Keith	Larsen	2011-06-27 LarsenK		2			1, 7						
Jerry	Laughery	2011-06-27 LaugheryJ					1, 2, 7		3				
Tom	Lewis	2011-06-27 LewisT					1, 2, 7		3				
Kevin	McClelland	2011-06-27 McClellandK					1						
Scott	Mendenhall	2011-06-27 MendenhallS		1, 2			1, 2			1, 2, 3			1
Michael	Mullaney	2011-06-27 MullaneyM					1, 2, 7			2			1
Patricia	Nelson	2011-06-27 NelsonP					1, 7						
James	Rasmussen	2011-06-27 RasmussenJ					1		3				
Tracy	Stevenson	2011-06-27 StevensonT					7		1, 3				
Gail	Stevers	2011-06-27 SteversG					1, 2, 7			2			1
Scott	Viegut	2011-06-27 ViegutS					1		3				
Taylor	Walt	2011-06-27 WaltT					7		1, 3				

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
David	Watson	2011-06-27 WatsonDa					1, 2, 7		3				
Douglas	Watson	2011-06-27 WatsonDo		1	4		2, 3			1, 2	1		
John	Welsh	2011-06-27 WelshJ											
David	Axe	2011-06-28 AxeD				1	7		3				1
Arlyne	Beito	2011-06-28 BeitoA		1			1			3	1		1
Josh	Brothers	2011-06-28 BrothersJ					7		1, 3				
Doris	Brown	2011-06-28 BrownD					7		1, 3				
William	Cohan	2011-06-28 CohanW		2			1, 7						
Steve & Ruth	Endicott	2011-06-28 EndicottSandR							2				
Dennis	Facer	2011-06-28 FacerD					1			3			1
Louis	Hill	2011-06-28 HillL		1			1			1	1		
Stephen	Langedyke	2011-06-28 LangdykeS					1, 2, 7		3				
Tara	Mastel	2011-06-28 MastelT_JLDC											
Roberta	McCanse	2011-06-28 McCanseR		1			6, 8, 10			2, 3	3	2	
Dwight	Morris	2011-06-28 MorrisD					1, 2, 7			2			1
Bert	Nicholl	2011-06-28 NichollB								1, 2			1
Lenny	Pauley	2011-06-28 PauleyL					1		1	3			1
Carol	Perry	2011-06-28 PerryC								1, 2			1
Charles	Pickering	2011-06-28 PickeringC							1, 3	2			
Nicholas	Ross	2011-06-28 RossN					1, 2, 7		3				
Brady	Selle	2011-06-28 SelleB		1									
Reinnis	Sipols	2011-06-28 SipolsR					1		3				
Jim	Stoor	2011-06-28 StoorJ	5				1, 2, 7		3				
Chester	Stryker	2011-06-28 StrykerC					1, 2, 7		3				

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Jon	Weisenbach	2011-06-28 WeisenbachJ					1			1			1
Ken	Ahern	2011-06-29 AhearnK	5				1				1		
Lori	Bowe	2011-06-29 BoweL		1			2				1		
Jim	Hammons	2011-06-29 HammonsJ					1						
Hank	Hartung	2011-06-29 HartungH					7		1, 3				
Karyn	Holcomb	2011-06-29 HolcombK	5				1				1		
Jay	Matthews	2011-06-29 MatthewsJ	5				1				1		
Bob	Moore	2011-06-29 MooreB								1, 2			1
Fred	Watson	2011-06-29 WatsonF					1, 2, 7		3				2
Brian	Wilkins	2011-06-29 WilkinsB					1			3			1
Larry	Bowman	2011-06-30 BowmanL							1				
Mark	Briggs	2011-06-30 BriggsM		1			1			1	1		
Bud	Chewning	2011-06-30 ChewningB					1, 7						
George	Clements	2011-06-30 ClementsG					1, 2, 7			2			1
Robert	Clough	2011-06-30 CloughR					2				1, 2		
Stanley	Davis	2011-06-30 DavisS	1										
Al	Dibble	2011-06-30 DibbleA	5				1		1		1		
Tim	Dimock	2011-06-30 DimockT					2				1, 2		
Lavada	Erickson	2011-06-30 EricksonL		1			1			1	1		
Rick	Henderson	2011-06-30 HendersonR					1, 2, 7		3				
Bernard	Hurd	2011-06-30 HurdB											
Sheri	Keehn	2011-06-30 KeehnS					2				1, 2		
Julie	Kendall	2011-06-30 KendallJ					1, 7						
Rudy	Ketchum	2011-06-30 KetchumR	5				1				1		
Vanessa	Lanz	2011-06-30 LanzV					1						

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Sharon	Lingel	2011-06-30 LingelS					1			1			1
Harry	Moe	2011-06-30 MoeH							3	2			
Mike	Moodry	2011-06-30 MoodryM					1			3			1
Clint	Mortensen	2011-06-30 MortensenC		1			1			1	1		
Carol	Oedewaldt	2011-06-30 OedewaldtC					7		1, 3				
Michael	Owens	2011-06-30 OwensM_and_AndersonM											
Tom	Phillips	2011-06-30 PhillipsT					1				1, 2		
Steve	Rebo	2011-06-30 ReboS							3	2			
Darrell	Scharf	2011-06-30 ScharfD					7		3				
Judy	Seeman	2011-06-30 SeemanJ	5				1				1		
Frank	Sholey	2011-06-30 SholeyF					1						
Seth	Slatter	2011-06-30 SlatterS					1, 2, 7		3				2
Kelly	Stolp	2011-06-30 StolpK	5				1				1		
Mark	Thompson	2011-06-30 ThompsonM		1			1			1	1		
Ron	Tuohimaa	2011-06-30 TuohimaaR							3				
Fred	Wesley	2011-06-30 WesleyF	5				1				1		
Steven	Erickson	2011-07-01 EricksonS	5				1				1		
Lacie	Farmer	2011-07-01 FarmerL					1				1		
Dan	Freebury	2011-07-01 FreeburyD					7		1, 3				
Milo	Haugen	2011-07-01 HaugenM		1			1			1	1		
Ralph	Heinert	2011-07-01 HeinertR		1			7		3				
James	McGlasson	2011-07-01 McGlassonJ											
Laura	McGlasson	2011-07-01 McGlassonL											

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Joe	Nicholls	2011-07-01 NichollsJ					2				1, 2		
Timothy	Oman	2011-07-01 OmanT								1, 2			1
Steve	Schwab	2011-07-01 SchwabS					1, 2, 7			2			1
Kerry	Weightman	2011-07-01 WeightmanK					1, 7						
Donald	Bennett	2011-07-02 BennettD								1, 2			1
Garman	Guthrie	2011-07-02 GuthrieG					7		1, 3				
E. Dianne	Habeck	2011-07-02 HabeckD		1			1			1	1		
Connor	James	2011-07-02 JamesC					1, 7						
John	McMenamin	2011-07-02 McMenaminJ								1, 2			1
Chuck	Riley	2011-07-02 RileyC					1, 2, 7		3				
Colleen	Snyder	2011-07-02 SnyderC							3	2			
Dan	Snyder	2011-07-02 SnyderD					1			1			1
JoAnn	Spell	2011-07-02 SpellJ	5				1				1		
Ronald	Spell	2011-07-02 SpellR					1, 7						
Nancee	Tallmadge	2011-07-02 TallmadgeN					1			3			1
Chris	Hesse	2011-07-03 HesseC											
Barry	Bruland	2011-07-04 BrulandB	5	1			1		3		1		
Renee	Guisewite	2011-07-04 GuisewiteR					1, 2, 7		3				
Rusty & Joan	Maynard	2011-07-04 MaynardRandJ					1, 2, 7		3				
Sharon	Rice	2011-07-04 RIceS					1, 2, 7		3				
Tammy	Anderson	2011-07-05 AndersonT	5	1			7		3				
Monty	Carson	2011-07-05 CarsonM					1, 2, 7		3				2
Lawrence	Dolezal	2011-07-05 DolezalL		1			1, 7			1, 2	1		1
Owen	Erickson	2011-07-05 EricksonO		2			1, 2			1, 2, 3	1		
Ed	Hammersch	2011-07-05											

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
	midt	HammerschmidtEandL											
Rich	Johnson	2011-07-05 JohnsonR	5				1				1		
Tom	Jones	2011-07-05 JonesT		2			1, 7						
Dan	Kneller	2011-07-05 KnellerD		2			1, 7						
James	Regh	2011-07-05 ReghJ					1, 2, 7		3				2
Edwina	Smith	2011-07-05 SmithE					1			1	1		
Andrew	Foote	2011-07-06 FooteA							3				
Chris	Hesse	2011-07-06 HesseC											
Elvie	Miller	2011-07-06 MillerE							3	2			
Sharel	Uphus	2011-07-08 UphusS		1			1			1	1		
Marc	McGill	2011-07-12 McGillM				1	7		3				1
Jon	Bennion	2011-07-15 BennionJ_MCC					1, 2, 3, 7		3	1, 2	1		1
Pat	McLeod	2011-07-22 McLeodP		1			12	1		1, 3			
Peter	Lopushok	2011-07-24 LopushokP		1			12, 13	2		1	1, 2		
Randy	Gariglietti	2011-07-26 GariglietiR		1			12, 13			1, 2, 3	1, 2		
Cole	Anderson	2011-07-28 AndersonC					1						
Justin	Beard	2011-07-28 BeardJ					1, 7						
Mark	Boswell	2011-07-28 BoswellM					1, 7						
Derek	Bricker	2011-07-28 BrickerD					1			3			1
Levi	Carlberg	2011-07-28 CarlbergL					1, 2, 7		3				
Ron	Caudill	2011-07-28 CaudillR					1			1			1
Roland	Chambers	2011-07-28 ChambersR					7		1, 3				
Ben	Colgan	2011-07-28 ColganB					1			3			1
Denise	Conner	2011-07-28 ConnerD					1, 7		3				

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Paul	Coon	2011-07-28 CoonP					1, 2, 7		3				
Kirk	Jaynes	2011-07-28 JaynesK		2			1, 7						
Ross	Julson	2011-07-28 JulsonR					2				1, 2		
Kyle	Keller	2011-07-28 KellerK					1			1			1
Cody	Lamey	2011-07-28 LameyC								1, 2			1
Tom	Lampshire	2011-07-28 LampshireT					1		3				
Randy	Leir	2011-07-28 LeirR	5				1				1		
Ole & Rusti	Leivestad	2011-07-28 LeivestadRO	5				13					3	
Kurt	Leverette	2011-07-28 LeveretteK					1, 2, 7		3				2
Dave	Lyman	2011-07-28 LymanDa		1			11, 12, 13			3	1, 2	2	
Debbie	Lyman	2011-07-28 LymanDe		1			11, 12, 13			3	1, 2	2	
Daniel	Mclinden	2011-07-28 McLindenD					1		3				
Ron	Moe	2011-07-28 MoeR					1			1			1
Donald	Pattie	2011-07-28 PattieD					1, 7						
Dean	Petty	2011-07-28 PettyD					1, 2, 7		3				2
Donald	Ratliff	2011-07-28 RatliffD		1			1			1	1		
Joseph	Rose	2011-07-28 RoseJ					1, 7						
Jim	Shaw	2011-07-28 ShawJ					1, 2, 7		3				
Tad	Singbeil	2011-07-28 SingbeilT					1		3				
Rod	Thorstenson	2011-07-28 ThorstensonR					1			1			1
Vaughn	Wallace	2011-07-28 WallaceV					2				1, 2		
Joe	Warner	2011-07-28 WarnerJ					1, 2, 7		3				
Austin	Wilson	2011-07-28 WilsonA					1, 2, 7		3				2
Ben	Wurz	2011-07-28 WurzB					1			3			1

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Gary	Zajanc	2011-07-28 ZajancG					1						
Mitchell	Benson	2011-07-29 BensonM							3	2			
Darby	Boespflug	2011-07-29 BoespflugD				1	7		3				1
Nate	Boespflug	2011-07-29 BoespflugN				1	7		3				1
Justin	Brown	2011-07-29 BrownJ					1, 7						
Matt	Brown	2011-07-29 BrownM	5				1				1		
John	Byrd	2011-07-29 ByrdJ					1, 2, 7		3				
Ward	Davis	2011-07-29 DavisW	5				1				1		
Mark	Dolan	2011-07-29 DolanM				1	7						1
Owen	Erickson	2011-07-29 EricksonO					7		1, 3				
Cory	Farmer	2011-07-29 FarmerC					7		1, 3				
Chris	Foote	2011-07-29 FooteC					1, 2, 7		3				
Stephanie	Fredin	2011-07-29 FredinS		2			1, 7		1				
Chris	Hawthorne	2011-07-29 HawthorneC							3	2			
Mike	Higareda	2011-07-29 HigaredaM					2				1, 2		
Mike	Holcomb	2011-07-29 HolcombM		2			1, 7						
Jeff	Holder	2011-07-29 HolderJ					1		3				
Clint	Jensen	2011-07-29 JensenC	5				1				1		
Matt	Jungst	2011-07-29 JungstM					1, 2, 7		3				2
Kent	Kanzler	2011-07-29 KanzlerK					1			1			1
Kasie	Kim	2011-07-29 KimK					1, 2, 7		3				2
Dan	Koch	2011-07-29 KochD								1, 2			1
Jon	Kyriss	2011-07-29 KyrissJ	5				1				1		
Rod	Lautt	2011-07-29 LauttR	5				1				1		
Charla	Lucibello	2011-07-29 LucibelloC					1		3				

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Margaret	Mack	2011-07-29 MackM		2			1, 7						
Judy	Matott	2011-07-29 MatottJ		1			1		1	1	1		
Ryan	Medlinger	2011-07-29 MedlingerR					1		3				
Johnny	Peek	2011-07-29 PeekJ					1			1			1
Joe	Pepiot	2011-07-29 PepiotJ					7		1, 3				
Kim	Posselt	2011-07-29 PosseltK					1						
Scott	Savage	2011-07-29 SavageS					1, 7						
Michael	Scott	2011-07-29 ScottM	5				1				1		
John	Shaw	2011-07-29 ShawJ	5				1				1		
Michael	Shea	2011-07-29 SheaM											
Danny	Stindt	2011-07-29 StindtD					1		3				
Timothy	Thompson	2011-07-29 ThompsonT		2			1, 7						
Echo	Venn	2011-07-29 VennE					1, 7						
Justin	Venn	2011-07-29 VennJ		2			1, 7						
Brandon	Vincent	2011-07-29 VincentB		1			1			1	1		
Scott	Vincent	2011-07-29 VincentS					1		3				
Vance	Vincent	2011-07-29 VincentV		2			1, 7						
George	Williams	2011-07-29 WilliamsG							3	2			
Patty	Coe	2011-07-30 CoeP					1, 2, 7		3				
Mike	Cuffe	2011-07-30 CuffeM		1			1			1, 2	1		
Diane	Mosley	2011-07-30 MosleyD		1			12, 13			3	1		
Milton	Mosley	2011-07-30 MosleyM		1			12, 13			3	1		
Brian	Sharp	2011-07-30 SharpB								1, 2			1
Ken	Farmer	2011-07-31 FarmerK					1, 2		3				2
Susan	Farmer	2011-07-31 FarmerS					1		3				
Ted	Antonioli	2011-08-01 AntonioliT					1						

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Betti	Hill	2011-08-01 HillB											
Doug	Kary	2011-08-01 KaryD					1, 7						
Steve	Mangold	2011-08-01 MangoldS											
Jeff	Coleman	2011-08-02 ColemanJ				1	7		3				1
Ronald & Kathleen	Cotten	2011-08-02 CottenR_andK		4	2, 3, 5		1, 2, 12, 13			1, 2, 3			
Greg	Garwood	2011-08-02 GarwoodG		2			1, 7						
Donna	Heikkinen	2011-08-02 HeikkinenD					7		1, 3				
William	Inabnit	2011-08-02 InabnitW					7		1, 3				
Mark	Mihelich	2011-08-02 MihelichM					1, 2, 7			2			1
Joe	Moodry	2011-08-02 MoodryJ					7		1, 3				
Harold	Sant	2011-08-02 SantH		2			1, 7						
Bob & Rita	Windom	2011-08-02 WindomB_and_R		2			1, 7						
Bruce	Clark	2011-08-03 ClarkB	TMI 1-3	TMI 2-6	TMI 1		TMI 1-6			TMI 1-2	TMI 1		
Darren	Coldwell	2011-08-03 ColdwellD					1, 7						
Larry	Erickson	2011-08-03 EricksonL		1			1			1, 2	1, 4		1
Derek	Feeback	2011-08-03 FeebackD					1, 4, 7			1	1		
Glenn	Knodle	2011-08-03 KnodleG					1, 4, 7			1	1		
Nancy	Oyer	2011-08-03 OyerN					2				1, 2		
Grace	Rantala	2011-08-03 RantalaG							3	2			
Jennifer	Shearer	2011-08-03 ShearerJ								1, 2			1
Margeaux	Zwang	2011-08-03 ZwangM								1, 2			1
Don	Allen	2011-08-04 AllenD_WETA					7		2				

First Name	Last Name	Comment File Name	A: General	B: Alternatives Definition	C: Air Quality	D: Fish Habitat	E: Hydrology	F: Recreation	G: Socio-economics	H: Reclamation Materials	I: Transportation	J: Vegetation	K: Wildlife
Doug	Ferrell	2011-08-04 FerrellD		1			1				1		
Ernest	Scherzer	2011-08-04 ScherzerE		1			1, 2, 12, 13			1, 2, 3	1		
Dave	Skinner	2011-08-04 SkinnerD		1			1, 2			1, 3			
Mike	Banks	2011-08-05 BanksM					1						
Paul	Glader	2011-08-05 GladerP_Hecla		1, 2			1			1, 2, 3		2	
Cesar	Hernandez	2011-08-05 HernandezC					13						
Phil	Hough	2011-08-05 HoughP_FSPW	3	1			1, 2				1	2, 4	
Robert & Sara Lou	Springer	2011-08-05 SpringerRAndSL	5				13						
		2011-08-18 Nhpkki.pdf											
Colleen	Hinds	2011-08-25 HindsC		1			12, 13			3	1, 2		
Max	Schrader	20110608 Transcript of Testimony								2			
Chas	Vincent	20110608 Transcript of Testimony		2	4		1, 2, 7			1, 2	1		1
Steve	Lloyd	20110608 Transcript of Testimony					1						
Bruce	Vincent	20110608 Transcript of Testimony					1, 2			3, 5			1

Table of Contents

A – General Comments **15**
B – Alternatives Definition **18**
C – Air Quality **24**
D – Fish Habitat **25**
E – Hydrology **26**
F – Recreation **66**
G- Socio-economics **66**
H – Reclamation Materials **67**
I – Transportation **85**
J – Vegetation **91**
K – Wildlife **92**
References **96**

A. General Comments:

Comment A1: Many commenters asked for an extension of the public review and comment period.

Response A1: The Agencies extended the comment period 30 days in response to requests. The ending date for public comment was extended from July 5th to August 5th 2011.

Comment A2: Overall, the need for a new pipeline, reclamation material amendments, or removal of the demolition debris from the site is not supported by the analysis in the Draft EIS.

Response A2: With respect to the need for a new pipeline, please see the response to Comment E1.

With respect to the need for reclamation material amendments, please see the response to Comment H3 and Comment H-TMI-1.

With respect to the need to remove demolition materials from the site, please see the response to Comment B1.

Comment A3: Long-term monitoring for vegetation, noxious weeds, and water quality is needed to address impacts.

*Response A3: For a description of the long-term monitoring plan for vegetation and noxious weeds, please see **Section 2.4.3.2** of the Final EIS.*

*For a description of the long-term monitoring plan for water quality, please see **Section 2.4.3.1** of the Final EIS – Surface Water Quality and Long-Term Monitoring of Water Quality and the response to Comment E-A-EPA 6.*

Comment A4: The disturbance of vegetation, soil, and habitats will be greater under the Agency-Mitigated Alternative than under the Proposed Action (e.g. removal of paving on road, use of toe pond soil stockpile, burying pipeline, etc.).

Response A4: *The Agencies agree that the short-term impacts will be greater, but they believe the overall long-term impacts will be less under the Agency-Mitigated Alternative. The rationale for removing the pavement from the roads is addressed in the response to Comment E-A-LCD 2. The rationale for using the toe pond soil stockpile is addressed in the response to Comment H3 and Comment H-TMI-1 below. The preferred treatment of the pipeline has been revised and is addressed in comment E1. In addition, the Final EIS has been revised to reflect this change.*

Comment A5: Reclamation bond should be sized appropriately. Some commenters suggested the reclamation bond should be large enough to cover the "worst case" scenario while others suggested the reclamation bond should be small enough as not to affect the continued operation of the mine.

Response A5: *The reclamation bond may not be less than the estimated cost to the Forest Service or the DEQ to ensure compliance with the respective federal and state reclamation requirements. The federal reclamation requirements include compliance with 36 CFR 228, Subpart A. The bond amount is the Agencies' estimated cost to complete site reclamation. The calculation of the reclamation bond is based on what it would cost the Agencies to hire a third party contractor to perform the work described in the reclamation plan if the company is unable or unwilling to do this work themselves. According to 82-4-338(6) MCA the reclamation bond must be based upon reasonably foreseeable activities. Currently, the bond at the Troy Mine is almost all in the form of a surety. Interest gathered on a CD or cash bond is non-obligated and can be returned to the company.*

Comment A-TMI 1: ES3 – Discussion of "patented" land may be confusing, may be better to just use private land and NFSL.

Response A-TMI 1: *There is a difference and a need to distinguish between patented and private land. Please see* ***Section 2.1.1****. Also see definition of patented land in* ***Chapter 7****: "A parcel of land which the federal government sold to a claim holder and whose ownership can be transferred to other private parties. The minerals contained within the land also belong to the claim holder."*

Comment A-TMI 2: 1-11: "*Based on the analyses in this EIS, the Deciding Officers only determine whether the Proposed Action is in compliance with respective state and federal laws*."

The statement does not seem to be correct. The Deciding Officers prepare a Record of Decision (ROD) that determines what if any stipulations may be required to mitigate any impacts. The further discussion that indicates the ROD can only select from one of the alternatives is also incorrect. The ROD may select or modify any alternative including the preferred alternative to address a variety of issues.

Response A-TMI 2: *The Agencies agree that this statement needs to be corrected. Based on the analyses in this EIS, the KNF Supervisor and the DEQ Director will make an informed decision on the Proposed Action. Each Deciding Officer's decision will be documented in their respective Record of Decision. Federal and state agency decision making is governed by*

regulations. Each agency's regulations provide the conditions the project must meet to obtain the necessary permit, approvals, or licenses and provide the conditions under which the agency could deny necessary permits or approvals. Please refer to ***Section 1.8*** *Decision Framework of the Final EIS that states the decision objective of the Agencies is to select an action that meets both the purpose and need for the project and respects the legal rights of Troy Mine, Inc., but still protects the environment in compliance with applicable laws, regulations, and policies.*

<u>Comment A-TMI 3</u>: 3-26: "*requiring lands disturbed by mining…be reclaimed to comparable stability and utility.*"

36CFR 228.8(g) is not the USFS's responsibility in this case to interpret DEQ's regulations. In fact 228.8(h) indicates that "certification or approval" by state agencies can be taken as acceptance of compliance with parallel regulations. The State and Federal responsibilities and authorities should be accurately described and kept separate from each other.

<u>Response A-TMI 3:</u> *Thank you for your comment. The text has been updated to read:*

> *The Montana Metal Mine Reclamation Act (MMRA) sets forth reclamation standards for lands disturbed by mining. The basic objective is to establish, on a continuing basis, the vegetative cover, soil stability, water condition, and safety condition appropriate to any subsequent use of the area (Section 82-4-302(2), MCA). Generally, lands disturbed by mining must be reclaimed to comparable stability and utility as that of adjacent areas (Section 82-4-336(9)(a), MCA). The reclamation standards apply to all lands disturbed by mining, whether they are federal, state, or private.*

USFS enforces several laws and regulations related to the impacts of mining on NFSL. The Organic Act authorizes the Secretary of Agriculture to issue rules and regulations for the use and occupancy of the National Forests and to protect them from unnecessary environmental impacts. The Multiple Use Mining Act of 1955 authorizes the Forest Service to restrict mining operations on National Forest System lands to only those uses reasonably incident to mining and in a manner that minimizes adverse environmental impacts. It is the purpose of the 36 CFR 228, Subpart A regulations to set forth rules and procedures through which use of the surface of National Forest System lands in connection with operations authorized by the United States mining laws shall be conducted so as to minimize the adverse environmental impacts on National Forest System resources. Forest Service Manual 2840 provides guidance for mining reclamation on NFSL.

USFS is required by regulation (36 CFR Part 228, Subpart 228.8) to ensure all operations are reclaimed. Forest Service manual direction for reclamation of mineral activities (FSM 2840) directs that mineral activities must be managed to minimize impacts and disturbed lands must be returned to a use consistent with long-term forest land and resource management plans. Reclamation is further defined as the actions to shape, stabilize, revegetate, or otherwise treat the affected lands in order to achieve a safe and ecologically stable

condition. The direction includes that all Plans of Operations with reclamation requirements must contain measurable performance standards that specify the revegetation of disturbed areas with measures for timing, kind, and amount.

B. Alternatives Definition:

Comment B1: Alternative locations for disposal of mine buildings and foundations were suggested. Commenters suggested the building materials and foundations should be buried in the mine, left in place and covered with pit run debris, or recycled with the debris removed to an approved landfill site. The Montana Solid Waste Management Act does not prohibit on-site disposal of inert building material. Commenters noted the inconsistencies in requiring inert building materials to be removed from the site when DEQ had allowed asbestos contaminated soil to be disposed at the Troy landfill and the annual allowance of iron released to the tailings impoundment, but not allowing steel rebar to be buried or placed in the mine.

Response B1: The mine office and mill buildings are situated on NFSL. It is Forest Service policy (FSM 2100) to discourage the disposal of solid waste on NFSL unless such use is the highest and best use of the land (USFS 1990). The Forest Service agrees that reinforced concrete foundation material may be buried on NFSL under the following conditions:

- *The concrete must be free from contaminants, such as petroleum products.*
- *Contaminated sections of concrete must be removed and disposed of at a proper waste facility off NFSL.*
- *The concrete must be cut or broken into sections no larger than four feet square and buried in a manner that will not create large voids which could lead to future settling of the materials. This may involve mixing glacial borrow material from east of the impoundment with the concrete sections during backfill operations. The rebar can remain in the concrete provided it is cut flush with the individual sections.*
- *The concrete must be buried with a minimum of four feet of glacial borrow material from east of the impoundment which must be graded in a manner that will not concentrate surface water runoff or allow water to pond.*
- *At time of mine reclamation, if new federal regulations prohibit burying of any materials, then all materials must be hauled off-site.*

The Montana Solid Waste Act defines "solid waste" to exclude mining wastes regulated under the mining and reclamation laws administered by DEQ. Thus, mining wastes are not regulated under the Montana Solid Waste Act. Under the MMRA, a reclamation plan must provide sufficient measures to prevent pollution of air or water and the degradation of adjacent lands. Burial of building demolition materials on site containing potential pollutants such as petroleum products, lead-based paints, etc. could potentially pollute ground and surface waters in violation of the MMRA. ***Section 2.4.3.2*** *of the Final EIS has been revised accordingly.*

The materials disposed of at the Troy Landfill are outside the scope of this EIS. The iron in the Troy tailings is a result of the milling process and disposal is allowed under the MMRA.

Comment B2: The Draft EIS needs to more completely document the potential risk to water quality from burying inert materials as a justification for alternatives that require building materials to be buried off site. Commenters argued that there would be no difference in impacts from burying inert building materials such as concrete versus burying natural materials. Commenters also argued that man-made materials such as concrete bridge abutments and metal culverts have already been placed on site and are exposed to the elements. If on-site burial would create water quality risks, the Draft EIS should document potential risks to water quality at potential off site locations as well.

Response B2: Please see the response to Comment B1.

Comment B3: Although some commenters noted that the adit closure measures described in the Agency-Mitigated Alternative, such as emergency overflow, are needed to protect the environment, others noted that the additional 100 feet of rock to close the South Adit does not address any specific impact and is, therefore, not necessary.

Response B3: There is a large amount of overburden located near the entrance to the South Adit. The adit must be backfilled 100 feet in order to reach the competent rock, which is located further back inside the adit. Backfilling deeper into the adit will prevent the adit entrance from sloughing.

Comment B4: Commenters addressed the timing of reclamation activities. Some noted that the tailings impoundment area should be reclaimed as soon as its capacity is exceeded which may be before mine operation ceases and that reclamation should be completed within 2 years of the start of reclamation (including removal of infrastructure, placement of growth media, revegetation, etc.).

Response B4: According to 82-4-336(3) MCA reclamation activities must be completed not more than two years after completion or abandonment of the operation on that portion of the complex. Since the reclamation bond is calculated on what it would cost the Agencies to hire a third party contractor to perform the work described in the reclamation plan, it is to the benefit of the company to complete reclamation as soon as possible in order to maintain or even reduce the bond amount during the life of mine.

If the mining company wants to enlarge the impoundment, it would have to file for either a revision or an amendment to its operating permit to increase the impoundment capacity. If permitted, reclamation could be delayed again until completion of the mine or until the impoundment reaches its new permitted capacity.

Comment B5: A commenter suggested that one acre of the tailings ponds should be left un-reclaimed in case the community wants to use the material for building blocks.

Response B5: According to 82-4-336(9)(a) MCA, the company can propose leaving mine related facilities in place if there is a reasonable post-mining use. The Agencies would have to agree with this post-mining use. It would be up to the company to propose such a post-mining land use, which the Agencies would then review.

Comment B-TMI 1: TMI disagrees that burial of concrete foundations and steel at the mill site pose any risk to water quality. On-site burial of demolition waste is an accepted practice during mill site reclamation. The unnecessary handling and haulage of inert materials to an offsite disposal area would increase risk to air and water quality.

TMI's Proposed Action is as follows:

1. Equipment from the mill, shops, office and associated facilities will be salvaged or disposed of offsite. Buildings will be removed and salvaged or demolished. The mill site materials which will be buried on site are primarily concrete, but also may include some metal, glass, plastic and wood. All of these materials will be buried on site with a minimum of three feet of cover material.

2-15: The agency alternative includes: *"All demolition materials, whether originating above or below ground, would be disposed of off NFSL in appropriate disposal areas to comply with the Montana Solid Waste Act."*

The need or benefit of this unnecessary action is not provided anywhere in the document.

3-75: There is no evidence, documentation or reason that "buried demolition debris could contaminate surface water." This rational for requiring the removal of concrete foundation materials and structural steel from the mill site area is not based on fact and should be corrected in the FEIS.

3-82: There is no documentation of any "risk" to water quality from burial of building and foundation materials. Concrete and steel would not result in leaching of problematic constituents in the oxidizing conditions of shallow burial. In fact, the increased alkalinity and iron potentially available from these materials are documented in the metals fate and transport discussions, at the tailing impoundment, provides a beneficial effect on metals of concern.

Response B-TMI 1: The Agencies have developed the alternatives to comply with USFS policy and the MMRA. Please see response to Comment B1.

Comment B-TMI 2: ES6/ES7 – The No Action description of groundwater monitoring is inaccurate and misleading by implying there are only two groundwater monitoring wells. Currently TMI samples 15 monitoring wells, two of which are at the Libby Load-out Facility. TMI also samples the Service Adit ditch, Service Adit pipe and the EP-1 pump-back station.

Response B-TMI 2: Text in the Executive Summary has been revised to clarify the current groundwater monitoring program. Text was edited as follows:

> *As part of the baseline sampling program, two test wells were drilled in July of 1976, and monitoring of two sites along Lake Creek began in 1979. Several additional monitoring sites have been added since that time. Surface water quality has been monitored at seven sites on Stanley, Fairway, and Lake Creeks since 1986. Five additional surface water sites are sampled*

and represent the farthest upgradient expressions of groundwater in drainages around the mine. These sites were chosen to monitor changes in the quality of groundwater discharging to surface drainages. Fifteen wells are currently monitored by TMI. These monitoring wells and sites would continue to be evaluated to determine potential mine water influence on surface and groundwater under the No Action Alternative.

<u>Comment B-TMI 3:</u> 2-25: *"Annual aerial inspections of the mine shadow area would be conducted by Troy Mine, Inc. with agency participation. Surveys would be conducted until bond release, and the subsidence portion of the reclamation bond would be held for a minimum of twenty years after the mine has been decommissioned and the adits have been plugged."*

The requirement for annual aerial inspections for subsidence is not necessarily an accurate method for determining subsidence based on actual site experience. Surface road erosion could appear to be a subsidence event when viewed from the air. Other methods of field inspection should be considered. Twenty years of subsidence inspection before bond release is excessive.

<u>Response B-TMI 3:</u> Subsidence features may take years to develop a surface expression. That is why subsidence monitoring will be required for twenty years after the mine has been decommissioned and the adits have been plugged. The text in the Final EIS has been changed to require once every five year flights with annual field reviews for twenty years.

<u>Comment B-TMI 4:</u> 2-36: This is the No Action and Proposed Action water monitoring plan, which is the one proposed in the Appendix F of the Revised Reclamation Plan with some additions. TMI adds the following Point of clarification: Table 2-2 is the one we proposed in the Revised Reclamation Plan during March 2006. As of 2005, TMI takes samples at 13 monitoring well sites – (two of which are at the Libby Loadout Facility). We also sample the mine's service adit ditch, service adit pipe and the Enviro-pump station and these sites are in the monitoring program. During the summer of 2010, two additional monitoring wells were drilled on the north end of the tailing facility, bringing the total to 15 monitoring wells.

The surface water program includes 16 surface water locations. In all we sample 34 locations including the monitoring wells, surface locations, plus the adit ditch, adit pipe and the spring at the Enviro-pump station.

Lake Creek 1, 2 and 4; Stanley Creek - 2 and Fairway Creek – 1 are the bio-monitoring (macroinvertebrate) sampling locations. As a point of clarification Lake Creek 1 and 2, date back to 1979.

<u>Response B-TMI 4:</u> Thank you for your comment. The Final EIS has been revised to clarify that Table 2-2 is the operational groundwater monitoring schedule that is currently followed. It is relevant to both the No Action Alternative and the Proposed Action. Post-closure monitoring under these alternatives would continue to use the existing operational monitoring plan until the mining company proposes changes approved by the Agencies.

Comment B-TMI 5: 2-57*: "If needed, the domestic water well located southeast of the tailings impoundment would be used for irrigation during the first three growing seasons; after which time, the well would be plugged and abandoned as required by ARM 36.21.810."*

The company objects to abandoning the well at the industrial site and abandoning the irrigation well at the decant pond area, because these private wells will have future uses.

> *Response B-TMI 5: The Agencies concur with the company's comment. The Agencies will stipulate that the wells will be left for post mine land use. If the wells are no longer needed, they should be plugged and abandoned as required by ARM 36.21.810.*

Comment B-TMI 6: 2- 59: 6th bullet; "*The East Impoundment, North East Impoundment, and Cell 3 borrow areas would be planted with lower elevation forest type vegetation."*

The references to an East impoundment and NE impoundment should be East Borrow and North East Borrow.

> *Response B-TMI 6: Thank you for your comment. The text in* ***Section 2.5*** *has been changed accordingly.*

Comment B-CRG 1: Under the Proposed Action, the proposed fill material for the adits is composed of large-sized development rock and a 12 "layer of growth medium; is this sufficient to preclude groundwater seepage from the adits?

> *Response B-CRG 1: The closure plan proposal to backfill adits with coarse fill applies only to adits at higher elevations on Mount Vernon above the level to which the underground workings will flood; therefore, groundwater would not seep from these adits. Please refer to Table 2-1 for a comparison of closure plans under each alternative for both the high elevation dry adits and lower draining adits. Seepage may discharge from the Service and Conveyor adits if the underground intake structures that feed the gravity flow pipelines fail over time. The Agencies would bond for regular inspections and for repair of the structure if needed over time as part of the long-term water management plan.*

Comment B-CRG 2: Why aren't the design details for the proposed non-hydraulic plugs and partial concrete dams or bulkhead in the Service and Conveyor adits included under the Proposed Action?

> *Response B-CRG 2: In* ***Section 3.8.5.2:*** *Under the Proposed Action, reclamation activities on the Troy Mine Permit Area would follow the specifications of the revised plan (Genesis 2006) (Table 2-1). Development rock would be used to backfill from portals 30 feet into the adit and would be placed as tightly as possible against the roof. Two concrete, non-hydraulic plugs are proposed for the Service and Conveyor adits. Conceptual designs for the plugs are outlined in Appendix J of the 2006 Revised Reclamation Plan and were not added to the text in the Draft EIS. Also, for the Agency-Mitigated Alternative, a conceptual design was provided in Draft EIS Appendix G, Page 4, Figure 1. TMI will be required to submit a detailed design to the Agencies for review and approval within one year of the ROD.*

Comment B-CRG 3: Why was subsidence not addressed as part of the Proposed Action? Given the history of subsidence at the Troy Mine, the potential impacts from this should be analyzed. Surveys should be conducted to ascertain the structural stability of the mine and potential areas for future subsidence.

> *Response B-CRG 3: The issue of subsidence was addressed for all three alternatives. In* ***Section 3.8.5.2****, the Agencies stated that the effects of subsidence under the Proposed Action would be the same as those under the No-Action Alternative. Studies were submitted to address subsidence impacts during operations and the Agencies bonded for future events. In the Agency-Mitigated Alternative in* ***Section 3.8.5.3****, additional subsidence monitoring and mitigations are listed. If the Proposed Action is selected by the decision makers, they can select the proposed monitoring and mitigation plans listed in the Agency-Mitigated Alternative.*

Comment B-A-EPA 1: Thank you for including clear descriptions of the alternatives, including identification of the differences between No Action, the Proposed Action and the Agency-Mitigated Alternative, and Table 2-1 (pages 2-19 to 2-35) comparing features of the alternatives in relation to the major issues (i.e., Water Management, Adit Closure and Mine Water Distribution, Water Treatment and Disposal, Groundwater Quality, Surface Water Quality, Long-Term Monitoring of Water Quality, Reclamation, Reclamation Materials, Subsidence, Revegetation, Infrastructure, and Topography). This information improves project understanding and assists in providing a basis of choice among alternatives for both the decision maker and the public in accordance with the Council on Environmental Quality (CEQ) rules for implementing NEPA (40 CFR Part 1500). We also appreciate the inclusion of a clear watershed map in Figure 3-2 (page 3-46) showing locations of waterbodies in the project area in relation to mine facilities. Understanding of the location of waterbodies in relation to mine facilities is critical for environmental impact assessment.

> *Response B-A-EPA 1: Thank you for your comment.*

Comment B-A-LCD 1: Requiring the concrete and rebar to be dug up, broke up, and moved to another location to be buried doesn't make any sense either. Why not allow the non-hazardous material that is inert to be buried and covered with appropriate fill and then revegetated? There is no environmental benefit in burying these material in another location, the time and resources put into doing so have more of an impact to the environment. This proposed action is unwarranted and does nothing but increase costs.

> *Response B-A-LCD 1: Please see the response to Comment B1. The proposal to bury materials on site is part of the Proposed Action. The Agency-Mitigated Alternative addresses the need to comply with the MMRA as well as the USFS regulations and policy.*

C. Air Quality:

<u>Comment C1:</u> Removing the pavement from the main road will create more dust and air quality impacts.

<u>Response C1:</u> Please see response to Comment E-CRG-1.

<u>Comment C2:</u> Past air quality issues have been resolved, but future management changes may allow them to re-occur. The Agency-Mitigated Alternative would prevent future air quality problems, while the Proposed Action and No Action Alternative are not sufficient to prevent potential future issues.

<u>Response C2:</u> Regardless of the Alternative selected, Troy Mine, Inc. would continue to be required to meet opacity standards, apply water or chemical dust suppressant to maintain reasonable precautions, and follow the ambient monitoring network requirements in Attachment I and Attachment II of Troy Mine, Inc.'s Montana Air Quality Permit (MAQP). Attachment I of the MAQP is specific to ambient air monitoring required after closure of the mine and during reclamation of the tailings pond.

Troy Mine Inc. would be required to install, operate and maintain two air quality monitoring sites in the vicinity of their tailings pond. Additionally, Troy Mine, Inc. would be required to begin monitoring within one month after the closure of the mine and would continue monitoring until mine reclamation has been completed. DEQ would continue to monitor compliance with dust, opacity and ambient monitoring requirements.

<u>Comment C3:</u> Air quality should be monitored throughout the reclamation period and until it is fully demonstrated that revegetation efforts have successfully minimized air quality impacts.

<u>Response C3:</u> The Montana Air Quality Permit (MAQP) specifically requires that Troy Mine, Inc. install, operate and maintain two air quality monitoring sites in the vicinity of their tailings pond after closure of the mine and during reclamation of the tailings pond. Troy Mine, Inc. would be required to begin monitoring within one month after the closure of the mine and would continue monitoring until mine reclamation has been completed. Additionally, DEQ would continue to monitor Troy Mine, Inc.'s compliance with dust, opacity, and ambient monitoring requirements.

All air monitoring data would continue to be reviewed by the DEQ and the DEQ will determine if continued monitoring or additional monitoring is warranted. The DEQ may require continued air monitoring to track long-term impacts of emissions for the facility or require additional ambient air monitoring or analyses if any changes take place in regard to quality and/or quantity of emissions or the area of impact from the emissions.

<u>Comment C4:</u> Reclamation materials should come from the borrow area rather than the toe pond soil stockpile to limit the amount of disturbance that would create new dust problems.

<u>Response C4:</u> Please see response to Comment H1.

Comment C5: Growth media should be amended with organic materials to ensure rapid growth to minimize dust impacts.

Response C5: Thank you for your comment. The Agencies are requiring organic amendments in the Agency-Mitigated Alternative. Dust impacts will be mitigated as described in the response to Comment H1.

Comment C-TMI 1: [3-8: (section 3.4.5.1)] "*The Libby loadout facility is not addressed in the No Action Alternative*."

This is not correct. The Libby Load-out is currently permitted, bonded and has a reclamation plan. TMI submitted a "Minor Revision" to our Operating Permit for the New Libby Load-out facility on February 7, 2011. We received Approval for the Minor Revision from the MT DEQ on February 16, 2011. TMI started using the new load-out during March 2011.

*Response C-TMI 1: The Agencies agree and the text in **Section 3.4.5.1** has been revised as follows:*

> *The Libby loadout is currently permitted, bonded, and has a reclamation plan. The Libby loadout facility is located in the Kootenai business park.*

D. Fish Habitat:

Comment D1: Commenters noted that fisheries have had no negative impacts from the impoundment and the attenuation study done while the mine was shutdown clearly illustrates what to expect when this operation is decommissioned.

Response D1: The results of the shutdown period support a determination of minimal effect to aquatic resources as a result of closing the mine. However, the shutdown represents a brief time frame in contrast to that after reclamation. That is reflected in the analysis.

Comment D-A-FWP-S 1: 3.7.4.1 The Fish Population Status - Several species of fish in addition to those noted from the report are in the Lake Creek drainage near, upstream and downstream of the affected area: mountain whitefish (*Prosopium williamsoni*), coarsescale sucker (*Catostomus macrocheilus*), longnose sucker (*Catostomus catostomus*), Northern Pikeminnow (*Ptychocheilus oregonensis*), Northern pike (*Esox lucius*), brown trout (*Salmo trutta*), peamouth chub (*Mylocheilus caurinus*), Smallmouth bass (*Micropterus dolomieu*).

*Response D-A-FWP-S 1: Thank you for your comment. Those species are added to the species list in **Section 3.7.4.1** of the Final EIS.*

Comment D-A-FWP-S 2: 3.7.4.2 Bull trout - There is no evidence that there is not a fluvial bull trout population in Lake Creek. In October 2006, MFWP personnel collected bull trout between 210 – 330 mm in the Lake Creek dam indicating that a fluvial lifestyle is probable.

For any of the actions related to water quality note that, during some time in their lives, 100 percent of the bull trout in the Lake Creek drainage will be influenced by the water quality effects from the proposed alternatives.

Response D-A-FWP-S 2: KNF based this analysis on data collected by FWP over the years. No evidence of bull trout spawning in Lake Creek has ever been found by FWP or KNF. It is well established that bull trout occupy Lake Creek at different times of the year particularly as a migratory route between Bull Lake and Keeler Creek. It is also well documented that large adfluvial fish spend a minimal amount of time in Keeler Creek spawning, thus it is likely those were the fish captured in October 2006. For that reason, water quality and its potential effects to bull trout were considered in this analysis.

Comment D-A-FWP-S 3: Page 3-23 Paragraph 3: Note: Instream activities proposed in the Lake Creek drainage between Bull Lake and Keeler Creek should be accomplished between July 15 and September 1, unless there are approved mitigation plans.

Response D-A-FWP-S 3: All instream activities would require a 124 permit which is issued by FWP prior to the commencement of instream activities. This process has facilitated close coordination between KNF and FWP. The suggested timing restriction is a standard condition of the 124 permit.

E. Hydrology:

Comment E1: Many commenters noted concerns about the proposal to bury the pipeline to carry mine water to the tailings impoundment area. These concerns include the construction impacts of removing and then building a new underground pipeline; long-term maintenance requirements of a buried pipeline; the potentially longer reaction time to a leak in an underground pipeline; and the impact of a leak in an underground pipeline. Commenters indicated that the EIS should include the current actual condition of the pipeline, how long it is expected to last, and a stronger discussion of why agencies feel it should be buried because it appears that the existing line is expected to last for several more decades without significant maintenance. The EIS should also discuss the long term impacts of repeatedly burying and unburying line every 40 years (based on a presumed 40 year life span of a pipeline).

Response E1: The Agency-Mitigated Alternative has been revised with respect to the tailings pipeline.

The Agencies have reviewed the comments received on the Draft EIS and determined that the existing pipelines could continue to be used as long as they can be operated with a low risk of failure. At the time of mine closure, the existing tailings lines and return water line would be evaluated by a qualified engineer to determine their remaining service life as a water conveyance line. If their condition is suitable, they would be retrofitted to enhance existing leak detection systems and to improve their integrity if that is determined to be necessary (for example, inner sleeves can be inserted into the pipelines to reduce the risk of leaks developing). The bond would also be held for the future installation of a replacement

pipeline. At this time, the Agencies anticipate that the replacement line would follow the route of the existing tailings lines, and would remain on the surface in locations where the existing lines are on the surface, and would be buried where the existing lines are buried.

The current condition of the pipelines is under review by the Agencies, and will be addressed via the mine's operating plan. A pipeline rupture occurred in October 2009, resulting in release of tailings into Thicket Creek. Another spill occurred in October 2011; however, this spill was not caused by wear of the pipeline, but rather through human error during maintenance of the pipelines and installation of a leak detection system. Because it is not known how long the mine will continue to operate, it cannot be determined in advance what the condition of the existing tailings lines will be at the time of mine closure. Consequently, a review of the pipeline condition at the time of closure will be necessary to determine how much pipeline maintenance and upgrades would be appropriate at that time. Transport of mine water via the tailings pipelines is expected to result in less wear than transport of tailings slurry. Consequently, the probability of pipeline leaks developing is expected to be lower than at present. Routine inspection and maintenance of the pipelines would continue for as long as they are in use. Please refer to Appendix G for the Conceptual Design of the New Water Line for Transport of Mine Water after Closure.

Comment E2: Many commenters made note of the current above-ground pipeline and commented that the above-ground pipeline does not result in impacts or unusual maintenance concerns. Some noted that leak sensors could be installed in an above-ground line to allow for response to leaks in the same manner as with an underground pipeline. Many commenters felt that it would be easier to monitor an above-ground line and that leaks in an above-ground pipeline would be easier to detect and repair with less disturbance to surrounding resources. Several commenters noted that no vandalism has occurred on the existing pipeline and that the concern expressed in the Draft EIS is not supported by past experience. Additionally, some commenters noted that an above ground pipeline does not have a visual or aesthetic impact.

Response E2: Please see response to Comment E1 above.

Comment E3: Commenters noted that if the pipeline will be carrying water that meets drinking water standards upon mine closure, there would be no need to change or remove the existing line. Similarly, some commenters questioned what the impact of a leak, containing water that meets drinking water quality standards, would be on surrounding resources.

Response E3: Water draining from the Troy Mine currently does not meet drinking water quality standards for nitrate and antimony. Nitrate concentrations are expected to decline to within drinking water standards rapidly following closure of the mine; however, elevated dissolved antimony is expected to persist in the mine drainage. It is important to note that aquatic life standards for metals are often significantly more stringent than human health standards for the same metals. For example, the drinking water standard for copper is 1.3 parts per million, while the aquatic life standard for copper in Stanley Creek is 2.85 parts per billion or approximately 1/500th of the drinking water standard. Dissolved copper in mine water after closure of the mine is expected to remain in the 60 parts per billion range (see

Final EIS Table 3-7), about 20 times the chronic aquatic life standard. In the event of pipeline failure, water would flow from the rupture point into Stanley, Thicket, and/or Lake Creeks. Although the water would likely meet drinking water criteria for everything but antimony, it would likely exceed aquatic life criteria for copper and possibly cadmium, lead, and/or other metals. If a major pipeline leak occurred and was not quickly repaired, the probable impacts of discharge of the mine water to surface waters could potentially include: mortality of aquatic life, including fish; migration of individual fish; and temporary loss of fish habitat in the affected streams.

Comment E4: Draft EIS should more accurately describe the current condition of the pipeline, including the secondary containment currently being installed at creek crossings in the analysis of existing conditions.

Response E4: The current condition of the pipeline is unknown. Several pipeline leaks have occurred since the mine restarted operations in 2004. A contributing factor to these leaks has been failure of the adhesive that holds the liner in place. Secondary containment boxes with leak detection sensors are being installed at stream crossings. The Agencies are currently reviewing whether additional operational pipeline upgrades are warranted under the Operating Plan.

Comment E5: A seven-mile long pipeline is a fatal flaw of the preferred alternative; if, in fact, mine water doesn't need treatment, then it should be discharged to the nearest channel.

*Response E5: The discharge of mine water directly to Stanley Creek was envisioned when the mine was originally permitted and is analyzed in the No Action Alternative (**Section 3.9.5.1** – Water Quality). Mine water does not meet state water quality standards for discharge to Stanley or Lake creeks. Mine water would require treatment before discharge to surface water near the mine site, but would not require treatment if conveyed to the tailings impoundment for infiltration into the underlying groundwater. Fish and aquatic life are very sensitive to some metals, including copper. Consequently, while the concentration of copper in post-closure mine water is expected to be only about 1/20th the human health standard, it would exceed criteria protective of aquatic life by a factor of about 20 times.*

Comment E6: In regard to the drainage channel, some commenters noted that waste rock is native to the area and therefore there would be no need to import rock; while other commenters noted that it is important to use non-mineralized rock to line the drainage channel.

Response E6: The Agencies would require non-mineralized rock be used for drainage channels in order to eliminate the possibility that mineralized rock might elevate heavy metal concentrations in the streams. The Agencies assumed all the waste rock in the area is potentially mineralized. If TMI provides testing (leachate and net neutralizing potential) that demonstrates it has a source of non-mineralized rock, the Agencies would consider using that source. The potential source rock that would be used for construction of drainage channels has not yet been identified, but would likely be from a commercial or off-site quarry that could be approved at closure by the Agencies as non-mineralized riprap.

Comment E7: Commenters noted that there is good data from the shutdown period and the past 30 years to support the conclusion that there has been no impact to water quality from the mine operations.

Response E7: There have been impacts to water quality from the Troy Mine, most notably due to tailings pipeline ruptures and erosion of sediment from the mill site area. The data show that mine water exceeds aquatic life criteria for copper and other metals and therefore cannot be discharged to surface waters. Please see response to Comment E5.

Comment E8: Commenters had questions and comments regarding the decant ponds. Some commenters asked how long it would take to remediate nitrogen and copper in the decant ponds.

Response E8: Nitrate and nitrite ("nitrates") nitrogen (N) in mine water from mine development blasting operations is a short-term pollutant. Mine waters during operations average 4.88 milligrams per liter (mg/L) as N. This is well below the human health-based groundwater standard of 10 mg/L. Based on data collected in 1993 after mine shutdown, with the cessation of blasting, the nitrogen level in the water will drop to less than 1 mg/L within a few months. By the time the water level in the mine void rises to the adit overflow and begins discharging, water routed to the decant ponds is predicted to average less than 1 mg/L as N.

Copper will be removed in the upper one foot of geologic material beneath the decant ponds. In addition, further study has shown that any copper that did not precipitate in the surface layer would be precipitated as a result of mixing with ambient groundwater that contains dissolved iron.

The decant ponds will constitute an in situ treatment system.

The decant ponds will be bermed to prevent rain water and snowmelt from flowing into the ponds.

The water management analysis (Appendix C) indicates that precipitation and evaporation are insignificant compared to future discharges from the underground workings. The decant ponds will be oversized to allow for increased mine discharge and/or slower than expected infiltration from the ponds.

Comment E9: Sufficient justification for one new surface water monitoring site and four new monitoring wells was not provided in the Draft EIS.

Response E9: No new monitoring wells were proposed under any alternative in the Draft EIS. Monitoring of some new surface water locations is proposed under the Agency-Mitigated Alternative as described in ***Section 2.4.3.1*** *– Surface Water Quality and Long-Term Monitoring of Water Quality. These new sites would generally be high elevation springs and stream channels where groundwater first reaches the ground surface, providing baseflow to the streams. These sites are considered to be the most likely areas where water from the*

flooded underground mine may first reach the ground surface. New monitoring sites are needed because existing site locations are not in the areas most vulnerable to effects from underground mine water.

Comment E10: Draft EIS should demonstrate that the toe pond runoff is safe for irrigation before it is used for that purpose and the Draft EIS should identify the proposed sources for irrigation water.

*Response E10: Under the Proposed Action, irrigation is proposed, if needed, during the first and second growing seasons after reclamation to establish vegetation and prevent wind erosion (**Section 2.4.2.2** - Revegetation). The source of irrigation water proposed is the domestic water well (one season only, **Table 2.1**) and snowmelt and runoff from the toe ponds (**Section 2.4.2.1** – Water Treatment and Disposal). Under the Agency-Mitigated Alternative, water from the domestic water well (**Section 2.4.3.2** - Infrastructure) or the decant ponds would be used to establish vegetation and prevent wind erosion if needed during the first three growing seasons.*

Irrigation water under both the Proposed Action and Agency-Mitigated Alternative meet EPA's criteria for irrigation water quality.

The Agencies reviewed the available water quality data for water in the toe ponds (pH, ammonia, nitrate+nitrite, total phosphorus, arsenic, copper, lead, iron, manganese, and zinc) from the Troy database (2005 to 2009). The water quality data were compared with EPA's recommended irrigation limits for constituents in irrigation water (US EPA 2004, Guidelines for Water Reuse EPA/625/R-04/108). EPA's guidance document provided limits on several trace elements, nutrients, and salinity for waters used for both short- and long-term irrigation. The Agencies compared the toe pond water quality to the recommended irrigation water limits for pH, ammonia, nitrate+nitrite, total phosphorus, arsenic, copper, iron, manganese, lead, and zinc. Ammonia, nitrate+nitrite, and total phosphorus are considered nutrients for irrigation waters. The concentrations of arsenic, copper, iron, manganese, lead, and zinc in toe pond waters were below the recommended concentrations for both short- and long-term irrigation water quality. The EPA guidance did not provide data for acceptable limits for antimony or silver in irrigation water; however, both silver and antimony are at non-detectable concentrations in the toe pond water. The quality of the toe pond water meets criteria for the short- and long-term irrigation of reclaimed areas, if needed during closure.

The decant pond water quality (Table 3-7 of the Draft EIS) was compared with EPA's recommended irrigation limits for constituents in irrigation water. The quality of decant water meets irrigation water quality criteria for copper, zinc, ammonia, nitrate+nitrite, and total dissolved solids. The EPA guidance did not provide data for acceptable limits for antimony in irrigation water. The decant pond water quality would be suitable for short- and long-term irrigation water quality.

The domestic water well is located upgradient of the tailings impoundment and would be consistent with background water quality. Background groundwater quality would meet EPA's criteria for both short- and long-term irrigation water quality.

<u>Comment E11:</u> The Draft EIS should identify all water resources affected by operation and potentially affected by reclamation.

<u>Response E11:</u> *This EIS is for mine closure and reclamation and does not address current mine operations. Effects from operations were addressed under the original EIS on the mine operation. Effects to water resources from the proposed reclamation alternatives are discussed in detail in* ***Section 3.9.5****.*

<u>Comment E12:</u> Some commenters noted that the Draft EIS should account for used/spilled solvents, grease, and lube oils. The Draft EIS should also disclose the Toxic Release Log of all spills and include any impacted sites in the reclamation plan. Some commenters also asked that the Draft EIS consider long-term monitoring and recording for any signs of harmful material.

<u>Response E12:</u> *This EIS addresses reclamation of the mine after its closure, and does not address operational issues. Spills are cleaned up when they occur; these activities are not deferred until reclamation.*

<u>Comment E13:</u> The location, contents, and impacts of the barrels buried in the tailings embankment should be disclosed in the Draft EIS and appropriate reclamation measures included in the plan.

<u>Response E13:</u> *This was dismissed in issues considered but not evaluated further in* ***Section 2.3.2*** *item 4. In addition, from January 30 to February 2, 2012, TMI conducted an excavation in the tailings impoundment at the site of Anomaly #5 as noted in the 2004 geophysical survey of the impoundment. An excavator and bulldozer removed tailings until the source of the anomaly was identified as a large rusty metal screen. The excavation was then deepened to the original ground surface without uncovering any other metallic debris. Representatives of TMI, the original geophysical contractor, DEQ, and Cabinet Resource Group were all present during this activity."*

<u>Comment E-CRG 1:</u> DEIS pg: 3-23:

"*The Agency-Mitigated Alternative would reduce sediment loading both by implementing reclamation actions and by treating mining road-related sediment sources. Thus, sediment levels in Stanley and Lake Creeks would be expected to decline over time*."

There is nothing in the DEIS supporting the claim that removing the asphalt surface of the mine road would reduce the risk of dust and sedimentation to nearby streams. Road 4626 is currently used heavily to access Spur Lake. Converting the industrial grade asphalt road to a gravel surface will defeat the original required mitigation of a blacktop road. The mine road from the Hwy 200 junction to the Spar Lake Road junction should be left in place.

<u>Response E-CRG 1:</u> Under the Agency-Mitigated Alternative there is more potential for sediment delivery in the short term from NFSR 4626 by converting it to gravel where it is under Forest Service jurisdiction from MP 2.33 to the mill site. The exception would be at the Stanley Creek bridge crossing where the approaches would be paved for 300 feet in both directions. In the long term, the effect would be the same because the Forest Service cannot afford to maintain an asphalt surface and would have to eventually convert it to gravel. Sediment would be minimized by implementing BMPs including constructing drain dips and placing sediment barriers along the outside shoulder where the road is immediately adjacent to the stream.

<u>Comment E-CRG 2:</u> The major issue of difference between the Proposed Action and the Agency-Mitigated Alternative is the replacement the two above ground pipelines with a buried one. There are good arguments for both. Would the construction project cause environmental damage through loss of natural vegetation and siltation at stream crossings? However, the current pipeline has had incidents of failure, and with closure of the mine the opportunity for vandalism greatly increases. Also, the concrete support piers are not "natural" and would extend the amount of time needed to return the area to its natural state. With the exception of the prohibition of burying demolition debris (see the following comment regarding mill site demolition) CRG supports the Agency-Mitigated Alternative as it applies to the pipelines.

<u>Response E-CRG 2:</u> Thank you for your comment. Please see the response to Comment E1.

<u>Comment E-CRG 3:</u> The agency alternative includes:

"*All demolition materials, whether originating above or below ground, would be disposed* of off *NFSL in appropriate disposal areas to comply with the Montana Solid Waste Act*".

There is no justification for this requirement; there is no documentation of risk to water quality. Concrete and steel debris possibly buried in the mine, in the driest possible location, would not result in leaching of problematic constituents. In fact, the additional handling and transport of these materials increases the chance of impacting air and water quality.

<u>Response E-CRG 3:</u> The Agency-Mitigated Alternative was designed to comply with the MMRA and USFS regulations and policy. Please see the response to Comment B1.

<u>Comment E-CRG 4:</u> The issue of barrels in the tailings is an issue of great concern to CRG, one the DEQ has avoided since it was first brought to the agency's attention in 1996. The rationale for dismissing this "potential" issue as beyond the scope of this DEIS is disingenuous.

CRG has not claimed to know the contents of the barrels. We have provided the DEQ with a list of possibilities –"solvents, waste oil, and grease"—that are known to have entered the mine, for which there is no record, as required by law, of disposal (Refers to CRG letter of Dec.27, 2007, Appendices, Appendix A, Scoping Report, Appendix F, pgs 53-83). The DEIS states that "the allegations" (which we did not make) "were never substantiated, and….the U S. District Court dismissed the case without prejudice."

The only way to know what is in the barrels is to look inside them, an increasingly expensive proposition. This poses two questions: is there sufficient evidence to warrant further investigation, and if so, who is to pay for it?

Several years after the DEQ did not so much as acknowledge receipt of a citizen complaint alleging late night burials of 55 gallon drums in the tailings, CRG learned of it, and began to investigate. We found corroborating witnesses. We sued ASARCO to gain access to the tailings impoundment for a consulting firm of our hire to do a preliminary ground penetrating radar search for barrels. The U.S. Circuit Court let us do so. Anomalies consistent with barrels were located in places barrels were said to be buried.

ASARCO denied any such thing had ever happened, and vilified CRG with asperity. After over a year of such denials, a former mine manager, being deposed under oath, admitted that barrels had been buried. Until then, it was reasonable for the DEQ to take no action, as the allegations might have just been disgruntled ex-employees trying to cause trouble. After this admission however, that was no longer the case.

Our lawsuit against ASARCO was dismissed without prejudice at our request. At the expenditure of great effort and considerable expense, we have established that there are several corroborating witnesses to the initial charge, that ASARCO admitted to burials, after having lied about it, and that there are targets that could be barrels where barrels are said to be buried. We feel we have done our part as citizens, and it is not CRG that should bear the expense and responsibility of pursuing this matter further, but rather this is the responsibility of the agencies that ostensibly exist to look out for the public's interests. For the agencies to blithely accept ASARCO's word that no contaminants were buried after it vehemently denied it had buried anything at all, for them to sweep this under the rug and make no inquiry into what was buried and why, why was it done at night and why it was lied about, would be unconscionable

We do not propose that the tailing impoundment be dug up to find every barrel in it, yet a more thorough look at areas that testimony has indicated as burial sites is by no mean unreasonable. Barrels will rust, and their unknown, possibly toxic contents, likely unmonitored for, will release into the groundwater, threatening yet another post-mining problem and expense for the people of Montana. This issue must no longer be ignored.

Response E-CRG 4: This issue is outside the scope of the Draft EIS. Please see the response to Comment E13 and ***Section 2.3.2*** *of the Final EIS.*

Comment E-CRG 5: What is the predicted attenuation rate for nitrogen and copper compounds to reach acceptable background quality?

Response E-CRG 5: Background quality is not the criterion used in this case; standards for human health and aquatic life are the criteria. Nitrogen and copper compounds have been discharged to the tailings decant ponds for 30 years, but monitoring of groundwater between the tailings impoundment and Lake Creek, and of Lake Creek itself, does not show increases in the concentrations of these parameters which indicates that attenuation processes beneath the tailings impoundment adequately remove these compounds. After

cessation of blasting underground, there will be no further source of added nitrogen and nitrate levels in mine water are expected to decline to less than 1 mg/L within a few months. Copper is expected to remain elevated in mine water. Monitoring of groundwater adjacent to the decant ponds indicates that this copper precipitates or is adsorbed to material beneath the decant ponds and reaches acceptable aquatic life criteria within a short distance from the decant ponds.

<u>Comment E-CRG 6:</u> How much water is anticipated to dissipate into fracture zones from the mine pool?

<u>Response E-CRG 6:</u> *The quantity of water that may drain from the flooded mine workings via fractures has not been determined; consequently, long-term post-closure monitoring of springs, seeps, and surface waters surrounding the mine would be required to document the effects, if any, of such seepage, and for purposes of implementing remedial actions, if necessary. Limited monitoring during the 1993-2004 interim shutdown, during which the mine void was temporarily flooded nearly to the maximum level, did not indicate impacts to surface waters surrounding the mine.*

<u>Comment E-CRG 7:</u> How would the monitoring plan be modified to account for groundwater seepage from the mine? What mitigation measures would be implemented to address groundwater seepage from the mine?

<u>Response E-CRG 7:</u> *Please refer to Appendix J of the Final EIS. Mitigation measures, if any, would be dependent on the location, quality, and quantity of seepage. For example, if a seep develops that results in sufficient loading of copper to downgradient surface water to result in exceedance of aquatic life criteria, the seep could be intercepted by a collection trench or drill hole, then piped to a location suitable for passive treatment (e.g. a location where a thick sedimentary deposit of sufficient distance from surface waters could attenuate copper from the seepage via precipitation within the sediments; alternatively a treatment cell could be constructed to perform that function if the natural soils are not sufficient).*

<u>Comment E-CRG 8:</u> Surface water quality monitoring should be collected at designated locations more frequently in order to promptly address any degradation to water quality. Remote monitoring systems that automatically upload to a website accessible by the public should be considered.

<u>Response E-CRG 8:</u> *Remote monitoring systems of the type described in this comment would not provide useful data for the parameters of concern. Automated monitoring systems can test for parameters such as pH, conductivity, or dissolved oxygen. For the data to be of value in detecting degradation from the Troy Mine, the remote monitoring systems would be required to detect copper at very low levels. Please see Appendix J of the Final EIS. Developing and maintaining reliable remote monitoring systems is difficult given the limited access, environmental conditions, and potential for vandalism. It would be more economical and reliable in this case to physically visit and collect samples on a periodic basis.*

Comment E-CRG 9: What mitigation measure would be employed if the Agencies determined that water quality was not improving?

> *Response E-CRG 9: Water quality is not predicted to improve, but the attenuation processes which remove metals from water in the decant ponds are predicted to continue to be effective. The proposed mitigation measure is to retain a bond or trust fund sufficient to maintain the pipelines from the mine to the decant ponds.*

Comment E-CRG 10: The long term groundwater monitoring does not address how potential seeps or springs would be treated if water quality did not meet Agency standards.

> *Response E-CRG 10: Please see response to Comment E-CRG 7.*

Comment E-CRG 11: Under the Agency-Mitigated Alternative, what manner of "additional": monitoring would be required to ensure water quality at seeps and springs is met?

> *Response E-CRG 11: Please see Appendix J and* ***Section 2.4.3.1*** *of the Final EIS - Surface Water Quality and Long-Term Monitoring of Water Quality.*

Comment E-TMI 1: The DEIS concludes that the existing dual 8" urethane lined steel pipelines that carry tailing slurry during operations need to be replaced with a new buried line at closure. TMI disagrees that the lines need to be replaced and there is little rational in the DEIS to justify this suggested replacement. The main reasons TMI disagrees with the installation of a new buried line are:

1. The existing two surface tailing lines and the existing buried pipeline have more than enough capacity and useful life to transport the mine water to the tailing facility as verified in discussions with the pipeline manufacturer;
2. The installation of a new buried line at closure would create significant new ground disturbance that will require additional reclamation;
3. There are areas in the pipeline and road corridor that are impractical for burial due to proximity of live streams (Stanley Creek and Lake Creek); and
4. TMI is installing additional secondary containment for monitoring and leak detection near stream crossings, on the existing tailing lines, that will allow better monitoring and the surface lines will be easier to repair if necessary.

It is TMI's opinion, based on actual review and testing by the pipeline manufacturer, that these lines currently have significant safe and useful life and should continue to be used following closure. TMI's proposed Closure Operations Manual (see Appendix A) summarized in this section provides a reasonable engineering approach to minimizing risk of a mine water spill during post closure.

The DEIS does not document any particular flaw or problem with the two existing 8" lines, but indicates that they are "old" and that above ground pipelines would be "more susceptible to vandalism". It is further indicated (with no documentation or explanation) that a leak from a buried pipeline would be less likely to cause sediment to reach surface water. The DEIS

incorrectly implies that the current operations does not include secondary containment of the tailing pipelines and that there is no monitoring of possible pipeline leaks. The Closure Operations Manual addresses secondary containment and leak detection monitoring. TMI would like to note that the installation of a new buried line will include a number of stream crossings where the line will either have to be buried under the stream or attached to bridge structures creating new areas of both engineering and installation challenge.

TMI has substantiated that the existing above ground tailing lines will have many years of service left at closure. Based on actual testing conducted in 2004 with the pipeline manufacturer (Irathane), the urethane lining in the existing pipelines is in excellent shape. At the time of the testing each of the slurry lines had a total of sixteen million tons of slurry flow through them, yet the lining was like new. In discussions with the manufacturer, they believe that the lining would last indefinitely with the continuous flow of mine water.

Therefore, TMI considers the addition of a 10 to 18 inch diameter buried pipeline for transporting mine water to the tailing storage facility unnecessary. The life and capacity of the two existing two surface 8 inch pipelines and the existing 10 inch buried pipeline will be every bit as effective as the proposed HDPE pipe and there is no new disturbance required.

TMI believes excavation for burial of the proposed pipeline will cause undue environmental disturbance; increase risk of sedimentation to nearby streams; and not provide any more assurance against discharge to nearby streams nor protect against vandalism. Assuming that the pipe must be buried below the frost line, the 6.1 miles of pipeline will require disturbing a 25 ft width or a minimum additional disturbance of 18.5 acres.

The DEIS documents concern with the tailings lines plugging and an over pressure event occurring which may break the lines. This will not happen for the following reasons:

1. The tailing line design includes a rupture disk installed in each tailings line that will open at 586 psi in the event of a pressure surge with the discharge directed to a containment pond. These rupture disks will prevent a tailing line breakage from an over pressure event from occurring; and
2. The tailings lines have been pressure tested at 1,110 psi. At closure, when running water in the line, the potential maximum pressure will be only 475 psi.

Response E-TMI 1: *Refer to response to Comment E1.*

Comment E-TMI 2: The surface water program includes 16 surface water locations for a total of 34 sample locations. Lake Creek 1, 2 and 4; Stanley Creek - 2 and Fairway Creek – 1 are the bio-monitoring (macroinvertebrate) sampling locations. As a point of clarification Lake Creek 1 and 2, date back to 1979.

ES10 – *"The surface water quality monitoring sites that would be sampled are the same sites as those identified under the No Action Alternative."*

TMI adds the following points for clarification: As of 2005/2006, the TMI surface water quality monitoring includes 16 locations as follows:

LC-1, LC-2, LC-4

SC-2, SC-15, SC-17A

FC-1

Emma Gulch,

Weasel Lake, Weasel Gulch

Ross Creek 1 and 2

Toe Ponds: 4, 3, 2

Decant Pond

> *Response E-TMI 2:* *Thank you for your comment. The Final EIS will clarify the current surface water monitoring program. See also response to Comment B-TMI-2.*

Comment E-TMI 3: 3-47 1st paragraph: "*along an approximately 200 foot length of a tributary of Ross Creek."*

The FEIS should note the tributary is ephemeral.

> *Response E-TMI 3:* *The text has been clarified as follows:*
>
> > *Development rock from construction of the South Adit was sidecast along an approximately 200 foot length of a tributary of Ross Creek. The sidecast material has forced this ephemeral stream into the opposite bank, resulting in erosion at high flows.*

Comment E-TMI 4: 3-86 1st paragraph: "*In Lake Creek, non-mine sediment sources are somewhat more substantial, but would still be substantially less than the sediment generated by the reclamation*."

The statement is not reasonable. The Proposed Action will not produce sediment to Lake Creek or Stanley-Fairway Creek because the topsoil stockpiles would be left in the current reclaimed condition and FR4628 paved surface would not be removed and replaced with a gravel surface.

Over all the years of monitoring, the numbers of clinger taxa in Stanley Creek have been similar to Fairway Creek and similar between Lake Creek Sites. This metric demonstrates that for both Fairway-Stanley and Lake Creek systems, little sedimentation effects have been noted in any of the streams evaluated. TMI has included the Comprehensive Water Quality Monitoring Programs for Streams adjacent to TMI: Spring 1986 through fall 2009, Year 25 in the Appendix E to this letter.

*Response E-TMI 4: The Agencies agree this sentence is unclear and it has been deleted from the Final EIS. The sentence was in a paragraph that applied to all alternatives, and the alternatives have different effects on sediment delivery which are summarized by alternative (**Section 3.9.5.4**).*

The Draft EIS does not analyze effects of operations on sediment delivery, and the past water quality monitoring results are not applicable to the proposed reclamation activities.

Comment E-TMI 5: 3-86, last paragraph: TMI believes the Proposed Action concrete closure/water capture structures in the service and conveyor adits would not have any more potential to "seep" resulting "*in water quality impacts*" than the agencies concrete water capture and diversion structure. No design was included in the DEIS.

Response E-TMI 5: Based on the design information presented for the Proposed Action it was not apparent how leakage would be controlled. Regardless of the alternative selected, TMI will be required to submit a detailed design to the Agencies for review and approval. A conceptual design for Agency-Mitigated Alternative was provided in the Draft EIS Appendix G, Page 4, Figure 1.

Comment E-TMI 6: 3-90, 1st paragraph*: "Because nitrate concentrations would decrease after blasting ceases, closure and reclamation of the mine would reduce nutrient loading to surface water under all alternatives."*

The analysis and conclusions provided elsewhere in the DEIS indicate there has been no nutrient impact to Stanley or Lake Creeks from the mine. The implication that the mine has caused impairment to Stanley or Lake Creeks or that mine closure will somehow "reduce nutrient loading" to these creeks is not accurate.

Response E-TMI 6: Mine closure will reduce nutrient sources and availability, regardless of whether these sources currently contribute nutrient loading to Stanley or Lake creeks.

Comment E-A-EPA 1: We are particularly concerned regarding the long-term pollutant removal effectiveness associated with the plan to discharge mine water draining from the underground workings to the decant ponds within the tailings impoundment after mine closure.

The DEIS states that mine water would be treated at the decant ponds through "natural attenuation mechanisms" as the water infiltrates, allowing metals concentrations to attenuate within the soils. Mechanisms for attenuating metals (removing them from groundwater) are stated to include dilution, precipitation, adsorption, and co-precipitation. It is further stated that the effectiveness of the natural attenuation mechanisms in treating mine water has been substantiated through monitoring of water at the tailings impoundment for the past 30 years as well as through studies directed at understanding the geochemical processes that occur in the underlying soils and groundwater system, and that the Agency-Mitigated Alternative would comply with the Clean Water Act and the Montana Water Quality Act.

The EPA acknowledges that there is empirical evidence that infiltration of mine water into groundwater beneath the Troy Mine tailings impoundment and decant ponds have apparently not resulted in elevated levels of copper and other metals in groundwater downgradient from the tailings impoundment or in Lake Creek (which is hydrologically connected to the groundwater beneath the impoundment). However, we are concerned that there may be a finite capacity for metals removal and/or immobilization, and/or that geochemical conditions may change over time reducing effectiveness of the removal/immobilization mechanisms, or that metals immobilized as precipitated metal compounds in decant pond sediments and groundwater have potential to become re-mobilized at some point in the future.

DEIS Appendix I states that the longevity of the natural attenuation mechanisms is dependent on the duration of the geochemical conditions conducive to attenuation and to the capacity of the tailing impoundment/aquifer sediments to continue to uptake metals. It concludes that the mineral precipitation and co-precipitation mechanisms are expected to last indefinitely or in perpetuity as long as geochemical conditions remain similar to current conditions. The adsorption mechanisms are conservatively estimated to last a minimum of 600 years.

However, it is also acknowledged that there are limitations and uncertainties regarding the long-term effectiveness of the natural attenuation mechanisms, including:

1. The lack of actual post-closure mine water for evaluation;

2. The lack of the analysis of several metals in some previous investigations;

3. The very low or non-detectable concentrations of some metals;

4. The assumption of chemical equilibria or disequilibria in geochemical modeling;

5. Uncertainties in the thermodynamic data upon which geochemical calculations and modeling is based.

Mine adit flow volumes and decant pond infiltration rates over time also have certain data limitations and uncertainties. Appendix I states that in spite of the uncertainties it is felt that this study is a reliable prediction of post-mine closure water quality and the behavior of metals in the infiltration pond and groundwater system. The reliability of these predictions is bolstered by the empirical evidence of attenuation that has occurred for over thirty years.

The EPA remains concerned, however, about whether the “natural attenuation mechanisms” occurring in impoundment/decant pond sediments and groundwater will continue to function effectively in regard to metals removal or immobilization over the long-term, and/or that at some point immobilized metals may become re-mobilized (i.e., the natural attenuation mechanisms may be reversible). Long-term outcomes with natural attenuation are difficult to predict. What are the Kootenai National Forest’s and Montana DEQ’s contingency plans in the event that elevated levels of metals or other pollutants are found in groundwater downgradient from the impoundment/ decant ponds and/or in Lake Creek at some point in the future after mine closure (e.g., decades into the future)?

Response E-A-EPA 1: Long-term monitoring of groundwater and evaluation of monitoring results will be required to document that discharge to the decant ponds is not resulting in a contaminant plume downgradient of the ponds. Based on geochemical studies and 30 years of monitoring, development of a groundwater plume is not foreseeable and a bond for a wastewater treatment plant is not reasonable. However, the mine will still have an operating permit and yearly reviews as well as five-year bond reviews. In the event that monitoring does show that attenuation mechanisms become less effective over time, it may be necessary to determine the cause of loss of attenuation capacity and re-evaluate water disposal options accordingly. Potential contingency actions include low-cost maintenance options such as: clean-out of sediment and precipitates that have accumulated in the decant ponds, excavation of a new infiltration pond sufficiently distant from the decant ponds that the substrate retains the attenuation capacity that the decant ponds formerly had, modification of the discharge to alter redox conditions, irrigation of the mine water onto the reclaimed tailings impoundment surface, or other actions that may be determined to be appropriate at the time based upon the cause of decreased attenuation capacity.

Comment E-A-EPA 2: It is also not clear to us if long-term water quality monitoring plans are adequate to allow detection of elevated metals levels in groundwater downgradient from the tailings impoundment should that occur in the future. The EPA has published technical guidance documents regarding the use of "Monitored Natural Attenuation" for the remediation of contaminated soil and ground water. EPA uses the term "Monitored Natural Attenuation" to emphasize the need to incorporate adequate monitoring when natural attenuation is relied upon for the remediation of contaminated soil and ground water.

While scientific understanding of natural attenuation processes is increasing, there is still much to be learned regarding the mechanisms governing natural attenuation processes and their ability to address contamination problems, particularly over the long-term. Therefore, while EPA believes monitored natural attenuation may be used where circumstances are appropriate, it should be used with caution commensurate with the uncertainties associated with a particular application. Furthermore, largely due to the uncertainty associated with the potential effectiveness of monitored natural attenuation to meet remediation or treatment objectives that are protective of human health and the environment, EPA expects that long-term performance monitoring must be a fundamental component of any monitored natural attenuation remedy.

Response E-A-EPA 2: The Agencies concur that long-term monitoring of mine water and groundwater near the Troy decant ponds to document the continued effectiveness of attenuation mechanisms is appropriate. Troy Mine, Inc. will be required to submit a long-term monitoring plan based upon EPA's MNA guidance for Agency review and approval.

Comment E-A-EPA 3: There are also uncertainties associated with the engineered design, operation and maintenance of the six mile pipeline from the underground mine to the decant ponds over the long term. Our detailed comments identify uncertainties and information/data needs for the pipeline, and include recommendations to reduce risk of pipeline leaks and spills. We also recommend that the FEIS provide additional information and clearer disclosure

regarding the streams and wetlands that may be crossed by the pipeline, and more complete evaluation and discussion regarding stream and wetland impacts associated with pipeline construction, operation and maintenance.

Response E-A EPA 3: Refer to response to Comment E1.

Comment E-A-EPA 4: It is EPA's understanding that discharge of mine water by infiltration into groundwater beneath the tailings impoundment has been occurring for many years (discharging at up to 1,170 gallons per minute to groundwater hydrologically connected to Lake Creek) without authorization by a Montana Pollutant Discharge Elimination System (MPDES/NPDES permit). Unpermitted discharges are expected to continue post-closure with transport of underground mine water to the decant ponds. While we understand that natural attenuation mechanisms are stated to occur in the decant pond sediments and groundwater that remove and/or immobilize metals, and it does not appear that elevated levels of metals are found in Lake Creek, we recommend that the MDEQ continue to monitor groundwater and Lake Creek, and carefully evaluate whether pollutants may move into Lake Creek via hydrologically connected groundwater in the future, and if so, reconsider the need for a MPDES Permit.

Response E-A-EPA 4: Please see response to Comment E-A-EPA 11 and Appendix J of the Final EIS.

Comment E-A-EPA 5: We want to reiterate and expand upon the discussion included in EPA's transmittal letter relating to our most significant concern regarding the preferred alternative (Agency-Mitigated Alternative), which is the long-term plan to discharge mine water draining from the underground workings to the decant ponds within the tailings impoundment after mine closure (page 2-52, ES-16). The preferred alternative proposes to capture mine water that would collect in the underground mine after closure and transport it via a new buried pipeline to the decant ponds at the tailings impoundment for final treatment and disposal in perpetuity. The DEIS states that mine water would be treated at the decant ponds through "natural attenuation mechanisms" as the water infiltrates, allowing metals concentrations to attenuate within the soils (page 3-77, and Appendices C, D, G, and I), such that the Agency-Mitigated Alternative would comply with the Clean Water Act and the Montana Water Quality Act (page 3-90).

The DEIS states that the effectiveness of the natural attenuation mechanisms in treating mine related water has been substantiated through monitoring of water at the tailings impoundment for the past 30 years as well as studies directed at understanding the geochemical processes that occur in the underlying soils and groundwater system. Table 3-11, "Groundwater Quality Data for Monitoring Wells at Tailings Impoundment 2000 — 2009" (page 3-59) indicates that antimony and copper concentrations downgradient of the tailings impoundment have consistently met groundwater quality standards; Table 3-9, "Surface Water Quality Data for Lake Creek, 2005 — 2009" indicates that antimony and copper water quality standards have been met at the Lake Creek monitoring station downstream of the impoundment (i.e., groundwater discharging to surface water in the vicinity of the impoundment does not compromise water quality in Lake Creek, page 3-53). The DEIS also states that during active operation of the mine

up to 1,170 gpm of the decant pond water seeped through the unlined bottom of the ponds into the underlying aquifer, which is hydraulically connected to Lake Creek, yet elevated levels of metals have not been found in downgradient groundwater or in Lake Creek (pages 3-53, 3-6 1, 3-77).

Mechanisms for attenuating metals (removing them from groundwater) include dilution, precipitation, adsorption, and co-precipitation (page 3-77). DEIS Appendices D and I provide more detailed information regarding the natural attenuation mechanisms. The Appendix D, "Metals Attenuation Study," indicates that copper was attenuated within the upper foot of soil via the precipitation of secondary copper phases (carbonates, silicates, and oxides) as well as adsorption onto organic matter (Appendix D, page 1). Appendix D also states that should the initial removal mechanisms occurring beneath the decant ponds (i.e., precipitation) become less effective over time, there are additional existing geochemical mechanisms (i.e., co-precipitation and adsorption) capable of removing at least 73-98% of the copper, 11-59% of the antimony, and 35-84% of the uranium from groundwater (Appendix D, page 14).

The Appendix I, "Assessment of Natural Attenuation of Metals in a Decant Pond Disposal System," states that concentrations of metal parameters are much lower in the groundwater than in the mine water/decant pond, evidencing that metal parameters are attenuated (removed) in the groundwater system (Appendix I, page viii). Analyses of sediments in the decant pond reveal that metals are enriched in the sediments, supporting the view that metals attenuated/removed from groundwater are retained in the sediments. Geochemical modeling and lab experiments demonstrate that natural attenuation is provided by the precipitation of iron from mixing of mine water and decant pond water with natural ambient groundwater. Copper, iron, lead, and manganese minerals are oversaturated in mine water and are favored to precipitate from mine water. Appendix I states that precipitation of naturally-occurring iron and manganese in groundwater can significantly reduce the concentrations of arsenic, antimony, copper, lead, and uranium in mine water and decant pond water to levels below human health and aquatic life standards during groundwater transport within a short distance (ten to one hundred feet) of the decant ponds. (Appendix I, pages 1-5, 1-6). The geochemical mechanisms responsible for copper attenuation include primarily the formation of copper minerals and secondarily adsorption by organic matter in soils.

The EPA acknowledges that there is empirical evidence that infiltration of mine water into groundwater beneath the Troy Mine tailings impoundment and decant ponds have apparently not resulted in elevated levels of copper and other metals in groundwater downgradient from the impoundment or in Lake Creek. Although it is not fully clear if all metals and metalloids of potential concern have been adequately evaluated. Monitoring should verify that all metals and metalloids that could potentially be present in mine waters are not present at the Troy Mine (at detectable levels), or if present, determine the concentrations at which they have been found (e.g., Ag, As, Bi, Cd, Co, Cr, Cu, Hg, Mn, Mo, Ni, Pb, Sb, Se, Tl, U, V and Zn).

The EPA is concerned about the long-term effectiveness of the "natural attenuation mechanisms," since this treatment and disposal system is proposed to occur in perpetuity. We are concerned that there may be a finite capacity for metals removal and/or immobilization,

and/or that geochemical conditions may change over time reducing effectiveness of the removal/immobilization mechanisms, or that metals immobilized as precipitated metal compounds in decant pond sediments and groundwater, may become re-mobilized at some point in the future (i.e., the natural attenuation mechanisms may be reversible).

Appendix I states that the longevity of the natural attenuation mechanisms is dependent on the duration of the geochemical conditions conducive to attenuation and to the capacity of the tailing impoundment/aquifer sediments to continue to uptake metals (Appendix I, page 9-2). It concludes that the mineral precipitation and co-precipitation mechanisms are expected to last indefinitely or in perpetuity as long as geochemical conditions remain similar to current conditions. The adsorption mechanisms are conservatively estimated to last a minimum of 600 years.

However, it is also acknowledged that there are limitations and uncertainties regarding the long-term effectiveness of the natural attenuation mechanisms, including (Appendix I, page 1-8):

1. The lack of actual post-closure mine water for evaluation;

2. The lack of the analysis of several metals in some previous investigations;

3. The very low or non-detectable concentrations of some metals;

4. The assumption of chemical equilibria or disequilibria in geochemical modeling;

5. Uncertainties in the thermodynamic data upon which geochemical calculations and modeling is based.

Appendix I states that in spite of these uncertainties it is felt that this study is a reliable prediction of post-mine closure water quality and the behavior of metals in the infiltration pond and groundwater system. The reliability of these predictions is bolstered by the empirical evidence of attenuation that has occurred for over thirty years.

The EPA remains concerned, however, about whether the “natural attenuation mechanisms” occurring in impoundment/decant pond sediments and groundwater will continue to function effectively in regard to metals removal or immobilization over the long-term, and/or that at some point immobilized metals may become re-mobilized. What are the Kootenai National Forest’s and Montana DEQ’s contingency plans in the event that elevated levels of metals (or metalloids) are found to develop in groundwater downgradient from the impoundment/decant ponds and/or in Lake Creek at some point in the future after mine closure (e.g., decades into the future)?

It is also not clear to us if long-term water quality monitoring plans are adequate to allow detection of elevated metals levels in groundwater downgradient from the tailings impoundment should that occur in the future. The EPA has published technical guidance documents regarding the use of “monitored natural attenuation” for the remediation of contaminated soil and ground water (EPA, Office of Solid Waste and Emergency Response, Directive 9200.4-17P, April 1999). EPA uses the term “Monitored Natural Attenuation” to

emphasize the need to incorporate adequate monitoring when natural attenuation is relied upon for the remediation of contaminated soil and ground water.

While scientific understanding of natural attenuation processes is increasing, there is still much to be learned regarding the mechanisms governing natural attenuation processes and their ability to address contamination problems, particularly over the long-term. Long-term outcomes are very difficult to predict. Therefore, while EPA believes monitored natural attenuation may be used where circumstances are appropriate, it should be used with caution commensurate with the uncertainties associated with a particular application. Furthermore, largely due to the uncertainty associated with the potential effectiveness of monitored natural attenuation to meet remediation or treatment objectives that are protective of human health and the environment, EPA expects that long-term performance monitoring must be fundamental components of any monitored natural attenuation remedy.

EPA technical guidance regarding monitored natural attenuation that we draw to the lead agencies attention include:

"Monitored Natural Attenuation of Inorganic Contaminants in Ground Water, Volume 1 - Technical Basis for Assessment" (EPA/6001R-07/139, October 2007, http://www.epa.gov/nrmrl/pubs/600R07139/600R07139.pdf);

"Monitored Natural Attenuation of Inorganic Contaminants in Ground Water, Volume 2 Assessment for Non-Radionuclides Including Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Nitrate, Perchiorate, and Selenium" (EPA/600/R-07/140, October 2007, http://www.epa.gov/nrmrl/pubs/600R07140/600R07140.pdf);

"Metal Attenuation Processes at Mining Sites," ((EPA/6001R-07/092) September 2007, http://www.epa.gov/nrmrl/pubs/600R07092/600R07092.pdt).

See also the EPA website on Monitored Natural Attenuation, http://www.epa.gov/nrmrl/gwerd/gw/mna.html, and note that there is also a publication, "A Citizen's Guide to Monitored Natural Attenuation," EPA 542-F-01-004, April 2001, http://www.clu-in.org/download/citizens/mna.pdf).

These EPA technical guidance documents address long-term attenuation capacity and reversibility issues, and long-term monitoring plans in the context of Tier 3 and Tier 4 analyses.

In Tier 3 analysis EPA recommends that long-term capacity and reversibility be specifically investigated. The DEIS states that mechanisms are expected to last indefinitely as long as geochemical conditions remain similar. This may be reasonable, but this type of broad conclusion typically requires a fairly detailed study of bonding/uptake mechanisms of metals in the solid phase and lab-based extractability assessments. It is not clear if the studies identified in Appendices D and I adequately address EPA Tier 3 analysis requirements. Tier 4 deals with the development of a long-term monitoring plan and the development of a contingency plan in case trends revealed by the monitoring data fail to meet expectations. We are including

additional discussion of long-term water quality monitoring and Tier 4 analysis in our following comment (comment No. 3) [Comment E-A-EPA 6].

The EPA recommends that long-term attenuation capacity and reversibility issues, and long-term monitoring and contingency plans be more comprehensively addressed in the FEIS in a manner consistent with the EPA technical guidance documents referenced above.

<u>Response E-A-EPA 5:</u> Thank you for your comments concerning the long-term effectiveness of natural attenuation mechanisms. The Agencies share these concerns and have required several studies to address this issue. The monitored natural attenuation guidance documents recommended in EPA's letter have been reviewed and provided an excellent framework for the development of a long-term monitoring program. We note that these guidance documents are also referenced in Hydrometrics' October 2010 report "Assessment of Natural Attenuation of Metals in a Decant Pond Disposal System – Troy Mine", which is included in the Draft EIS as Appendix I.

The need to assess attenuation mechanisms was raised in 2000 during discussions with the mining company concerning needed revisions to the mine's reclamation plan. In September 2000, Revett Minerals initiated a multi-phase water fate and transport study. This included a 'groundwater sampling and water quality evaluation' during 2000, groundwater tracer testing during 2001, additional monitoring well installation during 2001 – 2002, and geochemical testing of aquifer materials during 2003. These studies were summarized in the January 2004 report "Assessment of Fate and Transport of Copper in Decant Pond Disposal System – Troy Mine" prepared by Land and Water Consulting, Inc., and submitted as Appendix C of the Troy Mine's October 2005 Revised Reclamation Plan. During the research phase, one of the decant ponds was dewatered and sediment samples from the pond bottom were collected and analyzed for total metals content, mineralogical characterization via electron microprobe analysis, and sequential extraction analysis. The studies concluded that copper minerals are forming in the sediments directly beneath the decant pond. The sampling occurred following ten years of suspension of milling operations during which discharge of mine drainage to the decant ponds continued. Consequently, geochemical conditions in the decant ponds at the time of sample collection should have closely replicated those which will occur after closure of the mine.

The Agencies reviewed the studies and noted that (1) only copper attenuation had been addressed and that further studies should evaluate the fate and transport of other metals present in mine drainage; (2) duration of the natural attenuation mechanisms should be addressed; and (3) the potential for secondary attenuation processes to immobilize metals along the groundwater flow path, should the primary mechanism described in the decant pond sediment study ever fail, should also be evaluated.

As part of the Agencies' review of attenuation studies, recent water quality monitoring data from the Troy Mine's adit discharges and decant ponds were also reviewed. Routine sampling conducted by the mine includes the following metal parameters: aluminum (Al), silver (Ag), arsenic (As), barium (Ba), beryllium (Be), boron (B), cadmium (Cd), chromium (Cr),

copper (Cu), iron (Fe), mercury (Hg), manganese (Mn), nickel (Ni), lead (Pb), antimony (Sb), selenium (Se), silicon (Si), thallium (Tl), uranium (U), and zinc (Zn). These data, as well as data collected by DEQ, were compared with human health standards and with aquatic life standards for Lake Creek. Hardness results for Lake Creek monitoring sites ranged from 27 mg/L up to 40 mg/L. Metals which were present in either mine drainage or process water at levels in excess of the chronic aquatic life criteria at 25 mg/L hardness were recommended for inclusion in further attenuation studies.

In all results of tests for dissolved metals, only antimony exceeded human health standards in samples from either mine drainage or process water. For samples analyzed for total recoverable metals, arsenic and lead also sometimes exceeded human health standards; levels of these metals in the dissolved fraction of water samples were consistently within human health standards.

Concentrations of dissolved copper and cadmium commonly exceeded the chronic aquatic life criteria at 25 mg/L hardness in samples collected from the Troy Mine's decant ponds and adit drainage. Dissolved lead in mine water was sometimes detected at concentrations higher than chronic aquatic life criteria. Silver was sometimes detected at concentrations exceeding aquatic life criteria in the total recoverable fraction of either mine drainage or decant pond water, but was not detected in the dissolved fraction. Mercury was not detected, and uranium was only detected at concentrations much lower than human health standards; however, these metals were recommended for further analysis in the next phase of attenuation studies due to the limited amount of data that had been collected at sufficiently low detection limits.

Based on the review process described above, the following metals were identified for further assessment of attenuation potential: arsenic, antimony, cadmium, copper, iron, lead, manganese, mercury, silver, and uranium. The study included as Appendix I of the Draft EIS further reviews the long term effectiveness of the attenuation mechanisms that occur at the base of the decant ponds and that were previously assessed solely for copper attenuation during the 2000 – 2004 studies. Given that some uncertainty remained concerning the long term effectiveness of the attenuation processes that occur immediately beneath the decant pond, the Agencies also decided that a separate study should be conducted to assess the effects of mine water mixing with groundwater beneath the tailings impoundment without the benefit of the attenuation that occurs within or beneath the decant pond. This study is presented in Appendix D of the Draft EIS, and shows that significant attenuation of metals would also occur as a result of the mixing of mine water with ambient groundwater.

Comparison of previous research with Monitored Natural Attenuation guidance documents:

EPA's guidance documents on Monitored Natural Attenuation were published during 2007. Most of the relevant research at the Troy tailings impoundment site was conducted prior to then, yet was consistent with that guidance. EPA's guidance recommends a four-tiered approach to evaluation of natural attenuation. Tier I involves demonstration that the

groundwater plume is not expanding and that sorption of the contaminant onto aquifer solids is occurring where immobilization is the predominant attenuation process. Characterization of hydrogeologic conditions beneath the Troy tailings impoundment and decant ponds has been occurring for over 30 years. Initially, four deep monitoring wells were installed beyond the impoundment perimeter during the late 1970s. Following baseline data collection, the monitoring program shifted from groundwater characterization to water quality monitoring and macro-invertebrate diversity assessment in Lake Creek. Following suspension of milling operations in 1993, the middle cell of the tailings impoundment was reclaimed, allowing for access to the impoundment surface for the installation of wells to evaluate groundwater conditions beneath the tailings. Consultants representing ASARCO and the Cabinet Resource Group co-operated in the implementation of these studies, which included the drilling of several additional monitoring wells during 1995 and 1997. More detailed studies were conducted between 2000 and 2004, as noted above. Geochemical testing of aquifer materials was planned during 2003; however, groundwater collected from the monitoring wells nearest the decant ponds, installed within 30 to 50 feet of the ponds during 2001, showed background concentrations of copper. Consequently, it was decided that materials collected from these wells would not be expected to be strongly enriched in copper and could not be analyzed to determine the attenuation mechanisms. Instead, soil/sediment samples were collected from shallow pits dug in the bottom of the decant pond during the period when it was dewatered in early 2003 (Land and Water Consulting, Inc., 2004). These studies indicate that there is no groundwater plume associated with the discharge to the decant pond, as copper is precipitated within the sediments comprising the decant pond bottom in the form of several secondary copper minerals including malachite, chrysocolla, copper oxides, copper/iron oxides, and copper iron/copper manganese silicates. Copper was also concentrated in organic matter found on the pond bottom including algae and pine needles. The 2004 study concluded that copper precipitation in the decant pond is driven by chemical changes that occur in mine water after it is discharged to the decant pond. These changes include the increased availability of dissolved oxygen, the increased availability of dissolved silica, and the increased availability of organic and inorganic carbon (Land and Water Consulting, Inc., 2004).

Tier II analyses recommended in EPA's NMA guidance involve determination of the mechanism and rate of the attenuation process. Mine water has been discharged to the Troy tailings impoundment and decant ponds since 1981, either combined with tailings slurry during operations, or during the 1993 – 2004 interim shut-down phase as a direct discharge of mine water to the decant ponds. Monitoring of groundwater near the decant ponds, beneath the tailings impoundment, and between the tailings impoundment and Lake Creek has been occurring since 1995. This monitoring does not show evidence for an expanding plume of metal-contaminated groundwater; consequently it is apparent that the rate at which attenuation processes occur within and immediately beneath the decant ponds has been sufficient to preclude the development and expansion of a plume. Analyses of groundwater chemistry, and of the composition and mineralogy of sediment beneath the decant pond where metal precipitation is occurring, as noted previously and further described in the 2004 report, describe the mechanism of attenuation per Tier II guidance.

Tier III analyses involve determination of the capacity of the aquifer to attenuate the mass of contaminant within the plume and the stability of the immobilized contaminant to resist re-mobilization. The studies described above indicate that the attenuation of metals from Troy mine water occurs primarily within the decant ponds themselves and is not dependent upon interaction with ambient groundwater. Further, interaction with aquifer solids of limited availability does not appear to be a factor that would limit the duration of the attenuation process. Changes in groundwater chemistry that would result in slower rates of attenuation are not anticipated. Attenuation of metals in water discharged to the decant pond has been occurring for 30 years without the development of a groundwater plume. The chemistry of mine water has not changed substantially during that time, nor is it expected to after closure of the mine. Sulfate concentrations in mine water have remained in the 20 to 30 mg/L range, which is low and indicative that acid rock drainage is not developing within the mine workings. Given the record of stable mine water chemistry and rapid precipitation of metallic minerals as mine water seeps out of the decant ponds, it is anticipated that the currently occurring attenuation processes will remain effective for a long time. The Agencies note that EPA's MNA guidance appears to be focused on acid mine drainage sites where pollutant concentrations are generally much higher than at the Troy mine site and physical or chemical changes that may impede long-term attenuation are more likely to develop.

Tier IV involves designing a performance monitoring program based on the mechanistic understanding developed for the attenuation process, and establishing a contingency plan tailored to site-specific characteristics. The Agencies concur that long-term monitoring of mine water and groundwater near the Troy decant ponds to document the continued effectiveness of attenuation mechanisms is appropriate. Troy Mine Inc. will be required to submit a long-term monitoring plan based upon EPA's MNA guidance for Agency review and approval. Should the primary attenuation mechanisms occurring beneath the decant ponds ever fail to adequately remove metals from mine water, a contingency plan was presented in the EIS. As evaluated in the study included as Appendix D of the Draft EIS, secondary attenuation processes resulting from direct mixing of water discharged from the mine via the decant ponds with ambient groundwater within the Lake Creek valley aquifer will result in co-precipitation of mine-derived metals and dissolved iron that is naturally present within the aquifer.

Comment E-A-EPA 6: DEIS Table 2-1 (page 2-23) includes information on long-term monitoring of water quality for each alternative, and brief narrative discussion of monitoring is included for each alternative (pages 2-38, 2-39, 2-45, 2-46, 2-54). The DEIS states that the Agency-Mitigated Alternative includes water quality monitoring of springs in the analysis area to validate the prediction that water quality standards would be met post-closure (page 3-23). However, proposed long-term water quality monitoring is presented in a disjointed manner in the DEIS. The narrative monitoring discussions refer the reader to Table 2-2, "No Action Alternative Groundwater Monitoring Sites and Schedule" (page 2-36, 2-37), Table 2-3, "No Action Alternative Surface Water Monitoring Sites" (page 2-38), and Figure 2-5 "Proposed Surface and Groundwater Monitoring Sites" (page 2-40). The DEIS reader must flip back and forth between

the narrative discussions of monitoring for each alternative and Tables 2-2 and 2-3 and Figure 2-5 in an effort to understand proposed long-term water quality monitoring.

It is not clear to us from Figure 2-5 which groundwater monitoring sites are immediately downgradient from the decant ponds at the tailings impoundment, or if these sites are adequate or appropriate groundwater monitoring sites. It is also not clear which pollutant parameters would be analyzed and which analytical methods would be used at each site. It appears that groundwater samples would be collected three times per year (spring, summer, fall, page 2-37), and that the preferred alternative includes a commitment to monitor water quality post-closure for a minimum of five years after mine water discharge actually commences (page 2-54), and/or until the Agencies agree that monitoring is no longer necessary (page 2-23).

We believe a more detailed, comprehensive long-term water quality monitoring plan for groundwater and surface water, particularly for waters downgradient from the tailings impoundment decant ponds, must be disclosed to assure that adequate long-term performance monitoring is incorporated into the natural attenuation treatment plan. This is necessary to assure that the natural attenuation mechanisms continue to be effective in removing/immobilizing metals over the long-term, and that if metals levels increase for any reason, such increases will be identified and detected so they may be mitigated. A contingency plan in case trends revealed by the monitoring data fail to meet expectations is also needed.

We refer the lead agencies to the EPA monitored natural attenuation guidance documents referenced in our comment above for identification and discussion of factors that should be considered in developing a long-term performance monitoring plan for groundwater downgradient from the decant ponds. In particular we recommend pages 18 to 22 in the document, "Monitored Natural Attenuation of Inorganic Contaminants in Ground Water, Volume 1 - Technical Basis for Assessment," EPA/600/R-07/139, October 2007, http://www.epa.gov/nrmrl/pubs/600R07139/ 600R07139.pdf.

A list of pollutant parameters and proposed analytical methods at each monitoring site along with monitoring frequency should be clearly presented. The monitoring plan should be designed to monitor specific metals of concern. Monitoring parameters that should be considered include metals and metalloids that could be present or of concern in Troy Mine waters (e.g., Ag, As, Bi, Cd, Co, Cr, Cu, Hg, Mn, Mo, Ni, Pb, Sb, Se, Ti, U, V and Zn). Monitoring should also include other parameters that link to the proposed attenuation mechanisms, such as pH, redox conditions, dissolved oxygen, dissolved organic carbon, and concentrations of major cations (Ca, Mg, Na, K) and anions (S04, Cl, HCO3), so that geochemical conditions required for natural attenuation can be tracked. Nitrogen parameters (total nitrogen, nitrite+nitrate nitrogen, kjeldahl nitrogen, ammonia nitrogen) should also monitored to evaluate potential presence of contaminants from mine blasting residues.

Monitoring plans should also include well defined triggers that would initiate the implementation of additional evaluation and/or contingency remedial technologies if natural attenuation processes fail to fulfill expectations. Potential chemical and biological monitoring indicators that will be used to signify that natural attenuation treatment may be failing should

be identified with trigger values defined. Long-term monitoring plans must be adequate to detect if natural attenuation may be failing at some point, and if monitoring triggers indicate potential failure that should result in follow-up monitoring and investigation. A different reclamation treatment approach may need to be implemented in the event of failure of natural attenuation. Such measures should be incorporated into a monitoring and contingency/ corrective action plan. EPA's Monitored Natural Attenuation technical guidance documents for Tier 4 analysis recommends:

- Select monitoring locations and frequency consistent with site heterogeneity
- Select monitoring parameters to assess consistency in hydrology, attenuation efficiency, and attenuation mechanism
- Select monitored conditions that "trigger" re-evaluation of adequacy of monitoring program (frequency, locations, data types)
- Select alternative remedy best suited for site-specific conditions

We believe some level of monitoring will likely need to be conducted in perpetuity to assure that natural attenuation mechanisms remain effective in perpetuity. Although monitoring frequency can be reduced over time if monitoring results do not evidence contamination (e.g., reduce monitoring to twice per year, then annually, then biennially, etc.). However, some minimal level of monitoring will likely need to be conducted over the very long-term to validate continued effectiveness of natural attenuation. Bonding and financial assurances should provide adequate funding for long-term monitoring, and implementation of an alternative treatment reclamation approach in the event of failure of natural attenuation.

<u>Response E-A-EPA 6:</u> The Agencies concur that long-term monitoring of mine water and groundwater near the Troy decant ponds to document the continued effectiveness of attenuation mechanisms is appropriate. Troy Mine, Inc. will be required to submit a long-term monitoring plan based upon EPA's NMA guidance for Agency review and approval.

A conceptual long-term monitoring plan that incorporates the NMA guidance is included in Appendix J of the Final EIS.

<u>Comment E-A-EPA 7:</u> The DEIS states that copper is attenuated within the upper foot of soil of the decant ponds via the precipitation of secondary copper phases (carbonates, silicates, and oxides) as well as adsorption onto organic matter (Appendix D, page 1). It is also stated that the decant ponds would be cleaned out periodically (page 2-2 1). If heavy metals precipitate and accumulate in the upper foot of soil in the decant ponds and ponds are periodically cleaned out, it is not clear to us where the metal laden sediments removed from the decant ponds will be disposed. Disposal of metal laden sediments resulting from the periodic clean out of the decant ponds should be described in the FEIS (i.e., identification of the depository or landfill where metal laden sediments would be taken for final disposal).

Also, is there any potential that the periodic clean out of sediments from the decant ponds will mobilize some pollutants, or over time impair the efficacy of the "natural attenuation mechanisms" and/or pollutant removal efficiency of the decant pond?

<u>Response E-A-EPA 7:</u> The location for disposal of sediment periodically removed from the decant ponds was not specified in the Draft EIS. It is anticipated that the volume of material would be minor and the frequency of clean-out would be low. The Agencies would require that the material removed be tested via TCLP or other appropriate methods to determine whether metals contained within the sediments might become re-mobilized after removal from the pond bottom. If it is determined that metals would not leach from the sediment, it would likely be buried within the tailings impoundment and soil would be re-spread over the material. If metal mobility is a concern, the material could potentially still be disposed within the tailings impoundment if it is then covered with a barrier cover to preclude exposure of the material to water. Alternatively, the material could be transferred to any appropriately designed and licensed landfill that agrees to accept the material. The possibility also exists that the material could be shipped off-site for reprocessing and metal recovery.

The secondary copper minerals are stable under surface conditions; that is why they precipitated in the first place. As long as the water is well-oxygenated and its pH is near neutral, the minerals will remain stable.

There is no apparent mechanism for the cleanout of silt from the decant ponds to remobilize metals in the geologic materials or to impair the efficiency of oxygenated water and an inert solid surface to continue to precipitate minerals.

Under the Agency-Mitigated Alternative, cleanout of the decant ponds will be minimized because a berm will prevent inflow of sediment to the ponds and the mine water discharge is clear. In addition, the depth of the ponds (about 10 feet) will minimize plant growth within the ponds. However, if sediment and debris are removed from the decant ponds, they may be contaminated with metals. If TCLP testing of the excavated material documents that the potential for re-leaching of metals from the sediment is sufficiently low, then these materials will be buried within the tailings impoundment where the same attenuation processes are available in the subsurface to remove any metals that are contained in these materials. Topsoil in the burial area will be removed and replaced after burial, and the disturbed area will be revegetated.

The removal of materials from the ponds may mobilize metals that have been captured through geochemical processes in the uppermost soil at the base of the ponds. If this is the case, the remobilized metals will be attenuated in the remaining natural soils beneath the ponds, which extend for at least 15 vertical feet before encountering regional groundwater.

<u>Comment E-A-EPA 8:</u> The volume calculations for infiltration in the decant ponds appear to be based on an oversimplification of the hydrogeology in the area of the decant pond as demonstrated by the tracer tests described in Appendix C. We are concerned about the data limitations and uncertainties associated with decant pond infiltration rates over the long-term. Contingency planning should address this uncertainty.

<u>Response E-A EPA 8:</u> The decant ponds are documented to have performed their function of water infiltration for many years. Should their ability to continue to infiltrate mine water

become impaired in the future, the Agencies have proposed in the Draft EIS that the ponds would periodically be cleaned out. If this proves to be insufficient to restore their infiltration capacity, the ponds could also be expanded or relocated. If their capacity to infiltrate mine water were to diminish in the future and no actions were taken to restore their function, then the water level in the ponds would rise until the water expanded onto the reclaimed tailings and onto adjacent lands. As the pond surface area increased, infiltration rates would return to a balance with the rate of discharge to the ponds.

As a clarification, the tracer test performed by Hydrometrics in 2001 was not used to derive the infiltration rate; rather, the incidental data on ponds elevations collected with no discharge to the ponds were used to calculate the infiltration rate directly. This infiltration rate (0.4 ft/day) should be a good representation of the infiltration rate at the ponds without further modeling. Another estimate of the infiltration rate was derived from the measured hydraulic conductivity of groundwater beneath the ponds. This infiltration value, which varies from 8.4 to 10.1 ft/day, would allow a 1.6-acre pond 10 feet deep to contain the wettest condition expected in a ten year period. The more conservative estimate of 0.4 ft/day would require a 23-acre pond 10 feet deep to contain the same wet condition. Because the existing 5-acre pond has successfully infiltrated the discharge water for the period of mine operation, it was decided that the existing pond size should be used to infiltrate the mine discharge after closure. The expected discharge rate after mine closure is less than during mine operation, and the discharged water will be clear. These factors plus the depth of the ponds, which limits plant growth, should preserve the historical infiltration rate. If a diminishing rate is observed, the pond bottom can be cleaned to restore the original rate. The contingency plan (if more capacity is needed) is to construct more or larger infiltration ponds.

Comment E-A-EPA 9: The DEIS states that domestic wells in the vicinity of the tailings impoundment would not be affected (page 3-89). The EPA recommends that the FEIS identify the location and proximity of nearby domestic wells to the tailings impoundment (e.g., wells within a mile).

Response E-A-EPA 9: A new figure has been inserted into the Final EIS in ***Section 3.9.5.4****.*

Comment E-A-EPA 10: The DEIS states (page 3-5 8) that if nutrients in shallow groundwater discharge locally to surface water (as they may at the toe ponds) nuisance algal growth could occur, although numeric exceedances for the aquatic life standard for ammonia or for the human health standard for nitrate plus nitrite are not observed in the toe pond water quality data. Nonetheless, the DEIS states that nitrate plus nitrite levels may be high enough at times to promote nuisance algal growth in the toe ponds. Table 3-11 shows ammonia levels as high as 4.2 mg/L in groundwater (MW95-4) and nitrate+ nitrite levels as high as 1.19 mg/l. Table 3 in Appendix F (Appendix F, page 11) shows decant pond water ammonia levels from 4.4 to 11.2 mg/l, Nitrate+nitrite N from 14.5 to 37.6 mg/l; Mine water disused area ammonia levels of 0.39 mg/l and Nitrate+nitrite of 7.4 mg/L; and Adit discharge ammonia levels of 2.33 mg/L and Nitrate+nitrite of 7.99 mg/L. Currently, nitrate concentrations in the tailings decant pond water range between 10 mg/L and 30 mg/L, and concentrations in monitoring wells located close to the

decant ponds are similar. However, monitoring wells and the toe ponds downgradient of the tailings impoundment generally have nitrate concentrations of less than 1 mg/L (Table 3-1 1).

The DEIS states that after cessation of mining, addition of nitrate to the tailings impoundment would cease (page 3-70), and residual nitrate would slowly be rinsed out of the tailings by precipitation and diluted in the groundwater, and concentrations of nitrate in the underlying aquifer would decline. Nitrate concentrations are expected to decline rapidly after mining ends, as was observed during the interim mine shut-down between 1993 and 2004, because nitrate-rich mine water will no longer be discharged in the tailings impoundment.

While we agree that nitrogen levels in mine waters discharged to the decant ponds are likely to decline after mining ends there does appear to be potential for elevated nitrogen levels to occur in groundwater and surface waters hydrologically connected to groundwater. It is important to recognize that recent scientific studies have increased concerns about impact of even low levels of nitrogen in surface waters in regard to stimulation of growth of algae and undesirable aquatic vegetation. The Montana DEQ is developing numeric water quality criteria intended to control excessive nutrient (nitrogen and phosphorus) pollution in Montana's streams, rivers, and lakes to assure a level of water quality that will protect the beneficial uses of these waterbodies, (see DEQ website, http://deq.mt.gov/wginfo/standards/NurnericNutrientCriteria.rncpx).

In 2008, DEQ released the report, "Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana's Wadeable Streams and Rivers" which included draft numeric nutrient criteria that, if achieved, ensure protection of designated uses. The 2008 report proposed a total nitrogen criterion of 0.23 3 mg/l for the Northern Rockies ecoregion as the concentration that would ensure protection of aquatic life and recreational uses. We recommend that the revised reclamation plan take this science into consideration and that the closure and post-closure monitoring include monitoring for nitrogen parameters and growing season chlorophyll in the long-term water quality monitoring plan so that the response of the algal community to nitrogen loading can be identified and mitigated if need be.

> *<u>Response E-A-EPA 10:</u> Thank you for your comment. As EPA notes in this comment, the concentrations of nitrogen compounds in the toe ponds do not exceed and are less than the numeric aquatic criteria for ammonia or the human health standard for nitrate + nitrite. The highest concentrations of nitrogen compounds are expected during mining operation and the operational levels of nitrogen compounds in decant water discharged to the tailings impoundment range up to 37.6 mg/L nitrate + nitrite and 11.2 mg/L ammonia. However, the operational concentrations of nitrogen compounds in groundwater downgradient of the tailings impoundment and in the vicinity of the toe ponds are less than 1 mg/L. When blasting ceases, the input concentrations of nitrogen compounds would decrease further. It is important to note that there is no hydrogeological evidence that water from the tailings impoundment or toe ponds discharge to Lake Creek (Castro 2009).*
>
> *We are aware that DEQ Water Quality Standards Section has prepared a preliminary technical analysis to address total nutrient concentrations that could represent an undesirable biological impact for streams in Montana during the growing season from July 1*

through September 30 (Suplee et al. 2008, Suplee and Suplee 2011a). The analysis is not yet complete and has not been developed sufficiently to begin the rulemaking process. The technical analysis seeks to determine seasonal criteria that would be generally applied on an ecoregion level, but would be further subject to reach-specific factors that affect algal growth. To address the uncertainty regarding the response of area streams to increased nutrients, the Troy Mine performs aquatic monitoring in Lake Creek as part of the Hardrock Operating Permit requirements. More than 25 years of monitoring data (Fairway, Stanley, and Lake Creeks) have been collected and do not indicate the development of nuisance algal growth as a result of mine effluent discharge (Parametrix 2010).

EPA has indicated that both total nitrogen (TN) and total phosphorus (TP) are the minimum acceptable nutrient criteria for evaluating the potential for nuisance algal growth (Suplee et al. 2008). Significant increases in algal growth may not occur in response to increases in TN concentration if TP concentrations are sufficiently low that they limit algal growth when nitrogen is already present in surplus (Allan 1995, Steinman and Mulholland 1996). Further, it has been documented that elevated TN and TP can lead to significant seasonal dissolved oxygen decreases along a stream, which would be harmful to fish (Suplee and Suplee 2011b).

The TN concentration cited in your comment was one of three nutrient concentrations developed in a preliminary technical analysis on an ecoregion basis (Suplee et al. 2008). The Troy Mine is within the Northern Rockies Ecoregion 15q Purcell-Cabinet-North Bitterroot Mountains (NRIS). The preliminary technical analysis indicates that for this ecoregion, a TN concentration of 0.233 mg/L, a nitrate + nitrite concentration of 0.081, and a TP concentration of 0.012 mg/L could be appropriate numeric criteria for the Montana Board of Environmental Review to consider for adoption. These TN, nitrate + nitrite, and TP concentrations are based on maintaining in-stream chlorophyll a concentrations to less than 150 mg/m^2 as identified by MDEQ's nuisance algae public-perception survey. Nuisance algal levels were defined quantitatively in this survey using a benthic algae metric (i.e., chlorophyll a density per unit area of stream bottom; Suplee et al. 2009). Please refer to the table that follows.

Period of Record: 2000-present	***L-1 (upstream of tailings impoundment)***	***L-2 (downstream of tailings impoundment)***	***L-4 (downstream of tailings impoundment)***	***DEQ Preliminary Technical Analysis Nutrient Total Concentration Northern Rockies Ecoregion, (mg/L)***
Ammonia median (mg/L)	*<0.050*	*<0.050*	*<0.050*	*0.081*
$NO_2 + NO_3$ median (mg/L)	*0.062*	*0.060*	*0.110*	*0.233*
Total P median (mg/L)	*0.011*	*0.012*	*0.011*	*0.012*

Allan, J.D. 1995. Nutrient Dynamics. Pp. 283-303. In: J.D. Allan. Stream ecology structure and function of running waters. Chapman and Hall, London, UK.

Castro, James. 2009. Technical memo. Montana Department of Environmental Quality, Helena, MT.

NRIS. Ecoregions of Montana. http://nris.mt.gov/gis/gisdatalib/downloads/ecoreg2002.pdf. Draft 2. Accessed September 2, 2011.

Parametrix. Final annual report – year 25; comprehensive water quality monitoring program for streams adjacent to Genesis, Inc., - Troy Mine: Analysis of spring 1986 through fall 2009 samples. Prepared for Genesis Inc. and Montana Department of Environmental Quality. July. Bellevue, WA.

Steinman, A.D., and P.J. Mulholland. 1996. Phosphorus limitation, uptake, and turnover in stream algae. Pp. 161-189. In: F.R. Hauer and G.A. Lamberti, editors. Methods in Stream Ecology. Academic Press, San Diego, CA.

Suplee, M., V, Watson, A. Varghese, and J. Cleland. 2008. Scientific and technical basis of the numeric nutrient criteria for Montana's wadeable streams and rivers. Montana Department of Environmental Quality, Helena, MT.

Suplee, M.J., V. Watson, M. Teply, and H. McKee. 2009. How green is too green? Public opinion of what constitutes undesirable algae levels in streams. Journal of the American Water Resources Association 45: 123-140.

Suplee, M., and R.S. Suplee. 2011a. Guidance Document: Assessment methodology for determining wadeable stream impairment due to excess nitrogen and phosphorus levels. Draft 6: April 2011. Montana Department of Environmental Quality, Helena, MT.

Suplee, M., and R.S. Suplee. 2011b. Guidance Document: Assessment methodology for determining wadeable stream impairment due to excess nitrogen and phosphorus levels. Appendix B. Draft 6: April 2011. Montana Department of Environmental Quality, Helena, MT.

Comment E-A-EPA 11: The DEIS states that during active operation of the mine, Troy Mine, Inc. typically uses the tailings impoundment and decant ponds to settle out suspended sediment from the tailings slurry, and then clarified tailings/decant pond water is pumped to the mill circuit via a return line (page 3-60). The DEIS also states that up to 1,170 gpm of the decant pond water seeps through the unlined bottom of the ponds into the underlying aquifer (i.e., or approximately 1.7 million gallons per day). The 2001 Hydrometrics report (Appendix H) indicated that, while deep groundwater and the decant ponds system are hydraulically connected, most of the decant pond water is transported downgradient (towards Lake Creek) via the shallow alluvial aquifer (page 3 61); and it is also stated that groundwater beneath the tailings moves in a westerly direction and eventually discharges to Lake Creek (Summit Envirosolutions 1996, page 3-77).

It appears, therefore, that discharge of mine water by infiltration into groundwater beneath the tailings impoundment has been occurring for many years (groundwater hydrologically connected to Lake Creek). Such discharges are also proposed to occur after mine closure when underground mine waters will be piped to the decant ponds as the plan for treatment and disposal of mine waters over the long-term. It also appears that the amount of mine water infiltrating into groundwater may potentially increase after mine closure if the discharge to the decant ponds from the underground mine were to be anything close to the maximum pipeline design flow of 6.9 cfs (3,100 gpm). It is our understanding that existing and proposed discharges of mine water to groundwater hydrologically connected to Lake Creek have been occurring without authorization by an Montana Pollutant Discharge Elimination System (MPDES) permit, and such unpermitted discharges are expected to continue post-closure.

While we understand that natural attenuation mechanisms are stated to occur in the decant pond sediments and groundwater that remove and/or immobilize metals, and it does not appear that elevated levels of metals are found in Lake Creek, we recommend that the MDEQ continue to monitor groundwater and Lake Creek and carefully evaluate whether pollutants may move into Lake Creek via hydrologically groundwater in the future, and if so, reconsider the need for a MPDES Permit.

Response E-A-EPA 11: The Agencies have found no evidence of a direct connection of tailings seepage to surface water.

All of the potassium data from the Asarco/Sterling/Genesis water monitoring reports since 1985 showed no trends in potassium concentrations in Lake Creek above and below the tailings impoundment. Site LC-1 is upstream of the tailings impoundment, LC-2 is at the downstream end (and therefore definitely downstream of the paleochannel of Camp Creek, which is suspected to carry water from the impoundment to Lake Creek), and LC-4 is some distance downstream of the impoundment, past the point where a tributary enters Lake Creek. The only trend that may exist is a higher average potassium concentration at LC-4. Since LC-2 is not trending higher than LC-1, any elevated potassium at LC-4 would have to come from a source other than the mine.

Four reports were generated by consulting companies on the subject of seeps below the Troy tailings between 1990 and 2000.

The first was the Final Report on the ASARCO, Troy Unit Groundwater/Seepage Study submitted by EBASCO in September 1990. In this report, water quality data from the tailings water, the toe ponds, seeps between the tailings impoundment and Lake Creek, another seep on the opposite bank of Lake Creek and two miles downstream, and Lake Creek water sampled at points above and below the tailings impoundment were compared using "Euclidean distances" cluster analysis and analysis of variance.

This study concluded that the water in the seeps below the tailings impoundment did not originate in the tailings. Although the seeps near the tailings impoundment (S1 and S3) contained levels of magnesium, chloride, and sulfate similar to those in the tailings

impoundment water, there were no other similarities. On the other hand, the specific conductance, nitrate/nitrite, ammonia, Kjeldahl nitrogen, copper, and potassium levels in S1 and S3 were very similar to those at the downstream seep (S5), and very different from those in tailings impoundment water.

Since potassium has been regarded as a conservative indicator of tailings water, and since all of the seeps contain much lower potassium levels than those in the tailings, this casts doubt on the hypothesis that the tailings water is having an impact on the creek water via the seeps.

The second report was a re-evaluation, requested by the Department of State Lands, of the data in the first report. Draft Report: Supplemental Analysis of Water Quality Data for Springs and Other Surface Waters in the Vicinity of the Tailing Impoundment, ASARCO Troy Unit was submitted by Parametrix in April 1991. In this study, different statistical techniques were used, including five different cluster analysis methods and multiparametric analysis of variance. The findings in this report confirmed the conclusions of the first report. Again, seeps S1 and S3 were found to be different from tailings water but somewhat similar to the downstream seep S5.

A third study was performed jointly by Summit Envirosolutions, Inc., on behalf of the Cabinet Resource Group and McCulley, Frick, and Gilman, Inc. (MFG) on behalf of ASARCO. The report, Interim Report of Findings, Hydrologic and Hydrogeologic Assessment, ASARCO Troy Mine, Troy, Montana, was completed in June 1996. This study was intended mainly to develop a water monitoring plan for the mine. This study concluded, based on the groundwater and surface water quality data, that no acutely toxic levels of dissolved metals could be found to be mobilized into Lake Creek by groundwater under the tailings impoundment. (Copper above the chronic aquatic life limit was found in Lake Creek, but the levels upstream and downstream of the tailings impoundment were the same, i.e., the copper came from a source other than the tailings.)

The fourth study was performed by Summit Envirosolutions for the Cabinet Resource Group and was reported in Site Instrumentation Status Report, Troy Tailings Impoundment, Lincoln County, Montana, Summit Project No. 0762-002 on December 3, 1999. This report recommended regular sampling of certain monitoring wells but drew no new conclusions about any hydrological connection between the tailings and Lake Creek.

Comment E-A-EPA 12: The discussion of exceedances of copper water quality standards in upper Stanley Creek indicates that the source(s) of these exceedances may be due to several factors, including sediment generated from surface water erosion of naturally copper-bearing soil, groundwater seeping from the mine void, erosion of copper-bearing soil from the portal patios, or groundwater containing naturally-elevated copper concentrations from mineralization in the area (page 3-85). The DEIS states that the occasional low-level naturally-occurring copper exceedances in upper Stanley Creek would be expected to continue through post-closure for all alternatives. There have historically been numerous detections of copper in Fairway Creek despite the Fairway site being upgradient of the mine. The DEIS indicates that the most likely

reason for these detections is that copper occurs naturally in the region and is present in soils and sediment.

The MDEQ's Clean Water Act 303(d) listing website (http://cwaic.mt.gov/query.aspx) lists Stanley Creek as water quality impaired (from headwaters to confluence with Fairway Creek, 4 miles, MT76D002_010) with only partial support for aquatic life and cold water fishery uses with probable causes listed as unknown, copper, nutrients, and biological indicators, and probable sources listed as mine tailings and streambank modifications/destabilization. If natural sources of copper in the Stanley Creek drainage are believed to be causing water quality standards exceedances rather than mine tailings, it would be appropriate to revise the information on the MDEQ 303(d) listing website for Stanley Creek accordingly.

Similarly the disclosure of Lake Creek water quality in Table 3-9 (page 3-53) suggests potential for only low level exceedances of copper water quality criteria. This table does not include identification of cadmium, lead or mercury levels, which are among the listed pollutants causing water quality impairment for Lake Creek on MDEQ's Clean Water Act 303(d) website. Lake Creek is listed as water quality impaired (Bull Lake outlet to mouth, 17.6 miles, MT76D002_070) with only partial support for aquatic life and cold water fishery uses, and no support for drinking water use, due to cadmium copper, lead, mercury and zinc, nitrate/nitrite, and sedimentation from mine tailings, natural sources, and forest roads.

It is also worthy of note that the DEIS states that copper and antimony are the constituents of concern (page 3-50) because they have exceeded water quality standards for surface water in the mine water (i.e., copper concentrations averaged 0.04 1 mg/L and antimony concentrations have averaged 0.0 10 mg/L during mine operations; and during an interim shutdown copper concentrations were somewhat higher, averaging 0.059 mg/L, and antimony concentrations averaged 0.011 mg/L (Table 3-7, page 3-5 1). However, copper, cadmium, lead, mercury, and zinc are listed by MDEQ as the probable causes of Lake Creek water quality impairment, but the MDEQ website does not identify antimony as a probable cause of impairment. Table 3-7 in the DEIS does not identify cadmium, lead and mercury levels in mine waters.

The DEIS discussion of metals levels in Stanley and Lake Creeks appear, therefore, to be disconnected from the MDEQ's water quality impairment listings. It will be important that further evaluation of water quality impairments in Lake Creek and Stanley Creek and their magnitude and causes take place early in the development of the TMDL's for Stanley and Lake Creeks. It will also be important the Troy Mine long-term reclamation plan be consistent with the development of TMDLs to improve water quality and restore full support for designated uses in these waterbodies.

> *<u>Response E-A-EPA 12:</u> This matter will be discussed with the TMDL program, but is outside the scope of this EIS. Table 3-7 has been expanded to include cadmium, lead and mercury.*

<u>Comment E-A-EPA 13:</u> As noted earlier, the Agency-Mitigated Alternative proposes constructing and burying a new pipeline that would transport water from the underground mine (Service and Conveyor Adits) to the decant ponds at the tailings impoundment instead of using the existing

tailings pipelines (page 3-80). The DEIS indicates that the new pipeline would include a leak detection system and be double-lined at creek crossings to minimize the potential of discharge directly to streams (page 3-80). It is important that attention directed at reducing risk of pipeline leaks and spills, since we understand that there have been past tailings pipeline spills at the Troy Mine that have resulted in elevated metals levels in surface waters.

Appendix G provides information on the conceptual design of the proposed new pipeline. It is stated that the pipeline would follow the existing tailings/slurry pipes, approximate the land gradient, and have the hydraulic capacity to handle all of the estimated peak discharge of 6.9 cfs under gravity flow (Appendix G, page 2). The volume of flow over time after closure as provided in Appendix C appears to be a rough estimate. What are the provisions for collecting additional information for input into the final engineering design for the pipeline? For example, as the groundwater flow fluctuates seasonally, a design flow based upon averages is not robust and additional data will be needed before final design. The analysis of discharge is based upon existing operating conditions rather than closure conditions, and appears to be based on a simplification of the groundwater fracture flow conditions at the mine site. We recommend that the pipeline be designed for the highest forecasted flow over the timeframe that it will be used, not the "extreme event of over a ten-year recurrence interval" as stated in Appendix C (page 4). Also, if the water pressure may fluctuate, those fluctuations also need to be taken into account. Pipeline design considerations for freeze/thaw and for stability with steep slopes and transitions from steep to gentle slopes are not well described.

We recommend burying the pipeline at a depth below the freeze level across the entire width of the stream, meander zone, and active floodplain, such that if there is any stream movement the pipe is not exposed to erosive action of bedload and debris in moving water. In addition, we recommend consideration of using a secondary sleeve similar to how water supply pipes are often put in at stream crossings, so in case there is a leak under the stream the pipe can be replaced by removing old pipe and inserting new pipe into the sleeve without disturbing the stream again - the sleeve can be placed using a boring system or a trench. Also, if the pipe is to be hung over the stream or gully, it should be high enough to clear any substantial flood (FEMA a 100 year flood is reasonably foreseeable). Additional valving should also be considered at major slope transitions where they may be a higher likelihood of pipeline failure (e.g., transitions from 12% slope).

Appendix G suggests that smooth HDPE pipe may be used, in which case pipe corrosion is likely not a concern (i.e., sometimes installation of a casing pipe around a metal pipeline at crossings of rivers may actually increase the probability of a spill at or near a river or stream, since air and moisture accumulation between the casing and pipe has potential to aggravate pipe corrosion, but this should not be a concern with HDPE pipe material). Other measures that the lead agencies and company may want to consider to reduce risk of a pipeline spills or leaks include:

- Locate pipeline as much as possible away from streams and wetlands, and minimize pipeline crossings of streams and wetlands
- Pipeline valving shut-off arrangements that limit the magnitude/volume of a spill at any one time (periodic block and check valves). Mainline block valves and check valves located

upstream and downstream of river/stream crossings to allow stoppage of flow should leaks or pipeline damage occur at river and stream crossings, and additional valving is also recommended at major slope transitions where they may be a higher likelihood of pipeline failure.

[We note that Appendix G states that the static capacity of the pipeline is about 250,000 cubic feet (-4.87 million gallons), which is the maximum amount of mine water that could drain from the pipe should a break occur at its lowest point (Appendix G, page 2). It is also stated that this amount could be reduced with the addition of automatically controlled valves along the length of the pipeline, but this design feature was not incorporated into the design. We recommend that additional automatic valving be incorporated into the design to reduce potential spill volumes.]

- Increase pipeline thickness at stream crossings.
- Use cathodic protection along the entire length of pipeline or coat pipeline with a minimum of 8 mils of fusion bonded epoxy coating (FBE), 6 mils of copolymer adhesive, and 40-75 mils of high density polyurethane (HDPE) to protect the pipe from corrosion (if metal pipe were used).
- Use state-of-the art "smart pig" system to detect deformities on the inside of the pipe, and "smart pig" internal pipeline inspections within three years of the initial hydrostatic pipeline testing, and schedule subsequent periodic inspections (e.g. every two years) to reduce the risk of undetected deformities causing spills.
- Regular hydrostatic testing to evaluate pipeline integrity during operations.
- Have a Contingency Plan and Emergency Response plan for the pipeline, containing information on spill response procedures to be followed and actions to be taken in the event of a spill. The Plan also should identify the specific procedures to mitigate potential adverse environmental impacts (i.e., on surface water, ground water, soils, fisheries, wildlife, recreation, human health and safety) and discuss the location of equipment and expertise available to each length of the route to respond to environmental cleanup. Special conditions such as weather impaired and cold weather response procedures should be included.

<u>Response E-A-EPA 13:</u> Please see response to Comment E1.

Each 8-inch diameter tailings line carries 1,250 gpm (2.8 cfs), so the two lines together would be able to carry a maximum of 5.6 cfs. The reclaim pipeline would also be available to handle additional flow beyond the predicted maximum flow. The modeling of the predicted maximum flow is limited by 1) the uncertainty in the time frame over which the pipelines would be used; and 2) the available existing data with which to model the interactions of surface water with the groundwater system empirically. Ten years of data exist; additional years of data would be needed to model this complex system for a longer time period.

Freezing problems have not occurred with the existing tailings pipelines when operated as tailings delivery lines. If there is an interruption in water delivery, the line would automatically drain, which would reduce the potential for freezing damage. However, an above ground line and above ground automatic controls would have an increased risk of freezing compared to an underground system.

Comment E-A-EPA 14: The DEIS states that an average of 2.3 cfs of water is displaced from the mine workings to areas (e.g., the decant ponds) more distant from the mine (page 3-67). How does the reference to 2.3 cfs being displaced from the mine workings to the decant ponds relate to the range of flows estimated between 300 gpm (0.67 cfs) to 3100 gpm (6.9 cfs) being directed from the underground mine workings to the decant ponds (page 3-76)?

> *Response E-A-EPA 14: Discharge from the mine workings to the decant ponds is estimated to range seasonally from 0.67 cfs up to 6.9 cfs, with an average discharge rate of 2.3 cfs.*

Comment E-A-EPA 15: The reclaim water line is proposed for use after mine closure as an emergency line for transport of mine adit discharge in the event of a leak in the new buried pipeline (Appendix G, page 2). However, it stated that the reclaim water line will only handle approximately half of the estimated maximum 6.9 cfs under gravity flow conditions (Appendix G, page 3). It is also stated that the reclaim water line could handle the full estimated flow if it is retrofitted with appropriate vacuum relief and pressure relief valves. We recommend that the reclaim water line be appropriately retrofitted to allow it to handle the highest potential flow over the timeframe that it will be used.

> *Response E-A-EPA 15: Retrofitting the reclaim water line will be included in the reclamation bond. Troy Mine, Inc. will have to install some secondary measures to route water while the main pipeline is being repaired.*

Comment E-A-EPA 16: The DEIS states that no activities are proposed under any alternative that would discharge fill materials into water bodies or that would impact wetlands (page 3-9 1), however, since there are statements that the proposed pipeline would be double-lined at stream crossings (page 3-80), it leads us to believe that there will be pipeline stream crossings, and there may be potential for stream impacts during pipeline construction, and/or impacts to wetlands which are often associated with streams. Figure 1 in Appendix G includes a map with a proposed pipeline routing, but streams and wetlands are not clearly depicted on this map. We did not see clear disclosure of the number of streams and wetlands acreage that may be crossed. The EPA recommends that the FEIS clearly disclose the number of streams the pipeline may cross and if it would cross any wetlands, and more fully evaluate and discuss potential stream and wetland impacts associated with pipeline construction.

There may also be potential for disturbing wet areas during removal of stockpiled soils below the toe ponds for use in tailings impoundment reclamation (page 3-2 14). Areas of disturbance from this activity should be assessed for the presence of, and potential impacts to, wetlands.

We also encourage the lead agencies and Troy Mine, Inc. to contact Mr. Todd Tillinger of the U.S. Army Corps of Engineers, Montana Office in Helena at 406-441-1375 or Ms. Christina Schroeder of the Corps of Engineers, Missoula Office at 406-541-4845 extension 328, to determine applicability of Clean Water Act Section 404 permit requirements to proposed pipeline and other mine reclamation construction activities in or near streams or wetlands. We also note that other federal, state and local regulatory requirements may be needed for project implementation should construction activities occur in or near streams and wetlands (e.g.,

Montana Section 318 turbidity exceedance authorizations, Clean Water Act Section 401 certification, Montana 310 permit requirements, Montana Stream Protection Act 124 permits, etc.).

The Council on Environmental Quality (CEQ) regulations for implementing NEPA state that federal agencies shall to the fullest extent possible integrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively (40 CFR 1500.2(c)). To ease the administrative burden the Federal and State agencies in Montana have developed a single permit application for the various potential permits or authorizations that may be needed (http://dnrc. mt. gov/permits/default.asp http://dnrc.mt.gov/perinits/streampermitting/joint application.asp). Also a Montana Stream Permitting Guide is available to explain the various permitting authorities http://dnrc.mt.gov/permits/streampermitting/guide.asp.

Response E-A-EPA 16: As noted in previous responses, the Agencies have revised the Agency-Mitigated Alternative such that it no longer requires burial of the replacement pipeline where it crosses stream channels or elsewhere that the existing tailings pipelines are not buried. A new figure has been added to Section 3.7 that shows the existing tailings pipeline in relation to the stream crossings and Riparian Habitat Conservation Areas. In addition, Section 3.9.4.1 Roads and Other Facilities of the Final EIS has been expanded to provide more detaiil on the existing tailings lines and operational issues. See also response to Comment E1.

No current wetland areas, other than the adjacent floodplain and the toe ponds, were observed during a field review conducted in August 2011 by the Agencies. During reclamation, stockpiled soils may be removed down to or near the original floodplain elevation. Appropriate BMPs would be implemented to control erosion during removal of the stockpiled soils and Lake Creek water quality or associated wetlands would not be impacted.

All necessary permits will be secured before reclamation activities begin.

Comment E-A-EPA 17: In the Agency-Mitigated Alternative, all drainage channels would be built from imported rock rather than from mine development rock to further minimize the potential for near-neutral metal mobility (page 3-40). EPA agrees with and supports the use of rock with low metal leaching or mobility potential for drainage channel construction. The source of this imported rock, however, is not identified. What is the source of the imported rock, and are there any adverse environmental impacts associated with collecting and transporting the imported rock to drainage channel construction sites?

Response E-A-EPA 17: Please see response to Comment E-6.

Comment E-A-EPA 18: Is it expected that the ore zones to be mined in the future will have a geochemistry similar to the ore zones mined in the past, and thus, confirm that metals leaching predictions for the future can be reliably predicted on prior experience and observations? We recommend that the geochemical testing and evaluation methods that will be used to confirm

that the new ore zones will be analogous to the previously mined areas be identified and described in the FEIS.

Response E-A-EPA 18: *In 2009 Genesis, Inc. (now Troy Mine, Inc.) applied for a Permit Revision to allow mining in the "C" Beds, which were a new ore zone. Drill core and coarse reject samples were evaluated by the following tests:*

- *Archived drill core was composited by drill hole into four samples (one per drill hole), which were analyzed for:*
  - *Multi-element ICP,*
  - *Acid-base accounting, and*
  - *Synthetic Precipitation Leaching Procedure (EPA Method 1312).*
- *A further composite was made up from 1.5 kg splits of each of the original drill-hole composites. This sample was subjected to a twenty-week humidity-cell test (which was extended to thirty-two weeks because of an apparent anomaly at twenty weeks). Humidity cell eluate fluid was analyzed for eighteen metals plus fluoride, phosphorus, and sulfate.*
- *A representative composite was made from cores taken from the waste rock zone and this composite was analyzed for:*
  - *Multi-element ICP,*
  - *Acid-base accounting, and*
  - *Synthetic Precipitation Leaching Procedure (EPA Method 1312).*

These tests showed that the ore zone would not produce acid during the course of weathering and that its neutral leaching product was similar to that from the previously mined ore zones. If mining is authorized in other ore zones, a similar testing protocol will be used for analysis prior to the start of mining.

Comment E-A-EPA 19: Reduction in groundwater flows to Ross and Stanley Creeks, especially Stanley Creek, are identified as a water quantity impact caused by pumping underground mine water to the decant ponds (page 3-80). However, the extent of surface water flow reduction is not quantified or estimated, and potential impacts on aquatic life associated with this reduction in streamfiow in Stanley Creek are not identified. The DEIS states that changes in surface water flows and locations are expected to be minimal after mine closure because discharges are not expected to vary measurably at the surface water monitoring sites and because the potential for new, higher elevation springs to develop would be limited. Although it is acknowledged that surface water flows after mine closure would likely remain less than pre-mining flows in the vicinity of the workings (page 3-67).

We recommend that additional information be provided regarding estimated flow reductions in Stanley Creek, and likely impacts to aquatic life associated with such streamfiow reductions (e.g., estimates of pre-project baseline streamfiows or ranges of flow vs. post-closure streamfiows or ranges of flow; estimates of potential impacts to aquatic life associated with flow reduction). If such information is not available we recommend that the direction in 40 CFR 1502.22 be followed for incomplete or unavailable information.

<u>Response E-A-EPA 19:</u> The Agencies disagree that the guidance provided in 40 CFR 1502.22 is relevant to this issue. The statute addresses incomplete information regarding reasonably foreseeable impacts which may result from a future action, whereas the question of flow reduction is one of impacts which may have resulted from a historic action but which cannot be quantified because baseline flow data were not collected.

Groundwater that enters the mine void would previously have discharged to adjacent watersheds in the form of springs, seeps, and stream baseflow. The precise locations where such discharges may have occurred, and associated flow rates, cannot now be accurately determined. However, based upon the relationship between the mine void location and local topography, it may be assumed that approximately half of the intercepted groundwater formerly flowed south toward tributaries to Ross Creek, while much of the remainder flowed north toward tributaries to Stanley Creek. A small fraction of the intercepted groundwater may have flowed eastward toward Weasel Gulch and Bull Lake.

***Section 3.9.5.1** of the Draft EIS and Table 3-12 present estimated discharge rates from the mine during the period 1999 to 2008. The minimum discharge rate of 0.67 cfs can be assumed to approximate the minimum flux of groundwater which would have discharged to adjacent watersheds during baseflow conditions. This would equate to approximately 150 gallons per minute of additional baseflow in both the Ross Creek and Stanley Creek watersheds; the percent reduction in baseflow cannot be reliably estimated because this would be dependent upon the stream reach within which the groundwater formerly discharged and that information does not exist.*

The Draft EIS also estimates the average rate of discharge from the mine to be 2.3 cfs. This value may represent the average reduction in groundwater discharge to watersheds adjacent to the mine. None of the alternatives, the No Action Alternative, the Proposed Action, or the Agency-Mitigated Alternative, would result in changes to mine void hydrology that could substantially alter the way in which the mine void currently intercepts groundwater. Consequently, mine closure is not predicted to substantially alter existing stream flow conditions in Stanley Creek or Ross Creek.

<u>Comment E-A-EPA 20:</u> EPA also suggests that regular multi-spectral aerial photography be used to monitor for presence of new springs, loss of springs, and changes in habitat and vegetative cover in and around aquatic systems. Preparation of a baseline conditions map is recommended to assist in future comparisons. The company should also clarify how trends will be determined and reported.

<u>Response E-A-EPA 20:</u> The Agencies question the efficacy of multi-spectral aerial photography for identifying changes in the flow of springs surrounding the mine void. The Mount Vernon area is heavily forested, densely vegetated, and has extremely rugged terrain. The area typically receives abundant precipitation. Slight changes in spring flow and/or location would not likely be easily detected with aerial photography, and would in any case require follow-up monitoring on the ground.

*The Agency-Mitigated Alternative (**Section 2.4.3**) notes that additional monitoring of springs and seeps would be required.*

Comment E-A-EPA 21: In regard to the allegations that 55 gallon drums were buried in the impoundment years ago by ASARCO (page 2-16), was it ever determined where those drums were buried and what was contained in them? Were the drums ever found and removed?

Response E-A EPA 21: Please see response to Comment E-13.

Comment E-A-LCD 1: Requiring the existing tailings pipelines to be removed and replaced with a buried line does not make environmental, nor economic sense. The current pipelines have carried millions of tons of slurry and have shown relatively zero wear to the liner in the pipe as was discovered in 2004 prior to resuming mining operations after 11 years of dormancy. These pipelines have many years of safe use left in them and should be used until it is determined otherwise. When it is determined that they are in need of replacement, they should be left above ground and along the existing access road to provide for easy and efficient monitoring.

The disturbance to the existing road when digging deep ditches and burying your proposed new tailing line will cause unnecessary soil sediment to enter the creek than there would be if left alone until they needed replaced and substituted with new lines above ground. The fact that the Troy mine waters quickly reached drinking quality standards without any treatment when operations were idle removes any validity to concerns about vandalism as it would be clean water that would not pose a threat to surface or ground water. It should also be pointed out that there has never been an incident of vandalism during the pipelines thirty year existence. We would also ask that the agencies consider the unintended consequences of having a buried pipeline that cannot be easily monitored. What should happen if a section did develop a leak? How long would it take for it to be found and how large of a subsidence or sluff would it take to be able to detect a leak? How much disturbance would we be creating in looking for it? The balance of harm needs to be recalculated and we firmly believe that burying the lines is an unnecessary action that will create more disturbance to the watershed from both a short and long term perspective.

Response E-A-LCD 1: Please see response to Comment E1.

Comment E-A-LCD 2: With two of us in this delegation having carried the TMDL bill last session the proposed action to remove the asphalt from the existing seven miles of road really makes us scratch our heads. With the single biggest mitigation (aside from closing the road) for sediments from road surfaces being to cover them with asphalt, this part of the alternative begs a couple questions.

Response E-A-LCD 2: The Forest Service has no easement on the first 2.33 miles of NFSR 4626 starting at Highway 56. The road is privately owned. Following mine closure, it would be up to the owners to determine if this segment of the road is open to the public and/or if the road is maintained as an asphalt road.

Following mine closure, NFSR under USFS jurisdiction would be greatly reduced. There is no rationale to have an asphalt road, which is expensive to maintain, on a road that has low traffic volumes. By leaving the asphalt surface on bridge approaches for a distance of 100 feet and on live stream crossings we can achieve water quality (BMP) standards under the greatly reduced traffic volume.

See also response to Comment E-CRG 1.

F. Recreation:

Comment F1: Commenters supported keeping the roads open for recreational access under the Proposed Action.

Response F1: None of the three alternatives would result in a change to public access as long as Troy Mine, Inc. does not gate NFSR 4626 at the junction with Hwy 56 on completion of mining activities. The USFS does not have an easement on the first 2.33 miles of NFSR 4626 which takes off from Hwy 56; that 2.33 miles of road is on private land owned by the Troy Mine, Inc. In all three alternatives the USFS will keep NFSR 4626 gated at its current location at the mill site.

Comment F2: Some commenters noted that any gate on the main road should be located just beyond the fork to Spar Lake in order to keep access open to Spar Lake while others supported the Agency-Mitigated Alternative that removes roads and minimizes vehicular access which would require hunters to access areas by foot.

Response F2: Please see the response to Comment F1.

Comment F-A-LCD 1: Is the USFS planning on closing this road from public use after the mine is decommissioned? Have the recreational values of the road remaining open to access very popular places like Spar Lake even been considered? Do we want the public driving on a dirt road rather than one covered with asphalt?

If the plan is to prohibit motorized use of this road after decommissioning it should be articulated by the USFS to the public now, rather than later.

Response F-A-LCD 1: There is no plan at this time by USFS to close the road up to the mine following the mine closure. The USFS believes there is a high recreational value to access Spar Lake. The public access to Spar Lake is currently asphalt and gravel. The USFS or any other public agency currently have no public easement on the first 2.33 miles of NFSR 4626 starting at Highway 56. The road is privately owned.

G. Socio economics

Comment G1: Many commenters noted that the Troy Mine operation supports jobs and the local economy with a low environmental impact.

Response G1: *Thank you for your comment, please refer to* ***Section 3.12*** *of the Final EIS.*

Comment G2: Some commenters felt that the cost of the Agency-Mitigated Alternative versus the Proposed Action is an unreasonable economic burden and goes beyond what is required by law.

Response G2: *Please refer to* ***Section 1.6*** *of the Final EIS. The Agencies must select an alternative that meets legal requirements.*

Comment G3: Many letters provided some socioeconomic background information on the existing condition (e.g. current recession; context of mineral production; number of jobs supported by the mine; employment trends) of Lincoln County and Northwestern Montana.

Response G3: *Thank you for your comment, please refer to* ***Section 3.12*** *of the Final EIS.*

H. Reclamation Materials:

Comment H1: Many commenters noted that the use of the soil stockpiled west of the toe ponds would disturb the existing vegetation and habitat for western toad, would result in sedimentation and erosion impacts to Lake Creek, and would disturb the fine-grained material which will create a dust impact that would not occur with use of the coarser borrow material. One commenter noted the need to reclaim the soil stockpiled below the impoundment.

Response H1:

Disturbance to Existing Vegetation by the Toe Ponds

The Agencies agree that the No Action and Agency Mitigated alternatives would disturb vegetation currently growing on the revegetated soil stockpiles between the toe ponds and Lake Creek. This includes areas used by western toads. Please see response to Comment H-TMI 1 for discussion of effects to western toads. These alternatives would require construction of additional temporary roads for hauling the soil up to the impoundment surface. These roads would disturb other reclaimed surfaces including part of the embankment face. See photo below.

Photo of a portion of the revegetated soil stockpile between Lake Creek and the toe ponds. The photo was taken from the top of the tailings embankment. Lake Creek is in the flood plain in the forested area in the background. The toe ponds are in the foreground at the base of the embankment.

The Agencies want to use the stockpiled soil from the area west of the impoundment because the soil is a substantially better growing medium. Please see response to Comment H-TMI-1 for a more detailed comparison of the stockpiled soil versus the borrow site material.

Erosion and Sediment Impacts to Lake Creek and the Toe Ponds

Sediment impacts to the toe ponds and Lake Creek are expected to be minimal. As stated in ***Section 3.16.2.4****, the Agency-Mitigated Alternative would avoid disturbing the revegetated plant community on the lower outer edges of the stockpiles and maintain a berm around the disturbance area in order to contain sediment. Along Lake Creek, the floodplain would remain undisturbed and provide a natural sediment trap for any sediment that bypasses the erosion control barriers. An undisturbed strip of vegetation would be left around the toe ponds. Erosion and sediment would be controlled by using standard best management practices (BMPs) commonly used in the construction and logging industries. BMPs such as erosion control fabric, wattles, and silt fences would be used to prevent sediment delivery to Lake Creek and the toe ponds.*

Dust Impacts

The Agencies agree that dust impacts from use of the soil stockpiles would potentially be greater than those from use of the borrow sites because of the greater proportion of silt and fine sand in the soil stockpiles. Dust would be required to be controlled on the haul roads using standard construction BMPs such as watering or dust abatement chemicals. Dust impacts would primarily be limited to the season during which the soil haul and spreading work occurs. The disturbed areas would be seeded and organic amendments added following the soil hauling. If necessary, the tailings impoundment area could be irrigated to

control dust and ensure revegetation success from the first seeding. Operationally the Troy Mine has been controlling dust impacts from the tailings impoundments during windy periods of the year using irrigation.

Need to Reclaim the Soil Stockpiled Below the Impoundment

The existing soil stockpile area is currently revegetated with predominantly introduced grasses that were seeded after placement of the material. There are some young trees that have naturally seeded in. This established vegetation would be lost under the Agency-Mitigated Alternative, however after the soil is removed, the stockpile area would be planted with native forbs, shrubs and trees resulting in a more diverse vegetation community than currently exists. Coarse woody debris, if added for western toad habitat, would provide additional organic material that is now lacking.

Comment H2: The EIS should identify borrow sites. Borrow materials are just as effective in providing a growth medium as the soil stockpiles proposed in the Agency-Mitigated Alternative. Although borrow materials may revegetate more slowly, speed is not a regulatory requirement.

Response H2: The borrow site locations are identified in the Final EIS on Figure 2-1. Please see response to Comment H-TMI 1 for discussion of borrow site material suitability.

Comment H3: The EIS should document why growth media amendments are needed and why organic amendments are required over chemical fertilizers. Additional discussion should be added as to the justification, benefits, rationale, or authority for requiring additional woody debris or mulch. Can a compromise be made with wood chips, hay, and compost? The EIS should describe what mycorrhizal fungi are.

Response H3:

Additional discussion as to the justification, benefits, rationale or authority for requiring woody debris or organic amendment:

*The Agency-Mitigated Alternative (described in **Section 3.13.5.3**) requires the use of organic amendments. These amendments provide compliance with agency guidelines and regulatory requirements that are listed in **Section 3.13.2**. Additional federal guidance is found in FSM 2800-90-1 Chapter 2840 Reclamation. Reclamation is defined as "those actions performed during or after mineral activities to shape, stabilize, revegetate, or otherwise treat the affected lands in order to achieve a safe and ecologically stable condition and land use that is consistent with long-term forest land and resource management plans and local environmental conditions." The land management objective on NFSL within the permit area (including the mine and mill sites) includes timber production, watershed protection, wildlife habitat enhancement, and recreation.*

Generally, lands disturbed by mining must be reclaimed to comparable stability and utility as that of adjacent areas (Section 82-4-336(9)(a), MCA), and can meet the desired land use after mining. Stability is interpreted to include geochemical conditions, as well as physical

stability. Geochemical stability includes minimizing the potential for metals in mine wastes to get into water or revegetated plant communities. The desired future land use at the tailings impoundment on private lands is timber production and wildlife habitat. The MMRA requires the Agencies to evaluate the reclamation plan and to determine whether the plan achieves the land use goals.

Use of organic amendments is regularly specified in modern reclamation and revegetation plans for mining (see the Rock Creek and Montanore EISs), highway construction, abandoned mine lands, road decommissioning, and other restoration projects.

In order to restore forest lands so that they are self-sustaining and provide for the desired land use objectives, reclamation must restore soil function so that appropriate native vegetation can be sustained in a healthy condition. As stated in ***Section 3.13.5.1****, organic matter amendments are expected to partially restore soil function by increasing water infiltration and water-holding capacity, improving soil biologic activity, and decreasing soil compaction.*

A native forest soil has considerable subsurface organic material in the form of roots and decaying logs. Incorporation of wood-based organic matter amendment into the soil would partially substitute for this missing component and support improved soil function over both the short and long term.

The required surface organic amendment would reduce erosion and dust, help retain surface soil moisture, prevent crusting of the soil surface, and provide material to support biological processes that normally occur in the humus layer in a forest soil. The organic amendment would allow young plants to get established and improve survival rates.

The coarse woody debris specified for the mine and mill site areas on federal land would provide long term nutrients and duff, and also provide shade and moisture for plants growing adjacent to the logs. The logs also provide habitat for insects, amphibians, reptiles, birds and small mammals. In a forested ecosystem down logs provide benefits for many decades. Coarse woody debris would be recommended on the reclaimed soil stockpiles on private land between Lake Creek and the toe ponds.

The reason for requiring the placement of organic material at the outset of the reclamation is that organic material would otherwise not naturally accrue to levels needed for adequate soil function for over 100 years.

<u>Document why growth media amendments are needed and why organic amendments are required over chemical fertilizers:</u>

Chemical fertilizers can be useful on a selective basis in combination with organic amendments. Chemical fertilizers used alone as proposed in the No Action and Proposed Action only provide a short term nutrient benefit of 1-2 years as compared to many years of slow nutrient release provided by organic amendments. Chemical fertilizers also have the disadvantage of increasing weed growth disproportionately as compared to native plants.

Chemical fertilizers do not provide the other benefits of organic amendments, including improving moisture holding capacity, providing material to support long term soil biological activity, decreasing compaction, preventing crusting of the soil surface, or providing wildlife habitat.

Can a compromise by made with wood chips, hay or compost?

These materials have different constituents and therefore different purposes in a reclamation context. The Agencies think that wood-based materials are probably the most appropriate and readily available organic amendment. Use of a wood-based organic material would increase the establishment of fungus-based, soil microbe communities which would favor forested plant community establishment. Straw, hay or manure based compost tends to promote bacteria-based soil processes that better support grassland communities.

Define mychorrhizal fungi:

A definition of mycorrhizal fungi has been added to the glossary in Chapter 7: "Mycorrhizae are important structures that develop when certain fungi and plant roots form a mutually beneficial relationship". Mycorrhizae serve as highly efficient extensions of plant root systems, especially for woody species. These associations are important to consider in plant establishment and productivity because most plants depend on mycorrhizae for adequate growth and survival (Mallock et al. 1980 In USDA Forest Service and DEQ 2001; Trappe 1981, In USDA Forest Service and DEQ 2001). This is especially true in nutrient deficient soils. Mycorrhizae are particularly important to plant phosphorus nutrition and water uptake (Christiansen and Allen 1980 In USDA Forest Service and DEQ 2001). Thus, the association of mycorrhizae with plants in the project area is especially critical because plant available phosphorus is expected to be low.

Mycorrhizae are eliminated in soil stored for prolonged periods because mycorrhizae can only exist close to the soil surface. Both the stockpiled lacustrine soils and the borrow site glacial outwash materials are lacking in mycorrhizae and would need to be reinoculated. In reclaimed areas, Agency-approved wood-based amendments would be incorporated into the upper 6-12 inches of re-spread soil to promote the rebuilding of mycorrhizae in the soil. Inoculated tree and shrub planting stock with the appropriate mycorrhizal fungi would also be used, or mycorrhizal fungi would be incorporated into the soil as pellets during seeding.

Comment H4: Commenters asked for further clarification of the proposed nitrogen loading as they felt it was unnecessary because trees would grow without it.

Response H4: The organic amendments are needed to improve soil quality in order to establish a stable and diverse vegetation community. Trees will grow better and be more disease resistant with improved soil quality. The objective is to reestablish soil quality that will support most or all the species that would normally grow on this site, not just the species that can survive nutrient-poor, moisture-limited conditions.

Comment H5: A commenter recommended an application rate of 10-15 tons per acre because a range would be easier to achieve (and therefore more practical) and that 25 tons per acre is very hard to achieve unless the pieces are very large which may mean that the desired soil amendment does not actually occur. The EIS should elaborate on how this rate was decided.

> *Response H5: The Agency-Mitigated Alternative has been modified in* ***Section 2.4.3.2*** *to require a range of coarse woody material on the mine and mill site from 25-33 tons/acre with a minimum piece size of 6" diameter. The recommended coarse woody debris to be left after timber harvest in the western hemlock habitat type at the mill site is 16 -33 tons acre (Graham et al 1994). This range is considered what is practical given reforestation and fuels considerations. Graham's recommendations are required by Regional guidelines (FSM 2500-99-1) in order to maintain forest productivity over a 100 year period in a typical regeneration harvest unit. Since the mill site will have virtually no organic material the upper end of this range (25-33 tons/acre) is more appropriate. Larger wood is preferred because it will persist for a longer period* of *time. Approximately one log truck load per acre would be needed for 25 tons/acre. In addition 16-25 tons of coarse woody debris would be recommended on the reclaimed soil stockpiles to enhance western toad habitat.*

Comment H-TMI 1: TMI disagrees with the agencies recommended use of the topsoil located below the toe ponds because:

1. An adequate and proven source of topsoil / growth medium exists on the east side of the tailing facility;
2. The topsoil area below the toe ponds has been successfully reclaimed with over 30 years of re-vegetation that would be re-disturbed;
3. The control of sedimentation to Lake Creek during reclamation activities and topsoil excavation will be a challenge; and
4. The area around the toe ponds is providing breeding habitat for the western toad which has been listed as a species of a concern.

The agency alternative in the DEIS indicates that that soil salvaged in the tailing pond area be used for reclamation rather than borrow soil. TMI is concerned that use of the toe pond salvaged soil will increase long term risk of sediment impacts to Lake Creek, will impact documented western toad habitat and will result in the same reclamation success outcome as using the borrow soil (return of similar forest vegetation to that before the mine). The existing topsoil piles are fully re-vegetated with a thick growth of grass, alders, brush and coniferous trees. The potential impacts to neighbors from dust during soil replacement is higher with the fine grained soils than with the borrow soil. TMI requests the agencies to reconsider their decision to require use of the salvaged soil.

TMI provides Appendix B (Westech, 2011), a report on borrow soil availability and suitability that supports the use of borrow soil for reclamation at the TMI. The following are some of the specific areas in the DEIS that address soil use and amendment issues that should be revisited in preparation of the FEIS. According to the Westech Report (Appendix B), the tailings embankment face supports a young forest of planted, healthy ponderosa pine, white pine and lodge pole pine at a stocking rate suitable for proposed post-mining land uses. Natural

reinvasion of trees is occurring. The understory is primarily herbaceous, dominated by hard fescue. Cover of trees, herbaceous species, litter, lichens, moss and rock is adequate to provide a stable surface. The presence of existing forest on soils with high coarse fragments and the analysis in the DEIS – [(Section 3.16.2.9, Resource Impact Summary (page 3-149)] demonstrate that borrow area material will support the proposed post-mining land uses of forest and wildlife habitat consistent with the MMRA.

The requirements for use of organic fertilizer, organic matter addition to soil, mulch and placement of coarse woody debris on reclaimed sites is by the DEIS's own admission not necessary to achieve reclamation goals. TMI recognizes its responsibility to successfully reclaim the land disturbed by the mine, but doesn't agree that use of unnecessary amendments are required; if it takes a few years longer to achieve the vegetation density to meet bond release criteria that is TMI's option. At the 19th Annual Mine Design, Operation and Closure Conference, May 2011, Mr. Rich Prodgers, Bighorn Environmental, provided a presentation; "Effectiveness of Two Compost Products and One Mycorrhizal Inoculum in Promoting Nutrient Cycling in Cover Soils Originating as Deep Borrow" (see Appendix C). According to Mr. Prodgers' field work, analyses and presentation, he was not able to conclude from vascular plant performance or microbiological analysis that compost confers a benefit. Further he presented information that composts role in establishing nutrient cycling was far less than expected.

TMI understands that the constructed toe ponds provide breeding habitat for the western toad that would not be available without the toe ponds. The toe ponds and toad habitat at the tailing impoundment are on private land and will remain in place at closure. Evidence provided in an attached report on western toad occurrence provided with this letter from Patrick Farmer, 2011 (Appendix D) indicates that the salvage soil stockpile is used by toads during the breeding season and may be important toad habitat during other seasons. This is another reason to reevaluate the removal of the soil stockpiles when a reasonable alternative exists.

Response H-TMI-1:

An adequate and proven source of soil / growth medium exists on the east side of the tailings facility and response to conclusions reached in Westech report:

The soils in the impoundment area prior to mine development were deep lacustrine fine-grained soils covered with a top soil layer of 4-14 inches of ash influenced loess. These soils developed for thousands of years and were highly productive, supporting western cedar and western hemlock habitat types. The excellent soil productivity was the result of high moisture holding capacity and high organic inputs. These soils were salvaged and stockpiled for use during reclamation at mine closure. The intent is to produce a plant community similar to the one that existed before mining began.

Photo of the soils in the soil stockpile area by the toe ponds showing the fine texture and low rock content in the stockpiled materials.

In addition to the superior texture of the soil stockpile source, the other requirements of the Agency-Mitigated Alternative (ripping and adding organic amendments) would lead to better reclamation success. If replaced soils are ripped to limit compaction and organic matter is incorporated into the soils, soil crusting would be limited improving seedling establishment, and improved soil function and productivity of the reclaimed plant community would result.

Ripping would promote better infiltration, deeper root growth, more favorable soil structure, and would set the stage for better overall soil quality on the reclaimed surfaces. Using the stockpiled soil with organic matter additions would provide soil texture conditions that best represent conditions that existed prior to mine development in the impoundment area.

The glacial outwash borrow sites east of the impoundment footprint contain rocky materials that have been developed to construct dikes which were used to separate cells in the impoundment, operational roads, and placed as a growing medium over tailings in reclamation test plots. The Proposed Action would use glacial outwash material from these existing borrow sites east of the tailings impoundment.

Photo of a portion of the glacial outwash material in the borrow area proposed for use a growing medium in the Proposed Action.

The water-holding capacity of the borrow materials is low because of the high rock content (59% to 81% based on Westech soil samples). This glacial outwash material has little innate biological activity and the Proposed Action does not include organic matter amendments. DEQ has a recommended guideline of using a maximum soil coarse fragment content of 50 percent for soils salvage operations at proposed mines, and the glacial borrow source does not meet this standard.

Photo of some of the glacial outwash material that has been placed on top of the tailings in the impoundment. Note the large coarse fragment content.

These subsoil and geologic materials have low fertility, low organic matter content, and a low water holding capacity. Using these materials for reclamation would mimic the harsh conditions that existed when the glaciers first receded and soil had not developed over the outwash material.

Below is a photo of the soil that exists in the glacial outwash material borrow sites area to illustrate the volcanic ash-influenced top soil that gradually developed over this rocky glacial substrate over thousands of years.

Photo of the soil (ash-influenced loess) over the glacial outwash material in the borrow site east of the impoundment. Note the fine textured soil over the rocky subsoil horizons. (This soil surface layer would be saved to reclaim the borrow area and would not be used on the surface of the impoundment for reclamation.)

While the proposed glacial outwash material would support vegetation (primarily pine species and grasses) low fertility, lack of water holding capacity, issues of compaction, and lack of organic matter would compromise soil function, and limit productivity. The types of vegetation supported by such soil conditions are much more limited, and the health and vigor would be substantially reduced. This was substantiated by observation of the tailings

test plots (DEQ 2008a). Some test plot areas exhibited much slower plant growth for all species where the glacial outwash material contained excessive rock fragments.

The Agencies have reviewed the two studies performed by the mining company consultants which compare the quality of soil and the quality of borrow materials. The 2011 Westech report discussed the embankment plant community, but did not indicate the source of the material used for covering the embankment. The report noted that the embankment had a tree cover of 14-45% with an understory of introduced grasses and knapweed. TMI told the Agencies that the embankment had been reclaimed with glacial borrow material during an inspection of the site on August 16, 2011. Based on two test pits (south and west slopes) dug on August 16, the Agencies believe the material on the tailings embankment has considerably more fines than most of the borrow site material, and the revegetation success on the embankments would not be duplicated on the impoundment surface. As noted in the Agencies inspection report from August 16th, "We stopped and dug a shallow pit on the embankment to check the thickness of the soil or borrow used to reclaim it (no photo was taken). The soil/borrow used to reclaim the embankment was about 8 inches thick and was less rocky than the borrow glacial gravels currently used."

The fine-grained soils on the impoundment footprint area were salvaged and stockpiled during mine development for use during reclamation. This was the best quality soil available in the impoundment area and the Agencies see no adequate justification for accepting poorer quality material. In the Westech Report, the consultant indicates that site index (a measure of productivity) varies with soil characteristics and higher productivity is found on lower rock content soils. The Agencies contend that use of material from the borrow site would result in a substantially lower quality growth medium than use of the soil in the stockpiles.

Concern about disturbing vegetation on the soil stockpile:

This soil stockpile area is revegetated but it is not considered reclaimed. It has a temporary vegetation cover while the soil is being stored for final reclamation. Please see response to Comment H1.

Potential sediment to Lake Creek:

Please see response to Comment H1.

Loss of western toad habitat:

The Agencies have reviewed Appendix D submitted with the mining company's comments. Appendix D indicates that the salvaged soil stockpile is used by toads during the breeding season as foraging habitat due to its proximity to the forested habitat along Lake Creek. Overwinter use is unlikely as the few rodent burrows observed were not deep enough to provide adequate protection. The Agencies would minimize potential loss of western toads during soil hauling operations. As stated in ***Section 3.18.5.11****, under the Agency-Mitigated Alternative, no seasonal restrictions would be applied to soil hauling operations. BMPs*

would be used to limit sediment impacts to Lake Creek and the toe ponds and to minimize impacts to toads during soil hauling operations. Troy Mine, Inc. would be required to map out potential haul routes and install silt fences properly (i.e. bury the lower four inches of the fence material) around the entire perimeter of both the stockpile and haul routes. The silt fences would isolate these areas and restrict toad movement between the toe ponds and Lake Creek during reclamation operation, limiting the loss of toads from crushing by heavy equipment. In addition in ***Section 3.13.5.3****, in the Agency-Mitigated Alternative, the mining company would use up to 90 percent of the lacustrine and volcanic ash-derived soil material stockpiles between Lake Creek and the toe ponds. At least 10 percent of the lower slopes of the lacustrine and volcanic ash-derived soil material stockpiles, which are currently vegetated, would be left to act as erosion control berms to prevent sediment delivery to Lake Creek and the toe ponds. These lower slopes would give the toads a place to forage near their breeding habitat during the soil hauling campaign.*

Western toads have been documented to have a high fidelity to breeding sites and could be expected to work their way around silt fences until they reach the toe ponds (Maxwell 2010). Culverts would be placed under the haul routes in two or more general locations: 1) between Lake Creek and the toe ponds; 2) between the toe ponds to allow toads to move between ponds; and 3) other areas identified during an Agency field review. There would be no seasonal restriction on hauling operations.

The Agency-Mitigated Alternative would reduce the potential effect on western toads and their breeding/metamorphosis habitat at the toe ponds as well as limiting direct loss of individuals from heavy equipment traffic. The placement of the culverts would allow restricted, but continual, western toad movement between Lake Creek and the toe ponds during the breeding/ metamorphosis period.

Reclamation of the tailings impoundment surface would not negatively affect the western toad and would increase the amount of upland foraging habitat potentially available over the long-term. The soil stockpile areas would be revegetated again after soil removal resulting in a short-term loss of toad habitat. Given that impacts to western toads can be minimized, there is no adequate justification to accept lesser soil quality. The toads were observed to use logs and other woody debris for cover. The Agencies would request the mining company to place (16-25 tons) coarse woody debris on the soils stockpile area between Lake Creek and the toe ponds to enhance toad habitat.

<u>Dust issues with using the soil:</u>

Potential dust impacts are discussed in response to Comment H3.

<u>Concern over use of organic amendments:</u>

Please see response to Comment H3. The Agencies are aware of Prodgers' research which has not been published or peer reviewed. According to Prodgers' field work, analyses, and presentation, vascular plant performance or microbiological analysis did not indicate that compost confers a benefit in the semi-arid region with a forb/shrub plant community over

the time periods studied. The research study areas were not representative of the precipitation regime and vegetation community found at the Troy Mine. In addition, there are many benefits to adding organic amendments to growth medium used in reclamation other than just stimulating soil micro-organisms. Incorporation of organic matter can reduce compaction, increase water holding capacity, and prevent crusting of soils (such as the lacustrine sediments at Troy). Research has found that organic material is essential to soil productivity in forested ecosystems (Page-Dumroese et al. 1990, Jurgensen et al. 1997, Page-Dumroese et al. 2000). Organic material tilled into the soil provides multiple benefits (Curtis and Claasen 2009). The Federal Highway Administration has found that organic amendments are important to the success of highway revegetation projects (FHA 2007).

ES-14- summarizes agency alternative for use of salvage soil and organic addition; no justification provided.

Response ES-14: Please see response to Comments H3 and H-TMI-1.

ES-17- The DEIS states: "*Under the Agency-Mitigated Alternative,*

No additional measures would be required to mitigate geochemical impacts to reclamation success. The use of the rocky glacial and the lacustrine and volcanic ash-derived soils as growth media would minimize root contact with mined materials. This would effectively minimize the potential effects of plant uptake of metals from the development rock and tailings."

This implies that the tailing has a deleterious or toxic effect on plant growth; there is no evidence known to TMI or provided in the DEIS that toxicity exists and this must be corrected in the FEIS.

Response ES-17: The potential toxicity to plants from the tailings has never been determined. The tailings contain metals (recovery in the mill varies from 60-80 percent). The Agencies noted during inspections during mine life that plants growing in the tailings over the years have exhibited yellowing of the leaves indicating potential nutrient deficiencies and/or metal toxicity effects. The cause of the yellowing was never investigated because the reclamation plan requires replacement of 18 inches of soil over the tailings, minimizing contact with the tailings. The coarse rocky glacial materials proposed for use in the Proposed Action would have the indirect effect of forcing plants to root deeper in order to obtain the moisture needed for adequate growth. As a consequence, metals in the tailings could be absorbed by the plants with possible deleterious effects from metals. The capping of the tailings with fine textured soils that have a larger water holding capacity would minimize the need for plants to extend their roots down into the tailings for water, and reduce the potential for uptake of metals. The majority of plant roots would be in the upper 18 inches within fine textured soils minimizing potential for uptake of metals.

ES-18- The DEIS indicates that under the agency alternative chemical fertilizer would not be used in reclamation. No justification, reason or authority for this decision is provided here or elsewhere in the document.

Response ES-18: Please see response to Comment H3.

ES-19- The summary statement that the TMI proposed action would not achieve comparable utility in not supported here or elsewhere in the document and in fact is contradicted elsewhere in the document. TMI strongly disagrees that this standard cannot be met with borrow soil and further that the agencies have presented any substantive analysis documenting this conclusion. According to the Westech Report, 2011, the tailings embankment face supports a young forest of planted, healthy ponderosa pine, white bark pine and lodge pole pine at a stocking rate suitable for proposed post-mining land uses. Natural reinvasion of trees is occurring. The understory is primarily herbaceous dominated by hard fescue. Diversity is low with few species present. Cover of trees, herbaceous species, litter, lichens, moss and rock is adequate to provide a stable surface. Previous re-vegetation trials on Cell 2; the presence of existing forest on soils with high coarse fragments; and, the analysis of the DEIS demonstrate that borrow area material will support the proposed post-mining land uses of forest and wildlife habitat consistent with the MMRA.

*Response ES-19: See **Section 3.13.5.7** Regulatory Compliance – Reclamation Materials, **Section 3.16.2.8** Regulatory Compliance - Vegetation, and the response to Comment H-TMI-1.*

*The MMRA requires the reclamation of all disturbed lands to comparable stability and utility as that of adjacent lands. Where practicable, soil materials from disturbed areas must be stockpiled and used. By proposing not to use the stockpiled material, the Proposed Action is not consistent with the direction in the MMRA. Furthermore, the high rock content of the East Borrow site does not meet DEQ standards for reclamation material. The existing forest growing on the East Borrow site is dependent on the mantle of topsoil that covers the site. The topsoil that supports the vegetation on this site has good soil quality including elevated organic matter content, adequate nutrients, a healthy soil biotic community, and good water holding capacity. These soil quality attributes would be addressed by the Agency-Mitigated Alternative through use of the fine-textured stockpiled soil material, ripping after placement, and application of amendments. The Proposed Action would not produce comparable utility with respect to soil quality as compared to the Agency-Mitigated Alternative. Also see Final EIS **Section 3.13.5.2** and response to Comment H TMI-1 regarding revegetation on the embankments and previous test plots on the impoundment.*

2-54: Soil amendments listed for the agency alternative include that all disturbed ground at mill site will be covered with mulch and 25 tons/acre wood debris. Nowhere in the document provides the justification, authority or even describes the potential benefits of this treatment.

Response 2-54: Please see response to Comment H3 for organic amendment requirement and response to Comment H5 for coarse woody debris requirement.

3-42: TMI is not aware of any documentation indicating "*plant uptake of metals*" has caused any problem at the tailing impoundment. The use of the borrow soils as compared to stockpiled topsoil will accomplish the same objective; therefore, this argument needs to be revised in the FEIS.

Response 3-42: Please see response to Comment on ES-17.

3-115: TMI is not aware of any data or evidence indicating metals phytotoxicity from the tailing exists nor was any data or evidence referenced in the DEIS. If such documentation exists TMI would like to have a chance to discuss this issue with the agencies prior to completion of the FEIS.

Response 3-115: Please see response to Comment on ES-17.

3-119, 2nd paragraph: "*However, using a glacial outwash material instead would result in gradual, but slower vegetative recovery.*"

The DEIS states that borrow soils would result in successful but slower vegetative recovery and thus meet the "comparable utility" requirement. TMI agrees with this statement and argues that the long history of reclamation pilot tests supports it. The speed of re-vegetation is not a requirement of the Metal Mine Reclamation Act.

Response 3-119: Please see responses to Comments H-3 and H-TMI-1.

3-119, 5th paragraph: "The organic matter would increase infiltration, fertility, and the water-holding capacity of the rocky glacial materials, all of which would speed up soil development on the reclaimed areas."

This only establishes that the organic matter addition would speed up re-vegetation, not that it is necessary to meet the reclamation requirements.

Response 3-119: Please see responses to Comments H3 and H5.

3-119, 6th paragraph: "Twenty-five tons/acre of coarse woody debris (larger than three inches in diameter) would be scattered across the reclaimed areas at the mine portals and mill. All disturbed ground would be covered with an agency-approved mulch."

There is no discussion of the justification, benefits, rational or authority for requiring the addition of wood debris or mulch. More importantly, there is no discussion why this requirement in the Agency-Mitigated Alternative is more effective than the Proposed Action for achieving reclamation requirements.

Response 3-119, 6th paragraph: Please see response to Comment H3 regarding the requirement for organic amendment and response to Comment H5 regarding the requirement for coarse woody debris.

3-120, 3rd paragraph: "These materials would be used because they would produce better soil quality and a more productive plant growth medium due to their larger water-holding capacity.

The material proposed under this alternative would eventually produce a quality soil with a more productive forested plant community, even with the presence of noxious weeds."

This documents that the main benefit of using the stockpiled soils is increased forest productivity. Since the uses of the alternative borrow soils can achieve the DEQ's requirements for stability and utility on these private lands, the requirement to use the stockpiled soil is not warranted.

> *Response 3-120 3rd paragraph: The Proposed Action would not result in comparable utility with respect to soil quality. Please see response to Comment H TMI-1.*

3-121: "*All three alternatives would meet these guidelines on NFSL. However, the Agency-Mitigated Alternative would restore soil function in a shorter period of time*."

The DEIS documents the agencies are in agreement with TMI's Proposed Action which achieves Forest Service requirements. Therefore, there is no need for unnecessary activities just to shorten the time period.

> *Response 3-121: The sentence has been deleted from the Final EIS. See* ***Section 3.13.5.7*** *Regulatory Compliance, for the revised text. USFS guidance directs that timelines are included as part of reclamation plans.*
>
> *The USFS requires that the land be reclaimed so that it is ecologically stable and will support a sustainable forest community. Furthermore, USFS policy (FSM2800-90-1) requires that reclamation be undertaken in a timely fashion, and that timeframes be established with performance standards. Performance standards are provided in the Final EIS in Table3-19 and Table 3-20. The USFS maintains the requirements in the Agency-Mitigated Alternative are reasonable, practicable, and necessary to attain standards. The No Action and Proposed Action would implement a short term revegetation program, but is unlikely to sustain steady recovery in revegetation over time because of poor soil quality. Over many decades revegetation would occur naturally, but this is not considered an acceptable time frame for a reclamation effort. Furthermore, weeds will dominate the understory vegetation until soil quality is adequate to sustain native ground cover.*
>
> *Please also see response to Comment on ES-19 and the response to Comment H-TMI-1.*

3-121, last paragraph: "*The Proposed Action would not produce comparable utility on the reclaimed tailings impoundment*."

The statement is not justified and apparently relies on an interpretation of the MMRA "comparable utility" requirement that is not documented in any agency guidance but seems to be the "more is better" philosophy. The "comparable utility" wording is clearly meant to indicate a level of sustainable re-vegetation that achieves an acceptable level of cover and species diversity. There is no standard to support a minimum level of productivity. On page 3-146 (3rd paragraph) the DEIS indicates the Proposed Action achieves the "comparable utility standard". This statement must be corrected in the FEIS.

Response 3-121, last paragraph: *See* ***Section 3.13.5.7*** *Regulatory Compliance – Reclamation Materials,* ***Section 3.16.2.8*** *Regulatory Compliance – Vegetation, and the response to Comment H-TMI-1. The statement on page 3-146 (3rd paragraph) has been corrected in the Final EIS.*

Comment H-TMI 2: 3-114: "*Moreover, the water-holding capacity of the borrow materials is low and varies with the rock content.*"

The DEIS is correct that water holding capacity varies with rock content; however, the borrow materials proposed for growth media is composed of organics, clay, silt, sand and gravel. Test plots on Cell 2, embankment slopes and Cell 4 demonstrate the mixed borrow material has adequate water retention for growing grasses, shrubs and trees.

Response H-TMI 2: The Agencies disagree that the glacial outwash material contains organics. The organic surface horizon in the borrow areas would be salvaged to reclaim the borrow site. The subsoils and geologic materials in the glacial deposits have little to no organic matter as shown in the data submitted in the mining company's response in Appendix B.

Comment H-TMI 2 Continued: The borrow contains much less clay, silt, and sand than the stockpiled soils because the borrow has 59-81 percent rocks as noted in the Westech report.

Response H-TMI 2 Continued: Please see response to Comment H-TMI 1.

Comment H-TMI 2, Appendix F: Finally in Appendix F, TMI has included photographs of the tailings facility, that shows the excellent growth on borrow material, photographs of the secondary containment warning system installation, photographs of the topsoil stock pile area and the grass growth on cell #4 – borrow material growth media.

Response H-TMI 2, Appendix F: Thank you for the photos.

Comment H-CRG 1: Revett has expressed concern about disturbing the already re-vegetated topsoil stockpiled between the toe ponds and Lake Creek. We share this concern for the same and for other reasons (Refers to CRG letter of Dec.27, 2007, Appendices, Appendix A, Scoping Report, Appendix F, pgs 53-83), yet we also wish to see plenty of organic matter on the impoundment surface to help build soil structure, enhance water retention, and increase nutrients. We would like to suggest some ideas that may help address both these concerns.

Revett has told us it may be operating the Troy Mine for some years to come. The impoundment may well reach its' maximum capacity before the cessation of mining. Revett is looking into putting future tailings back into the mine.

If this were to start happening as soon as possible, reclamation could begin, and perhaps largely be completed at the impoundment while the mine is still in operation. This could, paradoxically, allow for a slower, more flexible pace of reclamations; methods could be tested and tweaked.

A composting program could begin now on an inactive cell of the impoundment, utilizing sawdust, wood chips, agricultural and livestock wastes, etc. Even if there is not enough material available in the area for a truly large-scale project, a significant quantity might be produced over the course of a few years. There are such operations in this region that could be consulted as to feasibility.

We understand that the US Forest Service and the University of Montana have developed a portable gasification plant, clean burning, that runs on waste wood. It can produce power and/or "char" a soil amendment (Operated by Community Power Corp., 8110 Shaffer Parkway, Littleton, CO 80127). There are other sources of information on such possibilities in the area, such as the Canadian company planning a bio-fuels operation in Thompson Falls (EcoTech Energy, 125 W. Granite, Butte, MT 59701). We encourage the agencies to seek innovative ways to put organic material on the impoundment while minimizing disturbance of the stockpiled topsoil.

At the north and south ends of those stockpiles, there are areas that do not yet have trees growing on them. Perhaps some small scale, experimental removal of soil from these areas could be tried seasonally, over several years, in order to determine if problems do arise before an irrevocable commitment is made. The dirt could be brought up and re-stockpiled near where it will finally be used.

We are dubious about the use of artificial fertilizer, particularly as it might affect trees. Finding the nutrients they need, they might put more growth into foliage that into root structure necessary to sustain that foliage growth when the fertilizer is used up.

> *<u>Response to H-CRG 1:</u> Thank you for your comment. Please see responses to Comments H1 and H-TMI-1 for the Agencies' responses about the use of the stockpiled soil versus material from the borrow sites. The Agencies are convinced that regardless of timing during operations or at closure that the stockpiled lacustrine soil would produce better soil quality. Reclamation on the impoundment can begin a cell at a time, minimizing the impacts at closure.*
>
> *With respect to organic amendments, please see response to Comment H3 and response to Comment H-TMI-1. The Agencies specified a wood-based organic amendment. The Agencies would consider the use of a variety of wood-based products. Agricultural and livestock wastes would not be acceptable. Please see response to Comment H3. The mining company can acquire agency-approved wood-based organic amendments during operations. The stockpiling of organic amendments during operations would reduce the reclamation bond. The research on char is not complete, but the Agencies would entertain its use.*
>
> *The Agencies appreciate your concern about commercial fertilizers and would prefer the use of organic amendments to produce slow release nutrients as well.*

<u>Comment H-A-LCD 1:</u> The topsoil piles are currently fully vegetated and have trees and alder brush that has created wonderful habitat for all sorts of terrestrial and aquatic wildlife, most importantly the Western Toad.

Requiring all of this to be undone is completely unnecessary as there is plenty of adequate borrow material that is located 3,000 feet away from Lake creek (think bull trout) and has been proven to work just as good as the topsoil would with test plots while not creating the dust problem that the fine particulates of the topsoil will. Many of the local conservation groups in the area also agree that this proposed action should be reconsidered. We recognize that you have statutory requirements that are driving this, and that the statute was created with the best of intentions, but we feel that this is a classic unintended consequence that can and should allow for a variance.

Response H-A-LCD 1: Please see response to Comments H1 and H-TMI-1.

Comment H-A-LCD 1, Organic Fertilizer: Further, requiring organic fertilizer, other organic matters additions to the soil, and 25 tons/acre of larger woody debris on reclaimed areas doesn't make sense either. 25 tons? Organic fertilizer? It seems that using the right amount of fertilizer than can be measured and applied using the best available science that can be calculated to the square inch is the appropriate and environmentally responsible thing to do. We thought nitrate levels in waterways were of concern to the DEQ?

Response H-A-LCD 1, Organic Fertilizer: The term "organic fertilizer" was mistakenly included in the document. The references should say "organic amendments". Please see response to Comment H3 regarding the use of organic amendments versus chemical fertilizers and response to Comment H5 regarding placement coarse woody debris. Chemical fertilizer application as called for in the No Action and Proposed Action Alternatives and organic amendments as specified in the Agency-Mitigated Alternative are not expected to increase nutrient levels in the streams.

I. Transportation:

Comment I1: Many commenters stated that the main road should remain paved because removing the pavement will result in greater impacts to air quality, water quality, and the economy (cost to remove and maintain). The paved road may also be needed for long-term monitoring. Several commenters noted that the road would be gated which would limit traffic and thus long-term maintenance costs.

Response I1: The cost to maintain an asphalt road over time, is much larger than it is to maintain a gravel surface road. A gravel road will serve for long-term monitoring just as well as an asphalt road. There is no proposal at this time to close NFSR 4626 below the mill site.

Comment I2: Some commenters noted that they assumed the gate on the main road would be located near the tailings impoundment while others requested that the gate on the main road be located just beyond the fork to Spar Lake allowing public access to Spar Lake.

Response I2: The gate on NFSR 4626 on National Forest will be located up at the mill site where public access is currently restricted. The first 2.33 miles of NFSR 4626 starting at Highway 56 is privately owned and the public has no legal access. The public is currently

permitted to use this road by TMI. If public access is prohibited on this road segment, then public access to Spar Lake would only be via Lake Creek Road 384.

<u>Comment I3:</u> Some commenters felt that the asphalt/concrete should be reused as gravel material to cover the road.

<u>Response I3:</u> The asphalt road is planned to be broken up into "black gravel" on the road by a milling machine. A 4-inch lift of crushed gravel is to be placed over the top of the milled asphalt as noted in ***Section 2.4.3.2*** *- Infrastructure.*

<u>Comment I4:</u> A commenter noted that many roads have been passively decommissioned and/or will be passively commissioned. These roads include 4626G, 4624B, most of 4624, the USFS part of 4551, and 4628A. Additionally, road 4628A will be passively decommissioned at mine closure and disturbing the steep, narrow, stable road prism in this area will cause undue environmental disturbances; increase risk of sedimentation to nearby streams; and the trail will become unstable and unusable.

<u>Response I4:</u> The USFS uses the term "decommissioning" for the administrative act of declaring a road has no future use, will not be maintained, and is not intended to be used again. Most roads naturally revegetate during periods of no motorized use; however, the presence of vegetation does not mean the road has already been decommissioned.

USFS policy is that roads designated for decommissioning should be reviewed for stability, sedimentation, and hydrologic issues. Roads that are well-vegetated can still adversely impact water resources through road failures, culvert washouts, surface erosion, and runoff diversion by roadways and ditches. Roads that have conditions that may or will contribute to water quality degradation may need physical treatment before declaring them decommissioned. The amount of sediment potentially created from doing the work is considered when evaluating the benefit of the work. As a result of the lack of risk to water quality and the extent of revegetation, many roads on Mt. Vernon have no ground-disturbing work proposed.

There are a few roads proposed for active decommissioning. These roads were field reviewed and were found to have problems that the Agencies determined should be addressed before considering them decommissioned. Vegetation will need to be removed to access portions of these roads in order to do stabilization work; however, the roads will be seeded and revegetation is expected to be rapid in this high precipitation area. The specific work proposed and the reason for the work is listed in the response to Comment I-TMI 1.

<u>Comment I-TMI 1:</u> The Agency-Mitigated Alternative road reclamation plan includes removal of several spur roads that have been passively decommissioned. TMI views reverting road 4626 to a gravel surface will cause undue environmental disturbance and increase risk of sedimentation to nearby streams. TMI performs annual maintenance on road 4626 and believes the surface will perform for decades after closure with minimal maintenance and cause no sedimentation risk to nearby streams. TMI believes roads 4626G, 4624B and most of 4624 to be passively decommissioned as of this date, and by closure of the Troy Mine, road 4624 will be passively

reclaimed. TMI agrees that the portion of road 4551 on private land should be decommissioned – converted to a trail; however, the portion of the road on national forest is already passively decommissioned and is little more than a trail. TMI believes that disturbing this road prism will cause undue environmental disturbance and increase risk of sedimentation to nearby streams. Additionally, TMI believes road 4628A will be passively decommissioned at mine closure and disturbing the steep, narrow, stable road prism in this area will cause undue environmental disturbance; increase risk of sedimentation to nearby streams; and, ultimately the trail will become unstable and unusable.

Response I-TMI 1:

Road	**Comment**	***Response***
4551	TMI agrees that the portion of NFSR 4551 on private land should be decommissioned – converted to a trail; however, the portion of the road on NFSL is already passively decommissioned and is little more than a trail. TMI believes that disturbing this road prism will cause undue environmental disturbance and increase risk of sedimentation to nearby streams.	*The action proposed for NFSR 4551 is simply a change in designation. No on-the-ground work is proposed.*
4624	TMI believes NFSRs 4626G, 4624B and most of 4624 to be passively decommissioned as of this date, and by closure of the Troy Mine, NFSR 4624 will be passively reclaimed.	*NFSR 4624 was field reviewed in September 2011 and was determined to pose a risk to water resources. The last 0.23 miles have signs of instability and risk factors including fill failures,, slumping shoulders, and water ponding on the road. This road has the potential to deliver substantial sediment to Ross Creek. Active decommissioning work is needed to reduce instability.*
4624B	TMI believes NFSRs 4626G, 4624B and most of 4624 to be passively decommissioned as of this date, and by closure of the Troy Mine, NFSR 4624 will be passively reclaimed.	*The Agencies concur that NFSR 4624B does not need additional on-the-ground work. The AMA will be modified to show passive decommissioning.*
4628A	TMI believes NFSR 4628A will be passively decommissioned at mine closure and disturbing the steep, narrow, stable road prism in this area will cause undue	*The Agencies have no intent to do on-the-ground work at closure on NFSR 4628A as long as existing waterbars remain functional.*

	environmental disturbance; increase risk of sedimentation to nearby streams; and, ultimately the trail will become unstable and unusable.	*Similar to NFSR 4551, the road would simply be designated as a trail. The KNF made the decision to convert NFSR 4628A to a trail in the 2001 Spar and Lake Record of Decision. At the time the KNF did not realize the mine might have future need for drilling access. The road decommissioning – convert to a trail designation has been postponed until mine closure.*
4626G	TMI believes NFSRs 4626G, 4624B and most of 4624 to be passively decommissioned as of this date, and by closure of the Troy Mine, NFSR 4624 will be passively reclaimed	*NFSR 4626G was field reviewed in September 2011 and was determined to pose a risk to water resources. An intermittent stream is routed out of its natural drainage by the road. The stream runs down the road for several hundred feet. The proposed active decommissioning work would return this stream to its natural channel and add waterbars to the road to prevent erosion. An additional benefit to this work is that this stream is probably the same stream that causes erosion above the west ventilation adit. Restoring this stream to its original channel will eliminate this problem and simplify reclamation at the adit opening.*

<u>Comment ES18-</u> "*Any additional sediment from untreated roads and stream erosion across the mill site would add to the already elevated sediment load that currently exists in Stanley Creek and would adversely impact beneficial uses for an extended period of time*."

This statement implies that Stanley Creek is impaired for sediment, <u>which is not the case</u>, and the claim that beneficial uses would be impacted is not substantiated. In early June 2011 Stanley Creek has been observed flowing at high flows while showing no visible sign of turbidity. Each year TMI sends the final report for the Comprehensive Water Quality Monitoring Program for streams adjacent to the TMI. To date, we have submitted reports for 25 years. According to Mr. Joe Volosin – Parametrix Inc., for 24 years, the benthic macroinvertebrate populations and water quality of the stream systems near the Troy Mine have been monitored. Samples have

been collected at locations above and below mining operations in Fairway-Stanley Creek Systems and in the Lake Creek System. The benthic macroinvertebrate and water quality monitoring over the past 24 years have not identified any pollution impacts or degradation of Fairway-Stanley Creek and Lake Creeks due to TMI Facilities.

Over all the years of monitoring, the numbers of clinger taxa in Stanley Creek have been similar to Fairway Creek and similar between Lake Creek Sites. This metric suggests that for both Fairway-Stanley and Lake Creek systems, little sedimentation effects have been noted in any of the streams evaluated. TMI has included the Comprehensive Water Quality Monitoring Programs for Streams adjacent to Troy Mine: Spring 1986 through Fall 2009, Year 25 in Appendix E to this letter.

Response I-TMI 1, ES18: In response to the comment regarding page ES18, the Agencies agree that this statement needs correction.

The Agencies concur that impacts to macroinvertebrates as currently monitored are not evident. However, the Agencies do not concur that there have been no impacts to water quality or aquatic biota from mining-related activities. Mine activities have clearly contributed sediment, and at least temporarily degraded water quality.

Roads used for mining activities have contributed substantial sediment to Stanley and Ross Creeks. Substandard road conditions and other mining related disturbances have contributed to slope failures and debris events. Sanding and snowplowing operations on Road 4626 provide a chronic source of sediment in the winter months.

The 2009 and 2011 tailings spills resulted in short term water quality impacts from turbidity and metal concentrations and longer term impacts as accumulated bedload sediment in Thicket and Stanley Creeks.

Comment I-TMI 1, 3-22; 2nd paragraph: "Under the Proposed Action, unneeded roads that pose a resource risk would not be treated, and restoration work on needed roads would not be implemented."

The definition is not clear as to "unneeded" and "needed" roads.

Response I-TMI 1, 3-22; 2nd paragraph: The Agencies agree that this paragraph is not clear. Text has been replaced with the following:

> *"Under the Proposed Action, some roads that pose a resource risk would not be treated. These roads are NFSRs 4626E and 4626G in Stanley Creek watershed, and NFSRs 4624 and 4628 in Ross Creek watershed. Sediment would probably continue to be contributed to Stanley and Ross Creeks from these roads, adversely affecting water quality."*

The term "needed" road only applies to roads under Forest Service jurisdiction. A needed road is a road determined by the transportation analysis to be required for current and/or future administrative or public access using highway vehicles. Roads that are determined to

be needed are considered long-term system roads. All Forest Service jurisdiction roads not identified for decommissioning are considered needed roads whether they are open or closed to traffic. Roads designated for Intermittent Stored Service are considered needed roads. Some segments of these roads have active or potential sediment sources, and/or water routing on the roads may pose water quality concerns. NFSRs 4626E, 4626G and 4624 are unneeded by the KNF. NFSR 4628 is needed for access to Mt. Vernon and Trail 398.

<u>Comment I-TMI 1, 3-23:</u> *"The Agency-Mitigated Alternative would reduce sediment loading both by implementing reclamation actions and by treating mining road-related sediment sources."*

The statement implies that the Agency-Mitigated Alternative reduces *road related sediment* more than the company's proposal. There is no analysis or discussion of how removing the asphalt surface from the road would reduce sediment more than the Proposed Action. Troy Mine was originally required to install asphalt to mitigate for sediment and it is used elsewhere in the KNF which indicates asphalt road cover is effective for sediment reduction.

<u>Response I-TMI 1, 3-23:</u> *The Agencies agree that this statement needs correction. The Agency-Mitigated Alternative would reduce sediment in Ross Creek by implementing reclamation actions and by treating mining road-related sediment sources. The Agency-Mitigated Alternative would increase road-related sediment in Stanley Creek by converting the pavement to gravel on NFSR 4626. This would be offset by decreasing sediment from the mill site with better reclamation techniques. It is expected that there would be a net decrease in sediment to Stanley Creek under the Agency-Mitigated Alternative because stream channel erosion at the mill site under the Proposed Action is likely to contribute more sediment than conversion to a gravel road under the Agency-Mitigated Alternative.*

<u>Comment I-TMI 1, 3-120:</u> "*Many roads used for drilling decades ago have revegetated and pose a low erosion risk to the watershed*."

The DEIS supports TMI's argument that natural re-vegetation is an appropriate solution for some of the older roads.

<u>Response I-TMI 1, 3-120:</u> *Please see responses to Comments I4 and I-TMI 1.*

<u>Comment I-CRG 1:</u> The Agency-Mitigated Alternative road reclamation plan call for the removal of spur roads that are already decommissioned and the removal of the blacktop surface of road 4626, the mine access road. The disturbance of these roads will increase the risk of environmental damage. Many of the roads built during the exploratory phase and not used since have already been reclaimed by natural vegetation as indicated in the DEIS page 3-120.

<u>Response I-CRG 1:</u> *Please see responses to Comments I4 and I-TMI 1.*

<u>Comment I-A-EPA 1:</u> We appreciate the inclusion of road improvement, reclamation and decommissioning activities in the Agency-Mitigated Alternative to reduce potential over the long-term for road sediment transport to surface waters and reduce road maintenance costs (Table 2-1, pages 2-30 to 2-32). We are pleased that the Agency-Mitigated Alternative would

result in the passive decommissioning of 3.8 miles of road and the active decommissioning of 2.7 miles of road (page 3-120); existing roads would be improved to USFS specifications and 6 miles of paved surface on NFSR 4626 would be replaced with gravel (page 3-134). Roads that are not needed would be ripped, covered with reclamation materials, and revegetated. The Agency-Mitigated alternative would implement BMPs on 19.2 miles of road needed for long-term access (includes stored service work) and decommissions 6.5 miles of unneeded road, thereby reducing long-term road maintenance costs as compared to the Proposed Action. Private roads on Troy Mine, Inc. property at the tailings impoundment would be field reviewed by the Agencies to decide if they are needed for post-mine land uses. We are pleased that this road stabilization work would be carried out and decrease long-term sediment delivery to Stanley and Lake Creeks in comparison to the existing conditions and the Proposed Action (pages 3-88, 3-89).

Response I-A EPA 1: Thank you for your comment.

Comment I-A-LCD 1: Is the USFS planning on closing this road from public use after the mine is decommissioned? Have the recreational values of the road remaining open to access very popular places like Spar Lake even been considered? Do we want the public driving on a dirt road rather than one covered with asphalt?

If the plan is to prohibit motorized use of this road after decommissioning it should be articulated by the USFS to the public now, rather than later.

Response I-A-LCD 1: NFSR 4626 will be restricted with a gate at the mill site. This will not change existing public access or affect access to Spar Lake. Please refer to Comment F-A-LCD 1 answered above. Regarding the road surface, please see response to Comment I1.

J. Vegetation:

Comment J1: Commenters noted that vegetation will re-establish itself and that the Draft EIS is incorrect in stating that vegetation will never fully re-establish. Commenters noted their observations that trees grow even without any replanting efforts in the geographic region around the mine.

Response J1: Yes, vegetation will re-establish but the native communities that existed before will not re-establish. Native tree species have a better chance than native herbaceous species to re-establish in communities similar to the pre-mining condition. Noxious weeds and aggressive introduced perennial and annual grasses have changed plant communities in the Troy area.

Comment J2: Commenters noted the need to control noxious weeds (especially if borrow is used to revegetate) and replant not only grass, but also trees.

Response J2: All alternatives would require control of noxious weeds to comply with the Montana Noxious Weed Control Act. All alternatives would require tree planting.

Comment J3: One commenter noted that there must be enough organic soil to properly revegetate the entire tailings impoundment.

Response J3: There are no organic soils in the impoundment area. All of the proposed reclamation materials lack organic matter because the soil has either been stockpiled for 30 years or buried at the mill site. The rocky glacial gravels near the impoundment also are low in organic matter. This is why the Agencies are requiring organic matter amendments to all reclamation materials in the Agency-Mitigated Alternative. Please see response to Comment H-TMI 1.

Comment J4: One commenter noted the importance of including steps to assure that the threats to surface habitat from subsidence is reduced or eliminated.

Response J4: The Final EIS outlines the steps that would be taken to reclaim and monitor for future subsidence in ***Section 3.8.5.3.***

K. Wildlife

Comment K1: Many commenters indicated that the use of the soils stockpiled to the west of the toe ponds will impact Western toad habitat and that this impact should be avoided.

Response K1: The primary habitats utilized by the western toad are the forested habitat adjacent to Lake Creek and the toe ponds themselves (breeding habitat), not the stockpiled soils areas that lie west of the toe ponds. The toe ponds and associated wetland habitat would not be removed under any of the alternatives (Final EIS ***Section 3.18.5.11****). Although the stockpiled soils areas have revegetated and provide habitat for a variety of species, including some foraging opportunities for western toads, these areas have relatively few trees, shrubs, downed woody material, or rodent burrows that provide hiding cover and protected movement areas for the toad. Between the toe ponds and Lake Creek, there are areas where the river and associated riparian habitat closely approaches the toe ponds and little if any stockpiled soil occurs (Final EIS Figure 2-1). These areas would be left undisturbed and would provide protected routes to the toe ponds both during and after reclamation of the tailings impoundment for the western toad. See also response to Comment H-TMI-1, "Loss of western toad habitat."*

Comment K2: There has been no impact to wildlife from 30 years of tailings disposal.

Response K2: Creation of the tailings impoundment resulted in the removal of upland forest habitat adjacent to Lake Creek's riparian habitat. Thirty years of tailings deposits have created an uncharacteristic and uniform "bench" that currently does not provide habitat for many species except some use by waterfowl in the decant ponds. Reclamation of the impoundment by encouraging the healthy growth of native grass, forb, shrub, and tree species would potentially provide characteristics in the future such as upland foraging habitat and cover for many species, including the western toad.

Comment K-A-EPA 1: Will the decant ponds and their metals levels present hazards to wildlife, including birds? Is there a need to keep the decant ponds fenced to prevent wildlife entry to these treatment ponds after mine closure?

Response K-A-EPA 1: Mine water is routinely analyzed for several metals. Copper is of primary concern as levels exceed chronic aquatic life standards (see Final EIS ***Section 3.9.4.1****). The decant ponds contain tailings water that has been routed through the impoundment from the mine and mill, as well as precipitation. After closure, the decant ponds would contain water derived from the flooded mine workings. Initially, there may be a slight increase in metals contamination of pool water that would be discharged from the mine. Final EIS Table 3-7 indicates mean copper values in mine water were 0.059 mg/L during the interim mine closure and flooding (2000 – 2003) compared to 0.041 mg/L during operations (2004-2009). This includes copper which would be released by dissolution of oxidized ore minerals contained within pillars in the flooding mine. However, the rates of oxidation and dissolution would decrease after the mine void has flooded. Water quality would be expected to improve or remain constant after closure (Final EIS Appendix F).*

Copper is an essential nutrient and animals obtain copper through their diets (Eisler 1995, Pascoe et al. 1995). Higher orders of species, including birds and mammals, are relatively resistant to copper and have regulatory mechanisms that help eliminate excess copper from their systems and reduce the potential risk of copper toxicity (Eisler 1995). Toxicity could still occur, but would require intakes of over 20–50 times the normal amount to result in effects in mammals (ibid).

Pascoe et al. (1995) studied the effects of a contaminated reservoir near Missoula, MT on wildlife species. They evaluated potential effects of increased metal levels through food chain analysis by estimating daily intakes (e.g. ingestion of food, water, and soil/sediments) and comparing it to toxicity values. In general, estimated metal doses to mammals and water/birds of prey were below the respective suites of toxicity values. Minimal health risks were expected due to increased presence of metals, including copper. The Bureau of Land Management developed a risk management criteria system which provides numerical action levels for metal contaminated areas (Ford 2004). Again, this was based on toxicity values compared to wildlife intake assessments. Similarly, the agency found that the rates of ingestion are small compared to toxicity levels. For an area to be considered "high risk," exceedances of 10-100 times the criteria would need to occur.

Surface water copper levels in the Pascoe et al. (1995) study ranged from 5-500 µg/L (approximately 0.005-0.500 mg/L). Dissolved copper at the decant ponds ranged between 0.003-0.200 mg/L (Final EIS Appendix F) and values are below or within the range of the Pascoe et al. (1995) study. Currently, ingestion would be primarily of water and soil/sediment and rates of ingestion, relative to toxicity values, would likely be lower for any wildlife species utilizing the decant ponds. Risk of metal contamination of species using the decant ponds is likely to be minimal.

With revegetation of the impoundment and decant ponds, wildlife species would also begin ingesting plant material. Some plants uptake copper and other metals in their tissues. Reclamation of the impoundment would cover the surface with 18 inches of growth medium to minimize the potential uptake of metals in plant tissue. The fine textured stockpiled soil would provide the most rooting medium and water holding capacity which would minimize the need for plants to root in the tailings. Reduced mineral uptake by plants coupled with maintained or improved water quality would provide wildlife habitat with minimal risk of metal toxicity. The rocky glacial gravels with their lack of water holding capacity would force plants to root deeper into the tailings increasing the potential for metals accumulation in plants grazed/browsed by animals post-closure.

The decant ponds would not be considered State waters, according to the Montana Water Quality Act (Title 75, Chapter 5 Montana Code Annotated), because the definition of State waters does not include "ponds or lagoons used solely for treating, transporting, or impounding pollutants" (75-5-103(29)(b)(1) MCA). Therefore the decant ponds are evaluated strictly in terms of the possible effects of incidental exposure of wildlife such as birds and mammals to the pond water.

The pond water is expected to meet human drinking-water standards except that it may slightly exceed the antimony standard. Therefore it is likely to be harmless to animals that drink it or have contact with it.

Comment K-A-FWP-CR 1: Seasonal road restrictions will benefit grizzly bears, as will the proposed road reclamation (minus clover). The proposed Agency-Mitigated road reclamations will also benefit elk, black bear, and other species. The proposal to prohibit/minimize ATV and snowmobile use in the project area will also afford protection to mountain goats during crucial winter and spring periods.

Response K-A FWP-CR 1: The Agencies agree that the proposed road reclamation and motorized restrictions on the remaining roads would benefit the many species that utilize the Mt. Vernon area, not just the grizzly bear.

Comment K-A-FWP-CR 2: The section on Wolf Background (3.18.4.2) should include the 2 most recent rulings, including that by the US Congress this spring, as well as the most recent ruling by Judge Malloy (8/4/11).

Response K-A-FWP-CR 2: Gray wolf status as an endangered species has changed several times over the past years. Indeed, since the completion of the Draft EIS the Northern Rocky Mountain distinct population of the gray wolf, excepting Wyoming's population, has been removed from the List of Endangered and Threatened Wildlife. This change will be updated in the Final EIS in ***Section 3.18.5.7***

Comment K-A-FWP-CR 3: The section on Wolverine Affected Environment (3.18.5.11) could also be updated to include the recently recorded wolverine sign near Billiard Table Lake (especially given that the area between Billiard Table and the Troy Mine is easily within a wolverine's home range).

Response K-A-FWP-CR 3: At the time the Draft EIS was completed, there were only two reported observations of wolverine within the project area. Since then, an update for the Inland Maritime Initiative, which conducted winter forest carnivore surveys, documented wolverine tracks near Billiard Table. This area is located within a few air miles of the southern extent of the Lake Creek Watershed. The Final EIS will reflect this new observation in ***Section 3.18.5.12****.*

Comment K-A-FWP-CR 4: Some of the information contained in the Mountain Goat section 3.18.6.2 needs updating. For the record, MFWP does not know the exact numbers of mountain goats in HD 101, however, goat hunter numbers, permit numbers, and goat harvest numbers across Region 1 have been decreasing since 1987. This causes me concern for the number of goats currently within HD 101 and using the project area.

Response K-A-FWP-CR 4: Based upon the stated concerns and updated information provided by FWP, the mountain goat population in the West Cabinet Mountains does not suggest a stable population as stated in the Draft EIS. This information will be updated in ***Section 3.18.6.2*** *of the Final EIS to more accurately reflect the status of the mountain goat in hunting district 101****.***

Comment K-A-LCD 1: We do not believe that requiring the topsoil that is now providing great habitat for wildlife be disturbed for the final reclamation plan. The topsoil piles are currently fully vegetated and have trees and alder brush that has created wonderful habitat for all sorts of terrestrial and aquatic wildlife, most importantly the Western Toad.

Response K-A-LCD 1: The revegetated soil stockpiles are now providing an early successional habitat used by open habitat/grassland associated species. While now providing habitat for a variety of species, it is not the primary habitat being utilized by the western toad. As addressed in Comment K1, the toe ponds provide shallow wetland characteristics necessary for successful breeding toads. The berms that hold the toe ponds in place would remain, maintaining the toe ponds and toad breeding habitat into the future. Although the disturbance to the soil stockpile areas would require revegetation and would not provide habitat as it currently does for several years, the grass and small shrub component would return relatively quickly to its current early successional habitat type and provide for open habitat/grassland associated species.

The Agencies disagree that borrow should be used instead of soil. Please see response to Comments H3 and H-TMI-1 above for the Agencies' arguments for using the soil rather than borrow and how the Agencies would mitigate impacts to toads.

References

Allan, J.D. 1995. Nutrient Dynamics. Pp. 283-303. In: J.D. Allan. Stream ecology structure and function of running waters. Chapman and Hall, London, UK.

Castro, James. 2009. Technical memo. Montana Department of Environmental Quality, Helena, MT.

Eisler, R. 1998. Copper hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Geological Survey, Biological Resources Division, Biological Science Report USGS/BRD/BSR—1998-0002.

Ford, K. L. 2004. Risk management criteria for metals at BLM mining sites. Bureau of Land Management, Technical Note 390 rev. 25 pp.

NRIS. Ecoregions of Montana. http://nris.mt.gov/gis/gisdatalib/downloads/ecoreg2002.pdf. Draft 2. Accessed September 2, 2011.

Parametrix. Final annual report – year 25; comprehensive water quality monitoring program for streams adjacent to Genesis, Inc., - Troy Mine: Analysis of spring 1986 through fall 2009 samples. Prepared for Genesis Inc. and Montana Department of Environmental Quality. July. Bellevue, WA.

Pascoe, G. A., R. J. Blanchet, and G. Linder. 1995. Food chain analysis of exposures and risks to wildlife at a metals-contaminated wetland. Archives of Environmental Contamination and Toxicology. 30:306-318.

Steinman, A.D., and P.J. Mulholland. 1996. Phosphorus limitation, uptake, and turnover in stream algae. Pp. 161-189. In: F.R. Hauer and G.A. Lamberti, editors. Methods in Stream Ecology. Academic Press, San Diego, CA.

Suplee, M., V, Watson, A. Varghese, and J. Cleland. 2008. Scientific and technical basis of the numeric nutrient criteria for Montana's wadeable streams and rivers. Montana Department of Environmental Quality, Helena, MT.

Suplee, M.J., V. Watson, M. Teply, and H. McKee. 2009. How green is too green? Public opinion of what constitutes undesirable algae levels in streams. Journal of the American Water Resources Association 45: 123-140.

Suplee, M., and R.S. Suplee. 2011a. Guidance Document: Assessment methodology for determining wadeable stream impairment due to excess nitrogen and phosphorus levels. Draft 6: April 2011. Montana Department of Environmental Quality, Helena, MT.

Suplee, M., and R.S. Suplee. 2011b. Guidance Document: Assessment methodology for determining wadeable stream impairment due to excess nitrogen and phosphorus levels. Appendix B. Draft 6: April 2011. Montana Department of Environmental Quality, Helena, MT.

USFS. 1990. FSM 2100 – Environmental Management Chapter 2130 – Solid Waste Management. 4 pp.

Agency, Elected Official, Organization Comments

2011-06-24 Stewart R_DOI.pdf

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Denver Federal Center, Building 67, Room 118
Post Office Box 25007 (D-108)
Denver, Colorado 80225-0007

TAKE PRIDE IN AMERICA

June 24, 2011

9043.1
ER 11/448

Paul Bradford, Forest Supervisor
Kootenai National Forest
31374 US 2
Libby, MT 59923-3022

Dear Mr. Bradford:

The Department of the Interior has reviewed the Draft Environmental Impact Statement (EIS) for the Troy Mine Revised Reclamation Plan, Kootenai National Forest, Lincoln County, Montana, and has no comments.

Sincerely,

Robert F. Stewart
Regional Environmental Officer

cc: Bobbie Lacklen, Project Coordinator, Kootenai National Forest
Emily Corsi, Project Coordinator, Montana DEQ

2011-06-29 DalsoglioJ_EPA.pdf

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8, MONTANA OFFICE
FEDERAL BUILDING, 10 W. 15th STREET, SUITE 3200
HELENA, MONTANA 59626

Ref: 8MO

June 29, 2011

Ms. Bobbi Lacklen
Kootenai National Forest
31374 U.S. Highway 2 West
Libby, Montana 59923-3022

and

Ms. Emily Corsi
Montana Dept. of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901

Re: CEQ 20110149; Troy Mine Revised
Reclamation Plan DEIS

Dear Ms. Lacklen and Ms. Corsi:

The Environmental Protection Agency (EPA) Region VIII Montana Office has reviewed the Draft Environmental Impact Statement (DEIS) for the Troy Mine Revised Reclamation Plan in accordance with EPA responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 of the Clean Air Act directs EPA to review and comment in writing on the environmental impacts of any major Federal agency action. EPA's comments include a rating of both the environmental impact of the proposed action and the adequacy of the NEPA document.

The EPA is generally pleased with and supports the mitigation measures added to the proposed action with the preferred alternative for the Troy Mine Revised Reclamation Plan (Agency-Mitigated Alternative). However, we do have comments and questions regarding the revised reclamation plan alternatives and the environmental impact analysis and disclosure, which are identified and discussed below and in our enclosed detailed comments. We are particularly concerned regarding the long-term pollutant removal effectiveness associated with the plan to discharge mine water draining from the underground workings to the decant ponds within the tailings impoundment after mine closure.

E-A-EPA1

The DEIS states that mine water would be treated at the decant ponds through "natural attenuation mechanisms" as the water infiltrates, allowing metals concentrations to attenuate within the soils. Mechanisms for attenuating metals (removing them from groundwater) are stated to include dilution, precipitation, adsorption, and co-precipitation. It is further stated that the effectiveness of the natural

Printed on Recycled Paper

attenuation mechanisms in treating mine water has been substantiated through monitoring of water at the tailings impoundment for the past 30 years as well as through studies directed at understanding the geochemical processes that occur in the underlying soils and groundwater system, and that the Agency-Mitigated Alternative would comply with the Clean Water Act and the Montana Water Quality Act.

The EPA acknowledges that there is empirical evidence that infiltration of mine water into groundwater beneath the Troy Mine tailings impoundment and decant ponds have apparently not resulted in elevated levels of copper and other metals in groundwater downgradient from the tailings impoundment or in Lake Creek (which is hydrologically connected to the groundwater beneath the impoundment). However, we are concerned that there may be a finite capacity for metals removal and/or immobilization, and/or that geochemical conditions may change over time reducing effectiveness of the removal/immobilization mechanisms, or that metals immobilized as precipitated metal compounds in decant pond sediments and groundwater have potential to become re-mobilized at some point in the future.

DEIS Appendix I states that the longevity of the natural attenuation mechanisms is dependent on the duration of the geochemical conditions conducive to attenuation and to the capacity of the tailing impoundment/aquifer sediments to continue to uptake metals. It concludes that the mineral precipitation
E-A-EPA1 and co-precipitation mechanisms are <u>expected to last indefinitely or in perpetuity as long as geochemical conditions remain similar to current conditions. The adsorption mechanisms are conservatively estimated to last a minimum of 600 years</u>. However, it is also acknowledged that there are limitations and uncertainties regarding the long-term effectiveness of the natural attenuation mechanisms, including:

1. The lack of actual post-closure mine water for evaluation;
2. The lack of the analysis of several metals in some previous investigations;
3. The very low or non-detectable concentrations of some metals;
4. The assumption of chemical equilibria or disequilibria in geochemical modeling;
5. Uncertainties in the thermodynamic data upon which geochemical calculations and modeling is based.

Mine adit flow volumes and decant pond infiltration rates over time also have certain data limitations and uncertainties. Appendix I states that in spite of the uncertainties it is felt that this study is a reliable prediction of post-mine closure water quality and the behavior of metals in the infiltration pond and groundwater system. The reliability of these predictions is bolstered by the empirical evidence of attenuation that has occurred for over thirty years.

The EPA remains concerned, however, about whether the "natural attenuation mechanisms" occurring in impoundment/decant pond sediments and groundwater will continue to function effectively in regard to metals removal or immobilization over the long-term, and/or that at some point immobilized metals may become re-mobilized (i.e., the natural attenuation mechanisms may be reversible). Long-term outcomes with natural attenuation are difficult to predict. What are the Kootenai National Forest's and Montana DEQ's contingency plans in the event that elevated levels of metals or other pollutants are found in groundwater downgradient from the impoundment/decant ponds and/or in Lake Creek at some point in the future after mine closure (e.g., decades into the future)?

It is also not clear to us if long-term water quality monitoring plans are adequate to allow detection of elevated metals levels in groundwater downgradient from the tailings impoundment should that occur in the future. The EPA has published technical guidance documents regarding the use of "Monitored Natural Attenuation" for the remediation of contaminated soil and ground water. EPA uses the term "Monitored Natural Attenuation" to emphasize the need to incorporate adequate monitoring when natural attenuation is relied upon for the remediation of contaminated soil and ground water.

E-A-EPA 2

While scientific understanding of natural attenuation processes is increasing, there is still much to be learned regarding the mechanisms governing natural attenuation processes and their ability to address contamination problems, particularly over the long-term. Therefore, while EPA believes monitored natural attenuation may be used where circumstances are appropriate, it should be used with caution commensurate with the uncertainties associated with a particular application. Furthermore, largely due to the uncertainty associated with the potential effectiveness of monitored natural attenuation to meet remediation or treatment objectives that are protective of human health and the environment, EPA expects that long-term performance monitoring must be a fundamental component of any monitored natural attenuation remedy.

Our detailed comments (enclosed) present and discuss EPA technical guidance documents regarding monitored natural attenuation. This technical guidance addresses long-term attenuation capacity and reversibility issues, and long-term monitoring and contingency plans. The EPA recommends that long-term attenuation capacity and reversibility issues, and long-term monitoring and contingency plans be more comprehensively addressed in the FEIS in a manner consistent with the EPA technical guidance documents.

We also note that an EPA contact person regarding monitored natural attenuation is Dr. Rick Wilkin of the EPA Ground Water and Ecosystem Restoration Division in Ada, Oklahoma (phone 580-436-8874). We have discussed the proposed natural attenuation mine water treatment at the Troy Mine with Dr. Wilkin, and he has indicated that he would be willing to discuss Monitored Natural Attenuation and monitoring and analysis needs further with the lead agencies in a telephone conference call if the lead agency staff are amenable to such discussions.

E-A-EPA 3

There are also uncertainties associated with the engineered design, operation and maintenance of the six mile pipeline from the underground mine to the decant ponds over the long term. Our detailed comments identify uncertainties and information/data needs for the pipeline, and include recommendations to reduce risk of pipeline leaks and spills. We also recommend that the FEIS provide additional information and clearer disclosure regarding the streams and wetlands that may be crossed by the pipeline, and more complete evaluation and discussion regarding stream and wetland impacts associated with pipeline construction, operation and maintenance.

E-A-EPA 4

Finally, it is EPA's understanding that discharge of mine water by infiltration into groundwater beneath the tailings impoundment has been occurring for many years (discharging at up to 1,170 gallons per minute to groundwater hydrologically connected to Lake Creek) without authorization by a Montana Pollutant Discharge Elimination System (MPDES/NPDES permit). Unpermitted discharges are expected to continue post-closure with transport of underground mine water to the decant ponds. While we understand that natural attenuation mechanisms are stated to occur in the decant pond sediments and groundwater that remove and/or immobilize metals, and it does not appear that elevated levels of metals

E-A-EPA4 are found in Lake Creek, we recommend that the MDEQ continue to monitor groundwater and Lake Creek, and carefully evaluate whether pollutants may move into Lake Creek via hydrologically connected groundwater in the future, and if so, reconsider the need for a MPDES Permit.

The EPA's further discussion and more detailed questions, comments, and/or concerns regarding the analysis, documentation, or potential environmental impacts of the Troy Mine Revised Reclamation Plan DEIS are included in the enclosure with this letter. Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action and alternatives in an EIS, the DEIS has been rated as Category EC-2 (Environmental Concerns - Insufficient Information) due to concerns regarding the long-term effectiveness of proposed mine water natural attenuation treatment and the adequacy of the long-term performance monitoring plan; uncertainties, environmental impacts and risk of spills from construction and operation of the mine water pipeline; and unpermitted mine water discharges to groundwater hydrologically connected to surface waters. A copy of EPA's DEIS rating criteria is attached.

The EPA appreciates the opportunity to review and comment on the DEIS. If we may provide further explanation of our comments please contact Mr. Stephen Potts of my staff in Helena at 406-457-5022 or in Missoula at 406-329-3313 or via e-mail at potts.stephen@epa.gov. Thank you for your consideration.

Sincerely,

Julie A. DalSoglio

Julie A. DalSoglio
Director
Montana Office

Enclosures

cc: Larry Svoboda/Peter Werner, EPA 8EPR-N, Denver
Dean Yashan/Robert Ray/Mark Kelley, MDEQ, Helena

EPA Detailed Comments on the Troy Mine Revised Reclamation Plan DEIS

Brief Project Overview: The Kootenai National Forest (KNF) prepared this DEIS to evaluate revised reclamation activities proposed at the Troy Mine, a copper-silver mine located about 15 miles south of the Town of Troy, Lincoln County, Montana, lying west and north of Bull Lake within the Stanley, Lake, and Ross Creek drainages. The mine permit area covers 2,782 acres of public, private, and patented land. Approximately 57 percent of the project area is on private and patented land, and the other 43 percent is on the KNF. Troy Mine facilities consist of an underground mine, mill, office facilities; the tailings and reclaim water pipelines; a power line; a tailings impoundment; and associated support facilities. The Troy Mine is operated by Troy Mine, Incorporated (Troy Mine, Inc.) formerly known as Genesis, Incorporated. The tailings facility and associated disturbances are located on approximately 430 acres of disturbed area owned by Troy Mine, Inc. Both the tailings and reclaim water pipelines and the power line are on KNF land, private, and patented land. The South Adit portal is located on patented land, while the North Adit portal and the mill and office/shop facilities are located on unpatented claims on the KNF. There are approximately 15.6 acres of disturbed land at the portal patios and 34 acres of disturbed lands at the mill site. Associated roads, pipelines and other small disturbed areas exist throughout the project area.

The purpose of the proposed reclamation plan is to return lands disturbed by mining to a condition appropriate for subsequent use of the area. A 1978 reclamation plan does not meet state or federal requirements for mine water discharge. The need for the revised reclamation plan stems from the need to meet state and federal requirements after mine closure; protect surface and groundwater quality and public health and safety; minimize environmental risk; and restore disturbed lands to productive use. The mining company prepared a revised reclamation plan and the final draft was submitted to the Agencies in March of 2006 (Genesis 2006). The 2006 Revised Reclamation Plan is the subject of this Draft EIS and is referred to as the Proposed Action.

Among the issues addressed in the DEIS are the potential for: discharges of mine water to surface water and exceedance of aquatic life standards; failure of the tailings pipeline potentially resulting in erosion and discharge of contaminants into Stanley or Lake creeks; and issues related to the long-term maintenance of the pipeline. Water Management issues include: 1) Adit closure and mine water distribution; 2) Water treatment and disposal; 3) Groundwater quality; 4) Surface water quality; and 4) Long-term monitoring of water quality. Reclamation issues include: 1) Reclamation materials; 2) Subsidence; 3) Revegetation; 4) Infrastructure (buildings and other structural materials and how they will be removed or reclaimed); and 5) Topography (disturbed areas).

Alternatives considered in detail include a No Action Alternative (the previously approved 1978 reclamation plan), the Proposed Action (Troy Mine, Inc.'s Revised Reclamation Plan), and an Agency-Mitigated Alternative (the Agencies preferred alternative). The DEIS analyzes Troy Mine, Inc.'s revised plan as well as agency-proposed modifications (e.g. adit closure, mine water management, water treatment and monitoring, reclamation cover requirements, subsidence monitoring, debris disposal, and road closures). The major state and federal actions include approval of a reclamation plan and any necessary permits to implement the reclamation activities including construction and long-term monitoring.

Comments:

B-A-EPA1

1. Thank you for including clear descriptions of the alternatives, including identification of the differences between No Action, the Proposed Action and the Agency-Mitigated Alternative, and Table 2-1 (pages 2-19 to 2-35) comparing features of the alternatives in relation to the major issues (i.e., Water Management, Adit Closure and Mine Water Distribution, Water Treatment and Disposal, Groundwater Quality, Surface Water Quality, Long-Term Monitoring of Water Quality, Reclamation, Reclamation Materials, Subsidence, Revegetation, Infrastructure, and Topography). This information improves project understanding and assists in providing a basis of choice among alternatives for both the decision maker and the public in accordance with the Council on Environmental Quality (CEQ) rules for implementing NEPA (40 CFR Part 1500). We also appreciate the inclusion of a clear watershed map in Figure 3-2 (page 3-46) showing locations of waterbodies in the project area in relation to mine facilities. Understanding of the location of waterbodies in relation to mine facilities is critical for environmental impact assessment.

Natural Attenuation Mechanisms for Metals Removal

E-A-EPA5

2. We want to reiterate and expand upon the discussion included in EPA's transmittal letter relating to our most significant concern regarding the preferred alternative (Agency-Mitigated Alternative), which is the long-term plan to discharge mine water draining from the underground workings to the decant ponds within the tailings impoundment after mine closure (page 2-52, ES-16). The preferred alternative proposes to capture mine water that would collect in the underground mine after closure and transport it via a new buried pipeline to the decant ponds at the tailings impoundment for final treatment and disposal in perpetuity. The DEIS states that mine water would be treated at the decant ponds through "natural attenuation mechanisms" as the water infiltrates, allowing metals concentrations to attenuate within the soils (page 3-77, and Appendices C, D, G, and I), such that the Agency-Mitigated Alternative would comply with the Clean Water Act and the Montana Water Quality Act (page 3-90).

   The DEIS states that the effectiveness of the natural attenuation mechanisms in treating mine-related water has been substantiated through monitoring of water at the tailings impoundment for the past 30 years as well as studies directed at understanding the geochemical processes that occur in the underlying soils and groundwater system. Table 3-11, "Groundwater Quality Data for Monitoring Wells at Tailings Impoundment 2000 – 2009" (page 3-59) indicates that antimony and copper concentrations downgradient of the tailings impoundment have consistently met groundwater quality standards; Table 3-9, "Surface Water Quality Data for Lake Creek, 2005 – 2009" indicates that antimony and copper water quality standards have been met at the Lake Creek monitoring station downstream of the impoundment (i.e., groundwater discharging to surface water in the vicinity of the impoundment does not compromise water quality in Lake Creek, page 3-53). The DEIS also states that during active operation of the mine up to 1,170 gpm of the decant pond water seeped through the unlined bottom of the ponds into the underlying aquifer, which is hydraulically connected to Lake Creek, yet elevated levels of metals have not been found in downgradient groundwater or in Lake Creek (pages 3-53, 3-61, 3-77).

Mechanisms for attenuating metals (removing them from groundwater) include dilution, precipitation, adsorption, and co-precipitation (page 3-77). DEIS Appendices D and I provide more detailed information regarding the natural attenuation mechanisms. The Appendix D, "Metals Attenuation Study," indicates that copper was attenuated within the upper foot of soil via the precipitation of secondary copper phases (carbonates, silicates, and oxides) as well as adsorption onto organic matter (Appendix D, page 1). Appendix D also states that should the initial removal mechanisms occurring beneath the decant ponds (i.e., precipitation) become less effective over time, there are additional existing geochemical mechanisms (i.e., co-precipitation and adsorption) capable of removing at least 73-98% of the copper, 11-59% of the antimony, and 35-84% of the uranium from groundwater (Appendix D, page 14).

The Appendix I, "Assessment of Natural Attenuation of Metals in a Decant Pond Disposal System," states that concentrations of metal parameters are much lower in the groundwater than in the mine water/decant pond, evidencing that metal parameters are attenuated (removed) in the groundwater system (Appendix I, page viii). Analyses of sediments in the decant pond reveal that metals are enriched in the sediments, supporting the view that metals attenuated/removed from groundwater are retained in the sediments. Geochemical modeling and lab experiments demonstrate that natural attenuation is provided by the precipitation of iron from mixing of mine water and decant pond water with natural ambient groundwater. Copper, iron, lead, and manganese minerals are oversaturated in mine water and are favored to precipitate from mine water. Appendix I states that precipitation of naturally-occurring iron and manganese in groundwater can significantly reduce the concentrations of arsenic, antimony, copper, lead, and uranium in mine water and decant pond water to levels below human health and aquatic life standards during groundwater transport within a short distance (ten to one hundred feet) of the decant ponds. (Appendix I, pages 1-5, 1-6). The geochemical mechanisms responsible for copper attenuation include primarily the formation of copper minerals and secondarily adsorption by organic matter in soils.

E-A-EPA 5

The EPA acknowledges that there is empirical evidence that infiltration of mine water into groundwater beneath the Troy Mine tailings impoundment and decant ponds have apparently not resulted in elevated levels of copper and other metals in groundwater downgradient from the impoundment or in Lake Creek. Although it is not fully clear if all metals and metalloids of potential concern have been adequately evaluated. Monitoring should verify that all metals and metalloids that could potentially be present in mine waters are not present at the Troy Mine (at detectable levels), or if present, determine the concentrations at which they have been found (e.g., Ag, As, Bi, Cd, Co, Cr, Cu, Hg, Mn, Mo, Ni, Pb, Sb, Se, Tl, U, V and Zn).

The EPA is concerned about the long-term effectiveness of the "natural attenuation mechanisms," since this treatment and disposal system is proposed to occur in perpetuity. We are concerned that there may be a finite capacity for metals removal and/or immobilization, and/or that geochemical conditions may change over time reducing effectiveness of the removal/immobilization mechanisms, or that metals immobilized as precipitated metal compounds in decant pond sediments and groundwater, may become re-mobilized at some point in the future (i.e., the natural attenuation mechanisms may be reversible).

Appendix I states that the longevity of the natural attenuation mechanisms is dependent on the duration of the geochemical conditions conducive to attenuation and to the capacity of the tailing impoundment/aquifer sediments to continue to uptake metals (Appendix I, page 9-2). It concludes that the mineral precipitation and co-precipitation mechanisms are expected to last indefinitely or in perpetuity as long as geochemical conditions remain similar to current conditions. The adsorption mechanisms are conservatively estimated to last a minimum of 600 years.

However, it is also acknowledged that there are limitations and uncertainties regarding the long-term effectiveness of the natural attenuation mechanisms, including (Appendix I, page 1-8):

E-A-EPA 5

1. The lack of actual post-closure mine water for evaluation;
2. The lack of the analysis of several metals in some previous investigations;
3. The very low or non-detectable concentrations of some metals;
4. The assumption of chemical equilibria or disequilibria in geochemical modeling;
5. Uncertainties in the thermodynamic data upon which geochemical calculations and modeling is based.

Appendix I states that in spite of these uncertainties it is felt that this study is a reliable prediction of post-mine closure water quality and the behavior of metals in the infiltration pond and groundwater system. The reliability of these predictions is bolstered by the empirical evidence of attenuation that has occurred for over thirty years.

The EPA remains concerned, however, about whether the "natural attenuation mechanisms" occurring in impoundment/decant pond sediments and groundwater will continue to function effectively in regard to metals removal or immobilization over the long-term, and/or that at some point immobilized metals may become re-mobilized. What are the Kootenai National Forest's and Montana DEQ's contingency plans in the event that elevated levels of metals (or metalloids) are found to develop in groundwater downgradient from the impoundment/decant ponds and/or in Lake Creek at some point in the future after mine closure (e.g., decades into the future)?

It is also not clear to us if long-term water quality monitoring plans are adequate to allow detection of elevated metals levels in groundwater downgradient from the tailings impoundment should that occur in the future. The EPA has published technical guidance documents regarding the use of "monitored natural attenuation" for the remediation of contaminated soil and ground water (EPA, Office of Solid Waste and Emergency Response, Directive 9200.4-17P, April 1999). EPA uses the term "Monitored Natural Attenuation" to emphasize the need to incorporate adequate monitoring when natural attenuation is relied upon for the remediation of contaminated soil and ground water.

E-A-EPA 5

While scientific understanding of natural attenuation processes is increasing, there is still much to be learned regarding the mechanisms governing natural attenuation processes and their ability to address contamination problems, particularly over the long-term. Long-term outcomes are very difficult to predict. Therefore, while EPA believes monitored natural attenuation may be used where circumstances are appropriate, it should be used with caution commensurate with the uncertainties associated with a particular application. Furthermore, largely due to the uncertainty

associated with the potential effectiveness of monitored natural attenuation to meet remediation or treatment objectives that are protective of human health and the environment, EPA expects that long-term performance monitoring must be fundamental components of any monitored natural attenuation remedy.

EPA technical guidance regarding monitored natural attenuation that we draw to the lead agencies attention include:

"Monitored Natural Attenuation of Inorganic Contaminants in Ground Water, Volume 1 - Technical Basis for Assessment" (EPA/600/R-07/139, October 2007, http://www.epa.gov/nrmrl/pubs/600R07139/600R07139.pdf);

"Monitored Natural Attenuation of Inorganic Contaminants in Ground Water, Volume 2 Assessment for Non-Radionuclides Including Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Nitrate, Perchlorate, and Selenium" (EPA/600/R-07/140, October 2007, http://www.epa.gov/nrmrl/pubs/600R07140/600R07140.pdf);

E-A-EPA 5 "Metal Attenuation Processes at Mining Sites," ((EPA/600/R-07/092) September 2007, http://www.epa.gov/nrmrl/pubs/600r07092/600R07092.pdf).

See also the EPA website on Monitored Natural Attenuation, http://www.epa.gov/nrmrl/gwerd/gw/mna.html, and note that there is also a publication, "A Citizen's Guide to Monitored Natural Attenuation," EPA 542-F-01-004, April 2001, http://www.clu-in.org/download/citizens/mna.pdf).

These EPA technical guidance documents address long-term attenuation capacity and reversibility issues, and long-term monitoring plans in the context of Tier 3 and Tier 4 analyses. In Tier 3 analysis EPA recommends that long-term capacity and reversibility be specifically investigated. The DEIS states that mechanisms are expected to last indefinitely as long as geochemical conditions remain similar. This may be reasonable, but this type of broad conclusion typically requires a fairly detailed study of bonding/uptake mechanisms of metals in the solid phase and lab-based extractability assessments. It is not clear if the studies identified in Appendices D and I adequately address EPA Tier 3 analysis requirements. Tier 4 deals with the development of a long-term monitoring plan and the development of a contingency plan in case trends revealed by the monitoring data fail to meet expectations. We are including additional discussion of long-term water quality monitoring and Tier 4 analysis in our following comment (comment No. 3).

The EPA recommends that long-term attenuation capacity and reversibility issues, and long-term monitoring and contingency plans be more comprehensively addressed in the FEIS in a manner consistent with the EPA technical guidance documents referenced above.

Long-term Water Quality Monitoring

E-A-EPA6 3. DEIS Table 2-1 (page 2-23) includes information on long-term monitoring of water quality for each alternative, and brief narrative discussion of monitoring is included for each alternative

(pages 2-38, 2-39, 2-45, 2-46, 2-54). The DEIS states that the Agency-Mitigated Alternative includes water quality monitoring of springs in the analysis area to validate the prediction that water quality standards would be met post-closure (page 3-23). However, proposed long-term water quality monitoring is presented in a disjointed manner in the DEIS. The narrative monitoring discussions refer the reader to Table 2-2, "No Action Alternative Groundwater Monitoring Sites and Schedule" (page 2-36, 2-37), Table 2-3, "No Action Alternative Surface Water Monitoring Sites" (page 2-38), and Figure 2-5 "Proposed Surface and Groundwater Monitoring Sites" (page 2-40). The DEIS reader must flip back and forth between the narrative discussions of monitoring for each alternative and Tables 2-2 and 2-3 and Figure 2-5 in an effort to understand proposed long-term water quality monitoring.

It is not clear to us from Figure 2-5 which groundwater monitoring sites are immediately downgradient from the decant ponds at the tailings impoundment, or if these sites are adequate or appropriate groundwater monitoring sites. It is also not clear which pollutant parameters would be analyzed and which analytical methods would be used at each site. It appears that groundwater samples would be collected three times per year (spring, summer, fall, page 2-37), and that the preferred alternative includes a commitment to monitor water quality post-closure for a minimum of five years after mine water discharge actually commences (page 2-54), and/or until the Agencies agree that monitoring is no longer necessary (page 2-23).

E-A-EPA6

We believe a more detailed, comprehensive long-term water quality monitoring plan for groundwater and surface water, particularly for waters downgradient from the tailings impoundment decant ponds, must be disclosed to assure that adequate long-term performance monitoring is incorporated into the natural attenuation treatment plan. This is necessary to assure that the natural attenuation mechanisms continue to be effective in removing/immobilizing metals over the long-term, and that if metals levels increase for any reason, such increases will be identified and detected so they may be mitigated. A contingency plan in case trends revealed by the monitoring data fail to meet expectations is also needed.

We refer the lead agencies to the EPA monitored natural attenuation guidance documents referenced in our comment above for identification and discussion of factors that should be considered in developing a long-term performance monitoring plan for groundwater downgradient from the decant ponds. In particular we recommend pages 18 to 22 in the document, "Monitored Natural Attenuation of Inorganic Contaminants in Ground Water, Volume 1 - Technical Basis for Assessment," EPA/600/R-07/139, October 2007, http://www.epa.gov/nrmrl/pubs/600R07139/600R07139.pdf.

A list of pollutant parameters and proposed analytical methods at each monitoring site along with monitoring frequency should be clearly presented. The monitoring plan should be designed to monitor specific metals of concern. Monitoring parameters that should be considered include metals and metalloids that could be present or of concern in Troy Mine waters (e.g., Ag, As, Bi, Cd, Co, Cr, Cu, Hg, Mn, Mo, Ni, Pb, Sb, Se, Tl, U, V and Zn). Monitoring should also include other parameters that link to the proposed attenuation mechanisms, such as pH, redox conditions, dissolved oxygen, dissolved organic carbon, and concentrations of major cations (Ca, Mg, Na, K) and anions (SO4, Cl, HCO3), so that geochemical conditions required for natural attenuation can be tracked. Nitrogen parameters (total nitrogen, nitrite+nitrate nitrogen, kjeldahl nitrogen,

ammonia nitrogen) should also monitored to evaluate potential presence of contaminants from mine blasting residues.

Monitoring plans should also include well defined triggers that would initiate the implementation of additional evaluation and/or contingency remedial technologies if natural attenuation processes fail to fulfill expectations. Potential chemical and biological monitoring indicators that will be used to signify that natural attenuation treatment may be failing should be identified with trigger values defined. Long-term monitoring plans must be adequate to detect if natural attenuation may be failing at some point, and if monitoring triggers indicate potential failure that should result in follow-up monitoring and investigation. A different reclamation treatment approach may need to be implemented in the event of failure of natural attenuation. Such measures should be incorporated into a monitoring and contingency/corrective action plan.

E-A-EPA6 EPA's Monitored Natural Attenuation technical guidance documents for Tier 4 analysis recommends:

- Select monitoring locations and frequency consistent with site heterogeneity
- Select monitoring parameters to assess consistency in hydrology, attenuation efficiency, and attenuation mechanism
- Select monitored conditions that "trigger" re-evaluation of adequacy of monitoring program (frequency, locations, data types)
- Select alternative remedy best suited for site-specific conditions

We believe some level of monitoring will likely need to be conducted in perpetuity to assure that natural attenuation mechanisms remain effective in perpetuity. Although monitoring frequency can be reduced over time if monitoring results do not evidence contamination (e.g., reduce monitoring to twice per year, then annually, then biennially, etc.). However, some minimal level of monitoring will likely need to be conducted over the very long-term to validate continued effectiveness of natural attenuation. Bonding and financial assurances should provide adequate funding for long-term monitoring, and implementation of an alternative treatment reclamation approach in the event of failure of natural attenuation.

Decant Ponds

E-A-EPA7 4. The DEIS states that copper is attenuated within the upper foot of soil of the decant ponds via the precipitation of secondary copper phases (carbonates, silicates, and oxides) as well as adsorption onto organic matter (Appendix. D, page 1). It is also stated that the decant ponds would be cleaned out periodically (page 2-21). If heavy metals precipitate and accumulate in the upper foot of soil in the decant ponds and ponds are periodically cleaned out, it is not clear to us where the metal laden sediments removed from the decant ponds will be disposed. Disposal of metal laden sediments resulting from the periodic clean out of the decant ponds should be described in the FEIS (i.e., identification of the depository or landfill where metal laden sediments would be taken for final disposal).

E-A-EPA7 Also, is there any potential that the periodic clean out of sediments from the decant ponds will mobilize some pollutants, or over time impair the efficacy of the "natural attenuation mechanisms" and/or pollutant removal efficiency of the decant pond?

E-A-EPA8 5. The volume calculations for infiltration in the decant ponds appear to be based on an oversimplification of the hydrogeology in the area of the decant pond as demonstrated by the tracer tests described in Appendix C. We are concerned about the data limitations and uncertainties associated with decant pond infiltration rates over the long-term. Contingency planning should address this uncertainty.

E-A-EPA9 6. The DEIS states that domestic wells in the vicinity of the tailings impoundment would not be affected (page 3-89). The EPA recommends that the FEIS identify the location and proximity of nearby domestic wells to the tailings impoundment (e.g., wells within a mile).

Nutrients

E-A-EPA10 7. The DEIS states (page 3-58) that if nutrients in shallow groundwater discharge locally to surface water (as they may at the toe ponds) nuisance algal growth could occur, although numeric exceedances for the aquatic life standard for ammonia or for the human health standard for nitrate plus nitrite are not observed in the toe pond water quality data. Nonetheless, the DEIS states that nitrate plus nitrite levels may be high enough at times to promote nuisance algal growth in the toe ponds. Table 3-11 shows ammonia levels as high as 4.2 mg/l in groundwater (MW95-4) and nitrate+ nitrite levels as high as 1.19 mg/l. Table 3 in Appendix F (Appendix F, page 11) shows decant pond water ammonia levels from 4.4 to 11.2 mg/l, Nitrate+nitrite N from 14.5 to 37.6 mg/l; Mine water disused area ammonia levels of 0.39 mg/l and Nitrate+nitrite of 7.4 mg/l; and Adit discharge ammonia levels of 2.33 mg/l and Nitrate+nitrite of 7.99 mg/l. Currently, nitrate concentrations in the tailings decant pond water range between 10 mg/L and 30 mg/L, and concentrations in monitoring wells located close to the decant ponds are similar. However, monitoring wells and the toe ponds downgradient of the tailings impoundment generally have nitrate concentrations of less than 1 mg/L (Table 3-11).

The DEIS states that after cessation of mining, addition of nitrate to the tailings impoundment would cease (page 3-70), and residual nitrate would slowly be rinsed out of the tailings by precipitation and diluted in the groundwater, and concentrations of nitrate in the underlying aquifer would decline. Nitrate concentrations are expected to decline rapidly after mining ends, as was observed during the interim mine shut-down between 1993 and 2004, because nitrate-rich mine water will no longer be discharged in the tailings impoundment.

While we agree that nitrogen levels in mine waters discharged to the decant ponds are likely to decline after mining ends there does appear to be potential for elevated nitrogen levels to occur in groundwater and surface waters hydrologically connected to groundwater. It is important to recognize that recent scientific studies have increased concerns about impact of even low levels of nitrogen in surface waters in regard to stimulation of growth of algae and undesirable aquatic vegetation. The Montana DEQ is developing numeric water quality criteria intended to control excessive nutrient (nitrogen and phosphorus) pollution in Montana's streams, rivers, and lakes to

assure a level of water quality that will protect the beneficial uses of these waterbodies, (see DEQ website, http://deq.mt.gov/wqinfo/standards/NumericNutrientCriteria.mcpx).

E-A-EPA10

In 2008, DEQ released the report, "Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana's Wadeable Streams and Rivers" which included draft numeric nutrient criteria that, if achieved, ensure protection of designated uses. The 2008 report proposed a total nitrogen criterion of 0.233 mg/l for the Northern Rockies ecoregion as the concentration that would ensure protection of aquatic life and recreational uses. We recommend that the revised reclamation plan take this science into consideration and that the closure and post-closure monitoring include monitoring for nitrogen parameters and growing season chlorophyll in the long-term water quality monitoring plan so that the response of the algal community to nitrogen loading can be identified and mitigated if need be.

MPDES/NPDES Permits

8. The DEIS states that during active operation of the mine, Troy Mine, Inc. typically uses the tailings impoundment and decant ponds to settle out suspended sediment from the tailings slurry, and then clarified tailings/decant pond water is pumped to the mill circuit via a return line (page 3-60). The DEIS also states that up to 1,170 gpm of the decant pond water seeps through the unlined bottom of the ponds into the underlying aquifer (i.e., or approximately 1.7 million gallons per day). The 2001 Hydrometrics report (Appendix H) indicated that, while deep groundwater and the decant ponds system are hydraulically connected, most of the decant pond water is transported downgradient (towards Lake Creek) via the shallow alluvial aquifer (page 3-61); and it is also stated that groundwater beneath the tailings moves in a westerly direction and eventually discharges to Lake Creek (Summit Envirosolutions 1996, page 3-77).

E-A-EPA11

It appears, therefore, that discharge of mine water by infiltration into groundwater beneath the tailings impoundment has been occurring for many years (groundwater hydrologically connected to Lake Creek). Such discharges are also proposed to occur after mine closure when underground mine waters will be piped to the decant ponds as the plan for treatment and disposal of mine waters over the long-term. It also appears that the amount of mine water infiltrating into groundwater may potentially increase after mine closure if the discharge to the decant ponds from the underground mine were to be anything close to the maximum pipeline design flow of 6.9 cfs (~3,100 gpm). It is our understanding that existing and proposed discharges of mine water to groundwater hydrologically connected to Lake Creek have been occurring without authorization by an Montana Pollutant Discharge Elimination System (MPDES) permit, and such unpermitted discharges are expected to continue post-closure.

While we understand that natural attenuation mechanisms are stated to occur in the decant pond sediments and groundwater that remove and/or immobilize metals, and it does not appear that elevated levels of metals are found in Lake Creek, we recommend that the MDEQ continue to monitor groundwater and Lake Creek and carefully evaluate whether pollutants may move into Lake Creek via hydrologically groundwater in the future, and if so, reconsider the need for a MPDES Permit.

303(d) Listed Streams and Total Maximum Daily Loads (TMDLs)

9. The discussion of exceedances of copper water quality standards in upper Stanley Creek indicates that the source(s) of these exceedances may be due to several factors, including sediment generated from surface water erosion of naturally copper-bearing soil, groundwater seeping from the mine void, erosion of copper-bearing soil from the portal patios, or groundwater containing naturally-elevated copper concentrations from mineralization in the area (page 3-85). The DEIS states that the occasional low-level naturally-occurring copper exceedances in upper Stanley Creek would be expected to continue through post-closure for all alternatives. There have historically been numerous detections of copper in Fairway Creek despite the Fairway site being upgradient of the mine. The DEIS indicates that the most likely reason for these detections is that copper occurs naturally in the region and is present in soils and sediment.

The MDEQ's Clean Water Act 303(d) listing website (http://cwaic.mt.gov/query.aspx) lists Stanley Creek as water quality impaired (from headwaters to confluence with Fairway Creek, 4 miles, MT76D002_010) with only partial support for aquatic life and cold water fishery uses with probable causes listed as unknown, copper, nutrients, and biological indicators, and probable sources listed as mine tailings and streambank modifications/destabilization. If natural sources of copper in the Stanley Creek drainage are believed to be causing water quality standards exceedances rather than mine tailings, it would be appropriate to revise the information on the MDEQ 303(d) listing website for Stanley Creek accordingly.

E-A-EPA12

Similarly the disclosure of Lake Creek water quality in Table 3-9 (page 3-53) suggests potential for only low level exceedances of copper water quality criteria. This table does not include identification of cadmium, lead or mercury levels, which are among the listed pollutants causing water quality impairment for Lake Creek on MDEQ's Clean Water Act 303(d) website. Lake Creek is listed as water quality impaired (Bull Lake outlet to mouth, 17.6 miles, MT76D002_070) with only partial support for aquatic life and cold water fishery uses, and no support for drinking water use, due to cadmium copper, lead, mercury and zinc, nitrate/nitrite, and sedimentation from mine tailings, natural sources, and forest roads.

It is also worthy of note that the DEIS states that copper and antimony are the constituents of concern (page 3-50) because they have exceeded water quality standards for surface water in the mine water (i.e., copper concentrations averaged 0.041 mg/L and antimony concentrations have averaged 0.010 mg/L during mine operations; and during an interim shutdown copper concentrations were somewhat higher, averaging 0.059 mg/L, and antimony concentrations averaged 0.011 mg/L (Table 3-7, page 3-51). However, copper, cadmium, lead, mercury and zinc are listed by MDEQ as the probable causes of Lake Creek water quality impairment, but the MDEQ website does not identify antimony as a probable cause of impairment. Table 3-7 in the DEIS does not identify cadmium, lead and mercury levels in mine waters.

The DEIS discussion of metals levels in Stanley and Lake Creeks appear, therefore, to be disconnected from the MDEQ's water quality impairment listings. It will be important that further evaluation of water quality impairments in Lake Creek and Stanley Creek and their magnitude and causes take place early in the development of the TMDL's for Stanley and Lake

E-A-EPA12 Creeks. It will also be important the Troy Mine long-term reclamation plan be consistent with the development of TMDLs to improve water quality and restore full support for designated uses in these waterbodies.

Pipeline Design

10. As noted earlier, the Agency-Mitigated Alternative proposes constructing and burying a new pipeline that would transport water from the underground mine (Service and Conveyor Adits) to the decant ponds at the tailings impoundment instead of using the existing tailings pipelines (page 3-80). The DEIS indicates that the new pipeline would include a leak detection system and be double-lined at creek crossings to minimize the potential of discharge directly to streams (page 3-80). It is important that attention directed at reducing risk of pipeline leaks and spills, since we understand that there have been past tailings pipeline spills at the Troy Mine that have resulted in elevated metals levels in surface waters.

Appendix G provides information on the conceptual design of the proposed new pipeline. It is stated that the pipeline would follow the existing tailings/slurry pipes, approximate the land gradient, and have the hydraulic capacity to handle all of the estimated peak discharge of 6.9 cfs under gravity flow (Appendix G, page 2). The volume of flow over time after closure as provided in Appendix C appears to be a rough estimate. What are the provisions for collecting additional information for input into the final engineering design for the pipeline? For example, as the groundwater flow fluctuates seasonally, a design flow based upon averages is not robust and additional data will be needed before final design. The analysis of discharge is based upon existing operating conditions rather than closure conditions, and appears to be based on a E-A-EPA13 simplification of the groundwater fracture flow conditions at the mine site. We recommend that the pipeline be designed for the highest forecasted flow over the timeframe that it will be used, not the "extreme event of over a ten-year recurrence interval" as stated in Appendix C (page 4). Also, if the water pressure may fluctuate, those fluctuations also need to be taken into account. Pipeline design considerations for freeze/thaw and for stability with steep slopes and transitions from steep to gentle slopes are not well described.

We recommend burying the pipeline at a depth below the freeze level across the entire width of the stream, meander zone, and active floodplain, such that if there is any stream movement the pipe is not exposed to erosive action of bedload and debris in moving water. In addition, we recommend consideration of using a secondary sleeve similar to how water supply pipes are often put in at stream crossings, so in case there is a leak under the stream the pipe can be replaced by removing old pipe and inserting new pipe into the sleeve without disturbing the stream again - the sleeve can be placed using a boring system or a trench. Also, if the pipe is to be hung over the stream or gully, it should be high enough to clear any substantial flood (FEMA a 100 year flood is reasonably foreseeable). Additional valving should also be considered at major slope transitions where they may be a higher likelihood of pipeline failure (e.g., transitions from 12% slope).

Appendix G suggests that smooth HDPE pipe may be used, in which case pipe corrosion is likely not a concern (i.e., sometimes installation of a casing pipe around a metal pipeline at crossings of rivers may actually increase the probability of a spill at or near a river or stream, since air and

moisture accumulation between the casing and pipe has potential to aggravate pipe corrosion, but this should not be a concern with HDPE pipe material). Other measures that the lead agencies and company may want to consider to reduce risk of a pipeline spills or leaks include:

-Locate pipeline as much as possible away from streams and wetlands, and minimize pipeline crossings of streams and wetlands

-Pipeline valving shut-off arrangements that limit the magnitude/volume of a spill at any one time (periodic block and check valves). Mainline block valves and check valves located upstream and downstream of river/stream crossings to allow stoppage of flow should leaks or pipeline damage occur at river and stream crossings, and additional valving is also recommended at major slope transitions where they may be a higher likelihood of pipeline failure.

[We note that Appendix G states that the static capacity of the pipeline is about 250,000 cubic feet (~1.87 million gallons), which is the maximum amount of mine water that could drain from the pipe should a break occur at its lowest point (Appendix G, page 2). It is also stated that this amount could be reduced with the addition of automatically controlled valves along the length of the pipeline, but this design feature was not incorporated into the design. We recommend that additional automatic valving be incorporated into the design to reduce potential spill volumes.]

E-A-EPA13

-Increase pipeline thickness at stream crossings.

-Use cathodic protection along the entire length of pipeline or coat pipeline with a minimum of 8 mils of fusion bonded epoxy coating (FBE), 6 mils of copolymer adhesive, and 40-75 mils of high density polyurethane (HDPE) to protect the pipe from corrosion (if metal pipe were used).

-Use state-of-the art "smart pig" system to detect deformities on the inside of the pipe, and"smart pig" internal pipeline inspections within three years of the initial hydrostatic pipeline testing, and schedule subsequent periodic inspections (e.g. every two years) to reduce the risk of undetected deformities causing spills.

-Regular hydrostatic testing to evaluate pipeline integrity during operations.

-Have a Contingency Plan and Emergency Response plan for the pipeline, containing information on spill response procedures to be followed and actions to be taken in the event of a spill. The Plan also should identify the specific procedures to mitigate potential adverse environmental impacts (i.e., on surface water, ground water, soils, fisheries, wildlife, recreation, human health and safety) and discuss the location of equipment and expertise available to each length of the route to respond to environmental cleanup. Special conditions such as weather impaired and cold weather response procedures should be included.

E-A-EPA14 11. The DEIS states that an average of 2.3 cfs of water is displaced from the mine workings to areas (e.g., the decant ponds) more distant from the mine (page 3-67). How does the reference to 2.3

E-A-EPA14 cfs being displaced from the mine workings to the decant ponds relate to the range of flows estimated between 300 gpm (0.67 cfs) to 3100 gpm (6.9 cfs) being directed from the underground mine workings to the decant ponds (page 3-76)?

E-A-EPA15 12. The reclaim water line is proposed for use after mine closure as an emergency line for transport of mine adit discharge in the event of a leak in the new buried pipeline (Appendix G, page 2). However, it stated that the reclaim water line will only handle approximately half of the estimated maximum 6.9 cfs under gravity flow conditions (Appendix G, page 3). It is also stated that the reclaim water line could handle the full estimated flow if it is retrofitted with appropriate vacuum relief and pressure relief valves. We recommend that the reclaim water line be appropriately retrofitted to allow it to handle the highest potential flow over the timeframe that it will be used.

E-A-EPA16 13. The DEIS states that no activities are proposed under any alternative that would discharge fill materials into water bodies or that would impact wetlands (page 3-91), however, since there are statements that the proposed pipeline would be double-lined at stream crossings (page 3-80), it leads us to believe that there will be pipeline stream crossings, and there may be potential for stream impacts during pipeline construction, and/or impacts to wetlands which are often associated with streams. Figure 1 in Appendix G includes a map with a proposed pipeline routing, but streams and wetlands are not clearly depicted on this map. We did not see clear disclosure of the number of streams and wetlands acreage that may be crossed. The EPA recommends that the FEIS clearly disclose the number of streams the pipeline may cross and if it would cross any wetlands, and more fully evaluate and discuss potential stream and wetland impacts associated with pipeline construction.

There may also be potential for disturbing wet areas during removal of stockpiled soils below the toe ponds for use in tailings impoundment reclamation (page 3-214). Areas of disturbance from this activity should be assessed for the presence of, and potential impacts to, wetlands.

We also encourage the lead agencies and Troy Mine, Inc. to contact Mr. Todd Tillinger of the U.S. Army Corps of Engineers, Montana Office in Helena at 406-441-1375 or Ms. Christina Schroeder of the Corps of Engineers, Missoula Office at 406-541-4845 extension 328, to determine applicability of Clean Water Act Section 404 permit requirements to proposed pipeline and other mine reclamation construction activities in or near streams or wetlands. We also note that other federal, state and local regulatory requirements may be needed for project implementation should construction activities occur in or near streams and wetlands (e.g., Montana Section 318 turbidity exceedance authorizations, Clean Water Act Section 401 certification, Montana 310 permit requirements, Montana Stream Protection Act 124 permits, etc.).

The Council on Environmental Quality (CEQ) regulations for implementing NEPA state that federal agencies shall to the fullest extent possible integrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively (40 CFR 1500.2(c)). To ease the administrative burden the Federal and State agencies in Montana have developed a single permit application for the various potential permits or authorizations that may be needed

E-A-EPA16 (http://dnrc.mt.gov/permits/default.asp , http://dnrc.mt.gov/permits/streampermitting/joint_application.asp). Also a Montana Stream Permitting Guide is available to explain the various permitting authorities http://dnrc.mt.gov/permits/streampermitting/guide.asp.

Drainage Channels:

E-A-EPA17 14. In the Agency-Mitigated Alternative, all drainage channels would be built from imported rock rather than from mine development rock to further minimize the potential for near-neutral metal mobility (page 3-40). EPA agrees with and supports the use of rock with low metal leaching or mobility potential for drainage channel construction. The source of this imported rock, however, is not identified. What is the source of the imported rock, and are there any adverse environmental impacts associated with collecting and transporting the imported rock to drainage channel construction sites?

Geochemistry of New Ore Zones

E-A-EPA18 15. Is it expected that the ore zones to be mined in the future will have a geochemistry similar to the ore zones mined in the past, and thus, confirm that metals leaching predictions for the future can be reliably predicted on prior experience and observations? We recommend that the geochemical testing and evaluation methods that will be used to confirm that the new ore zones will be analogous to the previously mined areas be identified and described in the FEIS.

Flow Reduction

E-A-EPA19 16. Reduction in groundwater flows to Ross and Stanley Creeks, especially Stanley Creek, are identified as a water quantity impact caused by pumping underground mine water to the decant ponds (page 3-80). However, the extent of surface water flow reduction is not quantified or estimated, and potential impacts on aquatic life associated with this reduction in streamflow in Stanley Creek are not identified. The DEIS states that changes in surface water flows and locations are expected to be minimal after mine closure because discharges are not expected to vary measurably at the surface water monitoring sites and because the potential for new, higher elevation springs to develop would be limited. Although it is acknowledged that surface water flows after mine closure would likely remain less than pre-mining flows in the vicinity of the workings (page 3-67).

We recommend that additional information be provided regarding estimated flow reductions in Stanley Creek, and likely impacts to aquatic life associated with such streamflow reductions (e.g., estimates of pre-project baseline streamflows or ranges of flow vs. post-closure streamflows or ranges of flow; estimates of potential impacts to aquatic life associated with flow reduction). If such information is not available we recommend that the direction in 40 CFR 1502.22 be followed for incomplete or unavailable information.

E-A-EPA20 17. EPA also suggests that regular multi-spectral aerial photography be used to monitor for presence of new springs, loss of springs, and changes in habitat and vegetative cover in and around aquatic

E-A-EPA20 systems. Preparation of a baseline conditions map is recommended to assist in future comparisons. The company should also clarify how trends will be determined and reported.

Roads

I-A-EPA1 18. We appreciate the inclusion of road improvement, reclamation and decommissioning activities in the Agency-Mitigated Alternative to reduce potential over the long-term for road sediment transport to surface waters and reduce road maintenance costs (Table 2-1, pages 2-30 to 2-32). We are pleased that the Agency-Mitigated Alternative would result in the passive decommissioning of 3.8 miles of road and the active decommissioning of 2.7 miles of road (page 3-120); existing roads would be improved to USFS specifications and 6 miles of paved surface on NFSR 4626 would be replaced with gravel (page 3-134). Roads that are not needed would be ripped, covered with reclamation materials, and revegetated. The Agency-Mitigated alternative would implement BMPs on 19.2 miles of road needed for long-term access (includes stored service work) and decommissions 6.5 miles of unneeded road, thereby reducing long-term road maintenance costs as compared to the Proposed Action. Private roads on Troy Mine, Inc. property at the tailings impoundment would be field reviewed by the Agencies to decide if they are needed for post-mine land uses. We are pleased that this road stabilization work would be carried out and decrease long-term sediment delivery to Stanley and Lake Creeks in comparison to the existing conditions and the Proposed Action (pages 3-88, 3-89).

Other

K-A-EPA1 19. Will the decant ponds and their metals levels present hazards to wildlife, including birds? Is there a need to keep the decant ponds fenced to prevent wildlife entry to these treatment ponds after mine closure?

E-A-EPA21 20. In regard to the allegations that 55 gallon drums were buried in the impoundment years ago by ASARCO (page 2-16), was it ever determined where those drums were buried and what was contained in them? Were the drums ever found and removed?

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

2011-08-01 JMayoLincolnCoPortAuthority.pdf

LINCOLN COUNTY PORT AUTHORITY

RECEIVED
AUG 02 2011
DEQ
DIRECTOR'S OFFICE

Board Members

Jim Mayo
Chair
Russ Barnes
Board Member
Craig Eaton
Board Member
Ardell Filler
Board Member
John Konzen
Lincoln County Commissioner
Doug Watson
Board Member
Sam Shupe
Board Member

P.O. 1071
Libby, MT. 59923

Phone: 406-293-8406
Fax: 406-293-2532
Email:krdc@frontiernet.net

H2

H1

C4

August 1, 2011

Emily Corsi
Montana DEQ
PO Box 200901
Helena, MT 59620-0901

Bobbie Lacklen
Kootenai National Forest
31374 US Highway 2
Libby, MT 59923-3022

Ms Corsi and Ms Lacklen,

Three members of the Lincoln County Port Authority Board attended the June 6 public meeting at Troy High School regarding the Troy Mine Revised Reclamation Plan. We reviewed the three options which were posted on the boards in the back of the meeting room and heard one of you review those proposals during the outset of the meeting.

While we understand your interest in assuring that the reclamation has minimal impact to the environment, we must agree with several of the speakers including our State Senator – Mr. Chas Vincent.

First, unless you have studies to the contrary, you should permit the Troy Mine ("Mine") to follow their plan to cover the reclaimed areas with pit-run and other immediately available products which were demonstrated to foster healthy trees and vegetation. If you have evidence that this study was flawed or if you possess other studies on this type of recovered area that demonstrate that plants cannot grow as reported, please make that evidence available to the public before you deny the Mine's request. The agency alternative in the DEIS indicates that that top soil salvaged in the tailing pond area be used for reclamation rather than borrow soil. We are concerned that use of the toe pond salvaged top soil will result with the following: 1) it would more than likely increase long term risk of sediment impacts to Lake Creek, 2) it will impact documented western toad habitat and 3) it will result in the same reclamation success outcome (return of similar forest vegetation to that before the Mine) as using the borrow soil. According to Mine Representatives the existing topsoil piles are fully revegetated with a thick growth of grass, alders, brush and coniferous trees. The potential impacts to neighbors from dust during soil replacement is higher with the fine grained soils than with the borrow soil. We concur with the Troy Mine request that the agencies to reconsider their decision to require use of the salvaged soil.

E1
E2
E3

Next, there is no need to bury the existing water/slurry lines. They are not an eyesore to the local population and pose no health and safety risk if left alone. In fact, it seems apparent to us that the disturbance to the existing road when digging deep ditches and burying your proposed new tailing line will have a far better chance of causing soil sediment to enter the creek than there would be if left alone. Further, it is our understanding that the Troy mine waters during the 11 year temporary shut-down quickly reached drinking quality standards without any treatment. The risk of future contamination from ground disturbance to bury a line seems unnecessary when the existing lines are carrying waters meeting groundwater standards." Again, if you have evidence that shows this to be untrue in a location like this with similar ore and waste byproducts, please present this evidence to the public before forcing your changes upon the Mine.

B1

We have no concern about the Mine leaving the old concrete foundations in place upon termination of activities. If they create an unacceptable eyesore (and I do not agree that they will) simply require them to be covered with pit run – borrow material and planted. Digging them up and re-burying the concrete in another location accomplishes nothing of value.

I1

Finally, the requirement to completely remove the existing paved road is also of no real value. Currently there are a number of paved road remnants in the area, mostly from former logging activities. The pavement is easier to ride upon than the surface of many local gravel roads. Erosion appears to be less than we see along the edges of most dirt or gravel roads. The process of removing the road is simply a waste of funds. If the ultimate plan is to close the roadway to motorized public use, that plan should be articulated to the public now.

We can all agree that mining practices have changed dramatically over the past fifty years. Some of this positive change was the result of increased regulations; the other key part is due to companies taking a stand for environmental stewardship.

Please seriously consider our thoughts and those of other area citizens before imposing additional unnecessary requirements upon the Troy Mine which has done a very good job of taking care of the property during its operations over the past few years.

Sincerely,

James E Mayo

James E Mayo
Chairman

2011-08-03 Lincoln Co Commissioners.pdf

BOARD OF COUNTY COMMISSIONERS

LINCOLN COUNTY

STATE OF MONTANA

ANTHONY J. BERGET, Commissioner
DISTRICT NO. 1, LIBBY

RON DOWNEY, Commissioner
DISTRICT NO. 2, TROY

MARIANNE B. ROOSE, Commissioner
DISTRICT NO. 3, EUREKA

TAMMY D. LAUER
CLERK OF THE BOARD AND COUNTY RECORDER

August 3, 2011

RECEIVED

AUG 04 2011

DEQ
DIRECTOR'S OFFICE

Bobbie Lacklen
Project Coordinator
Kootenai National Forest
31374 US Hwy 2
Libby, MT 59923

FAX: (406) 293-7709
E-mail: TroyMineReclamation@fs.fed.us

Emily Corsi
Project Coordinator
Montana DEQ
PO Box 200901
Helena, MT 59620

FAX: (406) 444-4386
E-mail: DEQTroyMine@mt.gov

RE: Troy Mine Revised Reclamation Plan DEIS

Dear Project Coordinators:

After having reviewed the Draft EIS analysis of the revised Troy Mine reclamation plan, we would like to voice our support of the Agency-Mitigated Alternative, with some suggestions that we believe should be amended into the preferred Alternative that are found in the proposed action by Troy mine, Inc for your consideration. It seems to us that the actions proposed would satisfy all of the identified reclamation goals in a manner less cumbersome, less expensive, and in some cases, with less environmental risk than the Agency-Mitigated Alternative (Alt. 3) as proposed.

- For example, Alt. 3 proposes that the current mine water pipeline be replaced with a buried pipeline, whereas Alt. 2 proposes to retain the two surface tailings pipelines. Troy Mines, Inc.'s conclusion that buried pipelines, along with future maintenance and repair (or replacement), would create more surface impacts than the existing above-ground pipelines, which could also be more easily repaired/replaced and would provide ease of visual monitoring. E1

  Further, it seems apparent to us that the disturbance to the existing road when digging deep ditches and burying your proposed new tailing line will have a far better chance of causing soil sediment to enter the creek than there would be if left alone. It is our understanding that the Troy mine waters during the 11 year temporary shut-down quickly reached drinking quality standards without any treatment. The risk of future contamination from ground disturbance to bury a line E2 E3

512 CALIFORNIA AVENUE
LIBBY, MONTANA 59923
(406) 293-7781 • (406) 293-7057 Fax
E-mail: lccomms@libby.org

seems unnecessary when the existing lines are carrying waters meeting groundwater standards. Again, if you have evidence that shows this to be untrue in a location like this with similar ore and waste byproducts, please present this evidence to this commission and the public before requiring this proposed action.

H3
H1

- For example, Alt. 3 proposes that soil salvaged in the tailing pond be used for reclamation, and would require organic fertilizer, organic matter additions to the soil, and the additional placement of 25 tons/acre of larger woody debris on reclaimed sites. This could actually increase the risk of sedimentation in Lake Creek, and would increase the risk of impacts to western toad habitat.

  In addition, the existing topsoil piles are fully re-vegetated with alder, brush, and trees and are now valuable habitat for a variety of wildlife. Eliminating this habitat is not justified when test plots indicate no additional reclamation success outcomes by doing so. Also, since there is no discussion of, nor evidence provided for, the benefits of all the organic amendments proposed in Alt. 3, we believe such action is unwarranted. If you have evidence that this study was flawed, or if you possess other studies on this type of recovered area that demonstrate that plants cannot grow as reported, please make that evidence available to this commission and the public before you requiring this proposed action in your preferred Alternative.

H2

B1
B2

- For example, Alt. 3 would require that all demolition materials be disposed of off USFS lands, whereas Alt. 2 provides for the removal of only the potentially hazardous materials for appropriate off-site disposal while burying inert and non-hazardous materials such as concrete, rebar, etc., on-site with appropriate covering and re-vegetation. On-site disposal of inert materials does not pose environmental risk. Requiring off-site disposal of these materials seems unwarranted as it would provide no significant benefit, but rather, would add significant effort and expense.

I1

- For example, Alt. 3 requirement to completely remove the existing paved road is also of no real value, and would actually result in increased sediments. We are well aware of MT DEQ's efforts to reduce Total Daily Maximum Loads (TMDL) in our watersheds and are very curious why this action is even being proposed. The most efficient way to mitigate road sediments to mitigate for TMDL concerns is to cover them with asphalt. Why would it be removed? This road provides great access to recreational opportunities such as Spar Lake and many of our county's citizens will benefit from an asphalt covered access road. If the ultimate plan is to close the roadway to motorized public use, that plan should be articulated to this commission and the public now, and before requiring this proposed action in your preferred alternative.

Thank you for this opportunity to comment. The Troy Mine is currently the largest private employer in our County. Its solvency and continued profitability is critical to our local economy, and it is very important that government agencies not require actions that are superfluous and do not provide identifiable environmental benefit.

The commission recognizes the positive steps that appropriate regulatory safeguards have taken to correct mistakes and mitigate future liabilities to the public's safety and welfare. We also believe that Troy Mine, Inc. is the kind of corporate citizen that stands up for responsible development and stewardship. We believe they are proposing common sense actions that will result in less environmental impacts and urge serious consideration of the above suggestions and ask that they be adopted by the regulatory environment that we believe is striving to achieve the same outcome.

Sincerely, Lincoln County Commissioners

Marianne B. Roose, Chairman Anthony J. Berget, Member Ron Downey, Member

2011-08-04 Chilton-Randt - FWP.pdf

From:	Chilton, Tonya
To:	TroyMineReclamation@fs.fed.us; DEQ Troy Mine
Cc:	Williams, Jim
Subject:	Comments to Troy Mine Reclamation
Date:	Thursday, August 04, 2011 1:17:37 PM
Attachments:	TroyMineRevisedReclamPlan_TC_Comments8_2011.doc

Please find my comments in the attached memo.

Thank you,
Tonya

Tonya Chilton-Radandt
Montana Fish, Wildlife, & Parks
Libby area Wildlife Biologist
385 Fish Hatchery Road
Libby MT 59923
#(406)293-4161, x209
tchilton@mt.gov

Montana Fish, Wildlife & Parks

MEMORANDUM

TO: Rebecca Cooper, Jim Williams

FROM: Tonya Chilton-Radandt, Libby Area Wildlife Biologist

DATE: 8/4/11

SUBJECT: Comments to ***Troy Mine Revised Reclamation Plan***

Thank you for this opportunity to comment on the TMRRP. In general, I agree that the Agency-Mitigated Alternative is preferred, in order to provide for the best possible outcomes for wildlife within the project area.

K-A-FWP-CR1 In particular, seasonal road restrictions will benefit grizzly bears, as will the proposed road reclamation (minus clover). The proposed Agency-Mitigated road reclamations will also benefit elk, black bear, and other species. The proposal to prohibit/minimize ATV and snowmobile use in the project area will also afford protection to mountain goats during crucial winter and spring periods.

K-A-FWP-CR2 I would also like to suggest that a few sections of the DEIS be considered for possible updates. The section on Wolf Background (3.18.4.2) should include the 2 most recent rulings, including that by the US Congress this spring, as well as the most recent ruling by Judge Malloy (8/4/11).

K-A-FWP-CR3 The section on Wolverine Affected Environment (3.18.5.11) could also be updated to include the recently recorded wolverine sign near Billiard Table Lake (especially given that the area between Billiard Table and the Troy Mine is easily within a wolverine's home range).

K-A-FWP-CR4 Finally, some of the information contained in the Mountain Goat section 3.18.6.2 needs updating. For the record, MFWP does not know the exact numbers of mountain goats in HD 101, however, goat hunter numbers, permit numbers, and goat harvest numbers across Region 1 have been decreasing since 1987. This causes me concern for the number of goats currently within HD 101 and using the project area.

2011-08-05 BennettG_CuffeM_and_VincentC.pdf

From: Chas Vincent
To: troyminereclamation@fs.fed.us; DEQ Troy Mine
Cc: Gerald Bennett; Mike Cuffe
Subject: Troy EIS Comments
Date: Friday, August 05, 2011 2:46:40 PM
Attachments: Lincoln County Delegation, Troy EIS.doc

Bobbie & Emily,

Please see the attached document from the Lincoln County delegation regarding the Troy Mine reclamation plan that is out for comment.

Have a great weekend!

Chas

Sen Chas Vincent
34 Paul Bunyan Ln
Libby, MT 59923
406.293.8821 o
406.293.1575 c
cvvincent@hotmail.com

Bobbie Lacklen
Project Coordinator
Kootenai National Forest
31374 US Hwy 2
Libby, MT 59923

FAX: (406) 293-7709
E-mail: TroyMineReclamation@fs.fed.us

Emily Corsi
Project Coordinator
Montana DEQ
PO Box 200901
Helena, MT 59620

FAX: (406) 444-4386
E-mail: DEQTroyMine@mt.gov

RE: Troy Mine Revised Reclamation Plan DEIS

Dear Project Coordinators:

After having reviewed the draft EIS for the Troy Mine reclamation plan, the Lincoln County delegation would like to go on the record as supporting the Agency-Mitigated Alternative as our preference, but we cannot fully support your preferred alternative in its entirety. We believe that a great deal of excellent work has been done by both of you and your agencies, but we feel that you have missed the mark in a few places. Please consider the following suggestions as ways to meet reclamation goals, further minimize environmental impacts, reduce unnecessary costs, and garner our full support of the proposed mitigation measures.

- Requiring the existing tailings pipelines to be removed and replaced with a buried line does not make environmental, nor economic sense. The current pipelines have carried millions of tons of slurry and have shown relatively zero wear to the liner in the pipe as was discovered in 2004 prior to resuming mining operations after 11 years of dormancy. These pipelines have many years of safe use left in them and should be used until it is determined otherwise. When it is determined that they are in need of replacement, they should be left above ground and along the existing access road to provide for easy and efficient monitoring.

E-A-LCD1

The disturbance to the existing road when digging deep ditches and burying your proposed new tailing line will cause unnecessary soil sediment to enter the creek than there would be if left alone until they needed replaced and substituted with new lines above ground. The fact that the Troy mine waters quickly reached drinking quality standards without any treatment when operations were idle removes any validity to concerns about vandalism as it would be clean water that would not pose a threat to surface or ground water. It should also be pointed out that there has never been an incident of vandalism during the pipelines thirty year existence. We would also ask that the agencies consider the unintended consequences of having a buried pipeline that cannot be easily monitored. What should happen if a section did develop a leak? How long would it take for it to be found and how large of a subsidence or sluff would it take

E-A-LCD1

to be able to detect a leak? How much disturbance would we be creating in looking for it? The balance of harm needs to be recalculated and we firmly believe that burying the lines is an unnecessary action that will create more disturbance to the watershed from both a short and long term perspective.

- We do not believe that requiring the topsoil that is now providing great habitat for wildlife be disturbed for the final reclamation plan. The topsoil piles are currently fully vegetated and have trees and alder brush that has created wonderful habitat for all sorts of terrestrial and aquatic wildlife, most importantly the Western Toad.

K-A-LCD1

Requiring all of this to be undone is completely unnecessary as there is plenty of adequate borrow material that is located 3,000 feet away from Lake creek (think bull trout) and has been proven to work just as good as the topsoil would with test plots while not creating the dust problem that the fine particulates of the topsoil will. Many of the local conservation groups in the area also agree that this proposed action should be reconsidered. We recognize that you have statutory requirements that are driving this, and that the statute was created with the best of intentions, but we feel that this is a classic unintended consequence that can and should allow for a variance.

H-A-LCD1

Further, requiring organic fertilizer, other organic matters additions to the soil, and 25 tons/acre of larger woody debris on reclaimed areas doesn't make sense either. 25 tons? Organic fertilizer? It seems that using the right amount of fertilizer than can be measured and applied using the best available science that can be calculated to the square inch is the appropriate and environmentally responsible thing to do. We thought nitrate levels in waterways were of concern to the DEQ?

- Requiring the concrete and rebar to be dug up, broke up, and moved to another location to be buried doesn't make any sense either. Why not allow the non-hazardous material that is inert to be buried and covered with appropriate fill and then re-vegetated? There is no environmental benefit in burying these material in another location, the time and resources put into doing so have more of an impact to the environment. This proposed action is unwarranted and does nothing but increase costs.

B-A-LCD1

- With two of us in this delegation having carried the TMDL bill last session the proposed action to remove the asphalt from the existing seven miles of road really makes us scratch our heads. With the single biggest mitigation (aside from closing the road) for sediments from road surfaces being to cover them with asphalt, this part of the alternative begs a couple questions.

E-A-LCD2

F-A-LCD1
I-A-LCD1

Is the USFS planning on closing this road from public use after the mine is decommissioned? Have the recreational values of the road remaining open to access very popular places like Spar Lake even been considered? Do we want the public driving on a dirt road rather than one covered with asphalt?

If the plan is to prohibit motorized use of this road after decommissioning it should be articulated by the USFS to the public now, rather than later.

The Troy Mine is currently the largest private employer in our County. Without question, its ability to continue providing family wage jobs and stock options to its employees and unnecessary and unwarranted costs required by regulators has a symbiotic relationship.

The Troy Mine has displayed to us and our constituents that they are the kind of corporate citizens that we want and deserve. It makes us proud to provide suggestions to agencies of ways to minimize environmental impacts that are actually being proposed by the applicant. This company recognizes not only their role of providing precious metals that enable our quality of life, but also their responsibility to strive to do it with as little of a footprint as possible.

We strongly encourage the regulating entities that are charged with mitigating impacts to move forward with the Agency-Mitigated Alternative with the above recommendations amended into it.

Thank you all for your time and consideration.

Rep. Gerald Bennet
784 Taylor Rd
Libby, MT 59923
406.293.7012
jbenhd1@hotmail.com

Rep. Mike Cuffe
PO Box 1685
Eureka, MT 59917
406.889.5777
mike@mcuffe.com

Sen. Chas Vincent
34 Paul Bunyan Ln
Libby, MT 59923
406.293.1575
cvvincent@hotmail.com

2011-08-05 Smith TO - FWP.pdf

From:	Smith, T.O. (FWP)
To:	DEQ Troy Mine
Cc:	Risley, Dave; Satterfield, Jim; Vashro, Jim; Hensler, Mike; Cooper, Rebecca
Subject:	MFWP Official comments for the Troy mine
Date:	Friday, August 05, 2011 3:02:34 PM
Attachments:	Troy Mine Comments.doc

Please find attached MFWP's official comments

Montana Fish, Wildlife & Parks

August 5, 2011

In regards to the Troy mine reclamation plan, Montana Fish, Wildlife and Parks submits the below listed comments for consideration and inclusion in the official record.

Montana FWP generally agrees that the agency proposed alternatives appear to give the greatest possible successful outcomes and protections for fish and fish habitat in the affected area.

D-A-FWP-S1

3.7.4.1 The Fish Population Status
Several species of fish in addition to those noted from the report are in the Lake Creek drainage near, upstream and downstream of the affected area: mountain whitefish (*Prosopium williamsoni*), coarsescale sucker (*Catostomus macrocheilus*), longnose sucker (*Catostomus catostomus*), Northern Pikeminnow (*Ptychocheilus oregonensis*), Northern pike (*Esox lucius*), brown trout (*Salmo trutta*), peamouth chub (*Mylocheilus caurinus*), Smallmouth bass (*Micropterus dolomieu*).

D-A-FWP-S2

3.7.4.2 Bull trout
There is no evidence that there is not a fluvial bull trout population in Lake Creek. In October 2006, MFWP personnel collected bull trout between 210 – 330 mm in the Lake Creek dam indicating that a fluvial lifestyle is probable.

For any of the actions related to water quality note that, during some time in their lives, 100 percent of the bull trout in the Lake Creek drainage will be influenced by the water quality effects from the proposed alternatives.

D-A-FWP-S3

Page 3-23 Paragraph 3:
Note: Instream activities proposed in the Lake Creek drainage between Bull Lake and Keeler Creek should be accomplished between July 15 and September 1, unless there are approved mitigation plans.

Montana FWP appreciates the opportunity to comment. If there are questions concerning these comments, please do not hesitate to contact our agency.

T.O. Smith
Bureau Chief, FWP

2011-08-05 Bakke H_and_Martin B-CRG.pdf

From: Howard Bakke
To: TroyMineReclamation@fs.fed.us; DEQ Troy Mine
Subject: Troy Mine DEIS
Date: Friday, August 05, 2011 9:36:03 AM
Attachments: CRG comment pdf.pdf

Hello,
Attached are our comments on the DEIS for the Troy Mine Reclamation plan.
They are in 'pdf' format. If there is a problem opening attachments please
notify me and I will send them in the body of the letter. Thank you.
Howard Bakke

The Cabinet Resource Group

P O Box 238 *Heron, MT*

August 4, 2011

Bobbie Lacklen
Kootenai National Forest
31374 U. S. 2
Libby, MT 59923-3022
TroyMineReclamation@fs.fed.us

Emily Corsi
Montana Department of Environmental Quality
P. O, Box 200901
Helena, MT 59620-0901
DEQTroyMine@mt.gov

Dear Ms. Lacklen and Ms. Corsi;

The Cabinet Resource Group (CRG) submits the following comments pertaining to the draft EIS released by the U. S. Forest Service and the Montana DEQ as noticed in the Federal Register May 20, 2011. There are five specific comments and a brief list of additional questions and thoughts; they are:

Road Reclamation

I-CRG1 The Agency-Mitigated Alternative road reclamation plan call for the removal of spur roads that are already decommissioned and the removal of the blacktop surface of road 4626, the mine access road. The disturbance of these roads will increase the risk of environmental damage. Many of the roads built during the exploratory phase and not used since have already been reclaimed by natural vegetation as indicated in the DEIS page 3-120.

Also, DEIS pg: 3-23:

"The Agency-Mitigated Alternative would reduce sediment loading both by implementing reclamation actions and by treating mining road-related sediment sources. Thus, sediment levels in Stanley and Lake Creeks would be expected to decline over time.

E-CRG1

There is nothing in the DEIS supporting the claim that removing the asphalt surface of the mine road would reduce the risk of dust and sedimentation to nearby streams. Road 4626 is currently used heavily to access Spur Lake. Converting the industrial grade asphalt road to a gravel surface will defeat the original required mitigation of a blacktop road. The mine road from the Hwy 200 junction to the Spar Lake Road junction should be left in place.

Pipeline For Mine Water Transport

E-CRG 2

The major issue of difference between the proposed action and the Agency-Mitigated Alternative is the replacement the two above ground pipelines with a buried one. There are good arguments for both. Would the construction project cause environmental damage through loss of natural vegetation and siltation at stream crossings? However, the current pipeline has had incidents of failure, and with closure of the mine the opportunity for vandalism greatly increases. Also, the concrete support piers are not "natural" and would extend the amount of time needed to return the area to its natural state. With the exception of the prohibition of burying demolition debris (see the following comment regarding mill site demolition) CRG supports the Agency-Mitigated Alternative as it applies to the pipelines.

Mill Site Demolition Materials

E-CRG 3

The agency alternative includes: *"All demolition materials, whether originating above or below ground, would be disposed* of off *NFSL in appropriate disposal areas to comply with the Montana Solid Waste Act*". There is no justification for this requirement; there is no documentation of risk to water quality. Concrete and steel debris possibly buried in the mine, in the driest possible location, would not result in leaching of problematic constituents. In fact, the additional handling and transport of these materials increases the chance of impacting air and water quality.

Tailings Impoundment Reclamation

Revett has expressed concern about disturbing the already re-vegetated topsoil stockpiled between the toe ponds and Lake Creek. We share this concern for the same and for other reasons[1], yet we also wish to see plenty of organic matter on the impoundment surface to help build soil structure, enhance water retention, and increase nutrients. We would like to suggest some ideas that may help address both these concerns.

H-CRG1

Revett has told us it may be operating the Troy Mine for some years to come. The impoundment may well reach its' maximum capacity before the cessation of mining. Revett is looking into putting future tailings back into the mine.

If this were to start happening as soon as possible, reclamation could begin, and perhaps largely be completed at the impoundment while the mine is still in operation. This could, paradoxically, allow for a slower, more flexible pace of reclamations; methods could be tested and tweaked.

A composting program could begin now on an inactive cell of the impoundment, utilizing sawdust, wood chips, agricultural and livestock wastes, etc. Even if there is not enough material

[1] Refers to CRG letter of Dec.27, 2007, Appendices, Appendix A, Scoping Report, Appendix F, pgs 53-83.

available in the area for a truly large-scale project, a significant quantity might be produced over the course of a few years. There are such operations in this region that could be consulted as to feasibility.

We understand that the US Forest Service and the University of Montana[2] have developed a portable gasification plant, clean burning, that runs on waste wood. It can produce power and/or "char" a soil amendment. There are other sources of information on such possibilities in the area, such as the Canadian company planning a bio-fuels operation in Thompson Falls.[3] We encourage the agencies to seek innovative ways to put organic material on the impoundment while minimizing disturbance of the stockpiled topsoil.

H-CRG1

At the north and south ends of those stockpiles, there are areas that do not yet have trees growing on them. Perhaps some small scale, experimental removal of soil from these areas could be tried seasonally, over several years, in order to determine if problems do arise before an irrevocable commitment is made. The dirt could be brought up and re-stockpiled near where it will finally be used.

We are dubious about the use of artificial fertilizer, particularly as it might affect trees. Finding the nutrients they need, they might put more growth into foliage that into root structure necessary to sustain that foliage growth when the fertilizer is used up.

Barrels in the Tailings

This is an issue of great concern to CRG, one the DEQ has avoided since it was first brought to the agency's attention in 1996. The rationale for dismissing this "potential" issue as beyond the scope of this DEIS is disingenuous.

E-CRG4

CRG has not claimed to know the contents of the barrels. We have provided the DEQ with a list of possibilities –"solvents, waste oil, and grease"—that are known to have entered the mine, for which there is no record, as required by law, of disposal. [4] The DEIS states that "the allegations" (which we did not make) "were never substantiated, and....the U S. District Court dismissed the case without prejudice."

The only way to know what is in the barrels is to look inside them, an increasingly expensive proposition. This poses two questions: is there sufficient evidence to warrant further investigation, and if so, who is to pay for it?

---

[2] Operated by Community Power Corp., 8110 Shaffer Parkway, Littleton, CO 80127

[3] EcoTech Energy, 125 W. Granite, Butte, MT 59701

[4] See note 1

Several years after the DEQ did not so much as acknowledge receipt of a citizen complaint alleging late night burials of 55 gallon drums in the tailings, CRG learned of it, and began to investigate. We found corroborating witnesses. We sued ASARCO to gain access to the tailings impoundment for a consulting firm of our hire to do a preliminary ground penetrating radar search for barrels. The U.S. Circuit Court let us do so. Anomalies consistent with barrels were located in places barrels were said to be buried.

ASARCO denied any such thing had ever happened, and vilified CRG with asperity. After over a year of such denials, a former mine manager, being deposed under oath, admitted that barrels had been buried. Until then, it was reasonable for the DEQ to take no action, as the allegations might have just been disgruntled ex-employees trying to cause trouble. After this admission however, that was no longer the case.

E-CRG4 Our lawsuit against ASARCO was dismissed with prejudice at our request. At the expenditure of great effort and considerable expense, we have established that there are several corroborating witnesses to the initial charge, that ASARCO admitted to burials, after having lied about it, and that there are targets that could be barrels where barrels are said to be buried. We feel we have done our part as citizens, and it is not CRG that should bear the expense and responsibility of pursuing this matter further, but rather this is the responsibility of the agencies that ostensibly exist to look out for the public's interests. For the agencies to blithely accept ASARCO's word that no contaminants were buried after it vehemently denied it had buried anything at all, for them to sweep this under the rug and make no inquiry into what was buried and why, why was it done at night and why it was lied about, would be unconscionable

We do not propose that the tailing impoundment be dug up to find every barrel in it, yet a more thorough look at areas that testimony has indicated as burial sites is by no mean unreasonable. Barrels will rust, and their unknown, possibly toxic contents, likely unmonitored for, will release into the groundwater, threatening yet another post-mining problem and expense for the people of Montana. This issue must no longer be ignored.

Additional Questions and Thoughts

Proposed action:

B-CRG 1 1. The proposed fill material for the adits is composed of large-sized development rock and a 12 " layer of growth medium; is this sufficient to preclude groundwater seepage from the adits?

B-CRG2 2. Why aren't the design details for the proposed non-hydraulic plugs and partial concrete damns or bulkhead in the Service and Conveyor adits included?

E-CRG5 3. What is the predicted attenuation rate for nitrogen and copper compounds to reach acceptable background quality?

E-CRG6 4. How much water is anticipated to dissipate into fracture zones from the mine pool?

E-CRG7 5. How would the monitoring plan be modified to account for groundwater seepage from the mine? What mitigation measures would be implemented to address groundwater seepage from the mine?

E-CRG8 6. Surface water quality monitoring should be collected at designated locations more frequently in order to promptly address any degradation to water quality. Remote monitoring systems that automatically upload to a website accessible by the public should be considered.

E-CRG9 7. What mitigation measure would be employed if the Agencies determined that water quality was not improving?

E-CRG10 8. The long term groundwater monitoring does not address how potential seeps or springs would be treated if water quality did not meet Agency standards.

B-CRG3 9. Why was subsidence not addressed as part of the Proposed Action? Given the history of subsidence at the Troy Mine, the potential impacts from this should be analyzed.

10. Surveys should be conducted to ascertain the structural stability of the mine and potential areas for future subsidence.

Agency-Mitigated Alternative

E-CRG11 1. What manner of "additional": monitoring would be required to ensure water quality at seeps and springs is met?

E-CRG9 2. What mitigation measure would be employed if the agencies determined that water quality was not improving?

E-CRG10 3. The long term groundwater monitoring does not address how potential seeps or springs would be treated if water quality did not meet Agency standards.

B-CRG3 4. Why was subsidence not addressed as part of the Proposed Action? Given the history of subsidence at the Troy Mine, the potential impacts from this should be analyzed.

5. Surveys should be conducted to ascertain the structural stability of the mine and potential areas for future subsidence.

We provide these comments in the hope that the Reclamation Bond for the Troy mine will be brought into compliance with the law.

Very truly yours,

Howard Bakke
President
Cabinet Resource Group
Noxon, MT
406-847-9390

Bill Martin
Vice-President
Cabinet Resource Group
Troy, MT
406-295-5258

2011-07-26 Troymine Revett Comments DEIS.pdf

Troy Mine Inc.

AUG 01 2011
RECEIVED

July 26, 2011

Bobbie Lackien
Kootenai National Forest
31374 U.S. 2
Libby, MT 59923-3022

Emily Corsi
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dear Ms. Lackien and Ms. Corsi;

Troy Mine, Inc. (TMI) provides the following comments on the Draft EIS released by the Forest Service and Montana DEQ and noticed in the Federal Register on May 20, 2011 regarding the TMI revised reclamation plan. The comments are grouped by subject and where possible, referenced to the page in the DEIS that is addressed. There are four primary issues of concern that TMI has identified, these are:

1. The requirement that the existing tailing lines be removed and replaced with another separate buried line at closure;

2. The requirement that TMI utilize essentially all of the toe pond soil stockpiles during reclamation thereby re-disturbing an area of significant size near Lake Creek;

3. The requirement that all site demolition materials and facility foundations and footings be disposed of off-site; and

4. The requirement that certain roads be reclaimed or converted to a gravel surface.

This letter also contains a number of general comments that are editorial in nature, question apparent inconsistencies in the document or address more minor points that require reassessment in the FEIS.

Pipeline to Transport Mine Water at Closure

E-TMI-1

The DEIS concludes that the existing dual 8" urethane lined steel pipelines that carry tailing slurry during operations need to be replaced with a new buried line at closure. TMI disagrees that the lines need to be replaced and there is little rational in the DEIS to justify this suggested replacement. The main reasons TMI disagrees with the installation of a new buried line are:

1) The existing two surface tailing lines and the existing buried pipeline have more than enough capacity and useful life to transport the mine water to the tailing facility as verified in discussions with the pipeline manufacturer;
2) The installation of a new buried line at closure would create significant new ground disturbance that will require additional reclamation;
3) There are areas in the pipeline and road corridor that are impractical for burial due to proximity of live streams (Stanley Creek and Lake Creek); and
4) TMI is installing additional secondary containment for monitoring and leak detection near stream crossings, on the existing tailing lines, that will allow better monitoring and the surface lines will be easier to repair if necessary.

It is TMI's opinion, based on actual review and testing by the pipeline manufacturer, that these lines currently have significant safe and useful life and should continue to be used following closure. TMI's proposed Closure Operations Manual (see Appendix A) summarized in this section provides a reasonable engineering approach to minimizing risk of a mine water spill during post closure.

The DEIS does not document any particular flaw or problem with the two existing 8" lines, but indicates that they are "old" and that above ground pipelines would be "more susceptible to vandalism". It is further indicated (with no documentation or explanation) that a leak from a buried pipeline would be less likely to cause sediment to reach surface water. The DEIS incorrectly implies that the current operations does not include secondary containment of the tailing pipelines and that there is no monitoring of possible pipeline leaks. The Closure Operations Manual addresses secondary containment and leak detection monitoring. TMI would like to note that the installation of a new buried line will include a number of stream crossings where the line will either have to be buried under the stream or attached to bridge structures creating new areas of both engineering and installation challenge.

E-TMI 1

TMI has substantiated that the existing above ground tailing lines will have many years of service left at closure. Based on actual testing conducted in 2004 with the pipeline manufacturer (Irathane), the urethane lining in the existing pipelines is in excellent shape. At the time of the testing each of the slurry lines had a total of sixteen million tons of slurry flow through them, yet the lining was like new. In discussions with the manufacturer, they believe that the lining would last indefinitely with the continuous flow of mine water.

Therefore, TMI considers the addition of a 10 to 18 inch diameter buried pipeline for transporting mine water to the tailing storage facility unnecessary. The life and capacity of the two existing two surface 8 inch pipelines and the existing 10 inch buried pipeline will be every bit as effective as the proposed HDPE pipe and there is no new disturbance required.

TMI believes excavation for burial of the proposed pipeline will cause undue environmental disturbance; increase risk of sedimentation to nearby streams; and not provide any more assurance against discharge to nearby streams nor protect against

vandalism. Assuming that the pipe must be buried below the frost line, the 6.1 miles of pipeline will require disturbing a 25 ft width or a minimum additional disturbance of 18.5 acres.

E-TMI1 The DEIS documents concern with the tailings lines plugging and an over pressure event occurring which may break the lines. This will not happen for the following reasons:

1) The tailing line design includes a rupture disk installed in each tailings line that will open at 586 psi in the event of a pressure surge with the discharge directed to a containment pond. These rupture disks will prevent a tailing line breakage from an over pressure event from occurring; and
2) The tailings lines have been pressure tested at 1,110 psi. At closure, when running water in the line, the potential maximum pressure will be only 475 psi.

Soil Replacement and Amendment

TMI disagrees with the agencies recommended use of the topsoil located below the toe ponds because:

1. An adequate and proven source of topsoil / growth medium exists on the east side of the tailing facility;
2. The topsoil area below the toe ponds has been successfully reclaimed with over 30 years of re-vegetation that would be re-disturbed;
3. The control of sedimentation to Lake Creek during reclamation activities and topsoil excavation will be a challenge; and
4. The area around the toe ponds is providing breeding habitat for the western toad which has been listed as a species of a concern.

H-TMI1 The agency alternative in the DEIS indicates that that soil salvaged in the tailing pond area be used for reclamation rather than borrow soil. TMI is concerned that use of the toe pond salvaged soil will increase long term risk of sediment impacts to Lake Creek, will impact documented western toad habitat and will result in the same reclamation success outcome as using the borrow soil (return of similar forest vegetation to that before the mine). The existing topsoil piles are fully re-vegetated with a thick growth of grass, alders, brush and coniferous trees. The potential impacts to neighbors from dust during soil replacement is higher with the fine grained soils than with the borrow soil. TMI requests the agencies to reconsider their decision to require use of the salvaged soil.

TMI provides Appendix B (Westech, 2011), a report on borrow soil availability and suitability that supports the use of borrow soil for reclamation at the TMI. The following are some of the specific areas in the DEIS that address soil use and amendment issues that should be revisited in preparation of the FEIS. According to the Westech Report (Appendix B), the tailings embankment face supports a young forest of planted, healthy ponderosa pine, white pine and lodge pole pine at a stocking rate suitable for proposed

post-mining land uses. Natural reinvasion of trees is occurring. The understory is primarily herbaceous, dominated by hard fescue. Cover of trees, herbaceous species, litter, lichens, moss and rock is adequate to provide a stable surface. The presence of existing forest on soils with high coarse fragments and the analysis in the DEIS – [(Section 3.16.2.9, Resource Impact Summary (page 3-149)] demonstrate that borrow area material will support the proposed post-mining land uses of forest and wildlife habitat consistent with the MMRA.

The requirements for use of organic fertilizer, organic matter addition to soil, mulch and placement of coarse woody debris on reclaimed sites is by the DEIS's own admission not necessary to achieve reclamation goals. TMI recognizes its responsibility to successfully reclaim the land disturbed by the mine, but doesn't agree that use of unnecessary amendments are required; if it takes a few years longer to achieve the vegetation density to meet bond release criteria that is TMI's option. At the 19th Annual Mine Design, Operation and Closure Conference, May 2011, Mr. Rich Prodgers, Bighorn Environmental, provided a presentation; "Effectiveness of Two Compost Products and One Mycorrhizal Inoculum in Promoting Nutrient Cycling in Cover Soils Originating as Deep Borrow" (see Appendix C). According to Mr. Prodgers' field work, analyses and presentation, he was not able to conclude from vascular plant performance or microbiological analysis that compost confers a benefit. Further he presented information that composts role in establishing nutrient cycling was far less than expected.

H-TMI 1

TMI understands that the constructed toe ponds provide breeding habitat for the western toad that would not be available without the toe ponds. The toe ponds and toad habitat at the tailing impoundment are on private land and will remain in place at closure. Evidence provided in an attached report on western toad occurrence provided with this letter from Patrick Farmer, 2011 (Appendix D) indicates that the salvage soil stockpile is used by toads during the breeding season and may be important toad habitat during other seasons. This is another reason to reevaluate the removal of the soil stockpiles when a reasonable alternative exists.

ES14 – summarizes agency alternative for use of salvage soil and organic addition; no justification provided.

ES17 – The DEIS states: "*Under the Agency-Mitigated Alternative,*
No additional measures would be required to mitigate geochemical impacts to reclamation success. The use of the rocky glacial and the lacustrine and volcanic ash-derived soils as growth media would minimize root contact with mined materials. This would effectively minimize the potential effects of plant uptake of metals from the development rock and tailings."
This implies that the tailing has a deleterious or toxic effect on plant growth; there is no evidence known to TMI or provided in the DEIS that toxicity exists and this must be corrected in the FEIS.

ES18 – The DEIS indicates that under the agency alternative chemical fertilizer would not be used in reclamation. No justification, reason or authority for this decision is provided here or elsewhere in the document.

ES19 – The summary statement that the TMI proposed action would not achieve comparable utility in not supported here or elsewhere in the document and in fact is contradicted elsewhere in the document. TMI strongly disagrees that this standard cannot be met with borrow soil and further that the agencies have presented any substantive analysis documenting this conclusion. According to the Westech Report, 2011, the tailings embankment face supports a young forest of planted, healthy ponderosa pine, white bark pine and lodge pole pine at a stocking rate suitable for proposed post-mining land uses. Natural reinvasion of trees is occurring. The understory is primarily herbaceous dominated by hard fescue. Diversity is low with few species present. Cover of trees, herbaceous species, litter, lichens, moss and rock is adequate to provide a stable surface. Previous re-vegetation trials on Cell 2; the presence of existing forest on soils with high coarse fragments; and, the analysis of the DEIS demonstrate that borrow area material will support the proposed post-mining land uses of forest and wildlife habitat consistent with the MMRA.

H-TMI 1 2-54: Soil amendments listed for the agency alternative include that all disturbed ground at mill site will be covered with mulch and 25 tons/acre wood debris. Nowhere in the document provides the justification, authority or even describes the potential benefits of this treatment.

3-42: TMI is not aware of any documentation indicating "*plant uptake of metals*" has caused any problem at the tailing impoundment. The use of the borrow soils as compared to stockpiled topsoil will accomplish the same objective; therefore, this argument needs to be revised in the FEIS.

3-115: TMI is not aware of any data or evidence indicating metals phytotoxicity from the tailing exists nor was any data or evidence referenced in the DEIS. If such documentation exists TMI would like to have a chance to discuss this issue with the agencies prior to completion of the FEIS.

3-119, 2nd paragraph: "*However, using a glacial outwash material instead would result in gradual, but slower vegetative recovery.*"

The DEIS states that borrow soils would result in **successful** but slower vegetative recovery and thus meet the "comparable utility" requirement. TMI agrees with this statement and argues that the long history of reclamation pilot tests supports it. The speed of re-vegetation is not a requirement of the Metal Mine Reclamation Act.
3-119, 5th paragraph: "*The organic matter would increase infiltration, fertility, and the water-holding capacity of the rocky glacial materials, all of which would speed up soil development on the reclaimed areas.*"

This only establishes that the organic matter addition would speed up re-vegetation, not that it is necessary to meet the reclamation requirements.

3-119, 6th paragraph: "*Twenty-five tons/acre of coarse woody debris (larger than three inches in diameter) would be scattered across the reclaimed areas at the mine portals and mill. All disturbed ground would be covered with an agency-approved mulch.*"

There is no discussion of the justification, benefits, rational or authority for requiring the addition of wood debris or mulch. More importantly, there is no discussion why this requirement in the Agency-Mitigated Alternative is more effective than the Proposed Action for achieving reclamation requirements.

3-120, 3rd paragraph: "*These materials would be used because they would produce better soil quality and a more productive plant growth medium due to their larger water-holding capacity. The material proposed under this alternative would eventually produce a quality soil with a more productive forested plant community, even with the presence of noxious weeds.*"

This documents that the main benefit of using the stockpiled soils is increased forest productivity. Since the uses of the alternative borrow soils can achieve the DEQ's requirements for stability and utility on these private lands, the requirement to use the stockpiled soil is not warranted.

H-TMI 1

3-121: "*All three alternatives would meet these guidelines on NFSL. However, the Agency-Mitigated Alternative would restore soil function in a shorter period of time.*"

The DEIS documents the agencies are in agreement with TMI's Proposed Action which achieves Forest Service requirements. Therefore, there is no need for unnecessary activities just to shorten the time period.

3-121, last paragraph: "*The Proposed Action would not produce comparable utility on the reclaimed tailings impoundment.*"

The statement is not justified and apparently relies on an interpretation of the MMRA "comparable utility" requirement that is not documented in any agency guidance but seems to be the "more is better" philosophy. The "comparable utility" wording is clearly meant to indicate a level of sustainable re-vegetation that achieves an acceptable level of cover and species diversity. There is no standard to support a minimum level of productivity. On page 3-146 (3rd paragraph) the DEIS indicates the Proposed Action achieves the "comparable utility standard". This statement must be corrected in the FEIS.

Disposal of Mill Site Demolition Materials

B-TMI 1

TMI disagrees that burial of concrete foundations and steel at the mill site pose any risk to water quality. On-site burial of demolition waste is an accepted practice during mill

site reclamation. The unnecessary handling and haulage of inert materials to an offsite disposal area would increase risk to air and water quality.

TMI's Proposed Action is as follows:

1. Equipment from the mill, shops, office and associated facilities will be salvaged or disposed of offsite. Buildings will be removed and salvaged or demolished. The mill site materials which will be buried on site are primarily concrete, but also may include some metal, glass, plastic and wood. All of these materials will be buried on site with a minimum of three feet of cover material.

B-TMI 1

2-15: The agency alternative includes: *"All demolition materials, whether originating above or below ground, would be disposed of off NFSL in appropriate disposal areas to comply with the Montana Solid Waste Act."*

The need or benefit of this unnecessary action is not provided anywhere in the document.

3-75: There is no evidence, documentation or reason that "buried demolition debris could contaminate surface water". This rational for requiring the removal of concrete foundation materials and structural steel from the mill site area is not based on fact and should be corrected in the FEIS.

3-82: There is no documentation of any "risk" to water quality from burial of building and foundation materials. Concrete and steel would not result in leaching of problematic constituents in the oxidizing conditions of shallow burial. In fact, the increased alkalinity and iron potentially available from these materials are documented in the metals fate and transport discussions, at the tailing impoundment, provides a beneficial effect on metals of concern.

Road Reclamation

I-TMI 1

The Agency-Mitigated Alternative road reclamation plan includes removal of several spur roads that have been passively decommissioned. TMI views reverting road 4626 to a gravel surface will cause undue environmental disturbance and increase risk of sedimentation to nearby streams. TMI performs annual maintenance on road 4626 and believes the surface will perform for decades after closure with minimal maintenance and cause no sedimentation risk to nearby streams. TMI believes roads 4626G, 4624B and most of 4624 to be passively decommissioned as of this date, and by closure of the Troy Mine, road 4624 will be passively reclaimed. TMI agrees that the portion of road 4551 on private land should be decommissioned – converted to a trail; however, the portion of the road on national forest is already passively decommissioned and is little more than a trail. TMI believes that disturbing this road prism will cause undue environmental disturbance and increase risk of sedimentation to nearby streams. Additionally, TMI believes road 4628A will be passively decommissioned at mine closure and disturbing the steep, narrow, stable road prism in this area will cause undue

environmental disturbance; increase risk of sedimentation to nearby streams; and, ultimately the trail will become unstable and unusable.

ES18 – "*Any additional sediment from untreated roads and stream erosion across the mill site would add to the already elevated sediment load that currently exists in Stanley Creek and would adversely impact beneficial uses for an extended period of time.*"

This statement implies that Stanley Creek is impaired for sediment, which is not the case, and the claim that beneficial uses would be impacted is not substantiated. In early June 2011 Stanley Creek has been observed flowing at high flows while showing no visible sign of turbidity. Each year TMI sends the final report for the Comprehensive Water Quality Monitoring Program for streams adjacent to the TMI. To date, we have submitted reports for 25 years. According to Mr. Joe Volosin – Parametrix Inc., for 24 years, the benthic macroinvertebrate populations and water quality of the stream systems near the Troy Mine have been monitored. Samples have been collected at locations above and below mining operations in Fairway-Stanley Creek Systems and in the Lake Creek System. The benthic macroinvertebrate and water quality monitoring over the past 24 years have not identified any pollution impacts or degradation of Fairway-Stanley Creek and Lake Creeks due to TMI Facilities.

I-TMI 1 Over all the years of monitoring, the numbers of clinger taxa in Stanley Creek have been similar to Fairway Creek and similar between Lake Creek Sites. This metric suggests that for both Fairway-Stanley and Lake Creek systems, little sedimentation effects have been noted in any of the streams evaluated. TMI has included the Comprehensive Water Quality Monitoring Programs for Streams adjacent to Troy Mine: Spring 1986 through Fall 2009, Year 25 in Appendix E to this letter.

3-22; 2nd paragraph: "*Under the Proposed Action, unneeded roads that pose a resource risk would not be treated, and restoration work on needed roads would not be implemented.*"

The definition is not clear as to "unneeded" and "needed" roads.

3-23: "*The Agency-Mitigated Alternative would reduce sediment loading both by implementing reclamation actions and by treating mining road-related sediment sources.*"

The statement implies that the Agency-Mitigated Alternative reduces *road related sediment* more than the company's proposal. There is no analysis or discussion of how removing the asphalt surface from the road would reduce sediment more than the Proposed Action. Troy Mine was originally required to install asphalt to mitigate for sediment and it is used elsewhere in the KNF which indicates asphalt road cover is effective for sediment reduction.

3-120: "*Many roads used for drilling decades ago have revegetated and pose a low erosion risk to the watershed.*"

I-TMI 1 | The DEIS supports TMI's argument that natural re-vegetation is an appropriate solution for some of the older roads.

General Comments

A-TMI-1 | ES3 – Discussion of "patented" land may be confusing, may be better to just use private land and NFSL.

B-TMI 2 | ES6/ES7 – The No Action description of ground water monitoring is inaccurate and misleading by implying there are only two ground water monitor wells. Currently TMI samples 15 monitoring wells, two of which are at the Libby Load-out Facility. TMI also samples the Service Adit ditch, Service Adit pipe and the EP-1 pump-back station.

The surface water program includes 16 surface water locations for a total of 34 sample locations. Lake Creek 1, 2 and 4; Stanley Creek - 2 and Fairway Creek – 1 are the bio-monitoring (macroinvertebrate) sampling locations. As a point of clarification Lake Creek 1 and 2, date back to 1979.

E-TMI 2 | ES10 – *"The surface water quality monitoring sites that would be sampled are the same sites as those identified under the No Action Alternative."*

TMI adds the following points for clarification: As of 2005/2006, the TMI surface water quality monitoring includes 16 locations as follows:
LC-1, LC-2, LC-4
SC-2, SC-15, SC-17A
FC-1
Emma Gulch,
Weasel Lake, Weasel Gulch
Ross Creek 1 and 2
Toe Ponds: 4, 3, 2
Decant Pond

1-11: "*Based on the analyses in this EIS, the Deciding Officers only determine whether the Proposed Action is in compliance with respective state and federal laws.*"

A-TMI 2 | The statement does not seem to be correct. The Deciding Officers prepare a Record of Decision (Rod) that determines what if any stipulations may be required to mitigate any impacts. The further discussion that indicates the Rod can only select from one of the alternatives is also incorrect. The Rod may select or modify any alternative including the preferred alternative to address a variety of issues.

B-TMI 3 | 2-25: "*Annual aerial inspections of the mine shadow area would be conducted by Troy Mine, Inc. with agency participation. Surveys would be conducted until bond release, and the subsidence portion of the reclamation bond would be held for a minimum of*

twenty years after the mine has been decommissioned and the adits have been plugged."

B-TMI 3 The requirement for annual aerial inspections for subsidence is not necessarily an accurate method for determining subsidence based on actual site experience. Surface road erosion could appear to be a subsidence event when viewed from the air. Other methods of field inspection should be considered. Twenty years of subsidence inspection before bond release is excessive.

B-TMI 4 2-36: This is the No Action and Proposed Action water monitoring plan, which is the one proposed in the Appendix F of the Revised Reclamation Plan with some additions. TMI adds the following Point of clarification: Table 2-2 is the one we proposed in the Revised Reclamation Plan during March 2006. As of 2005, TMI takes samples at 13 monitoring well sites – (two of which are at the Libby Loadout Facility). We also sample the mine's service adit ditch, service adit pipe and the Enviro-pump station and these sites are in the monitoring program. During the summer of 2010, two additional monitoring wells were drilled on the north end of the tailing facility, bringing the total to 15 monitoring wells.

The surface water program includes 16 surface water locations. In all we sample 34 locations including the monitoring wells, surface locations, plus the adit ditch, adit pipe and the spring at the Enviro-pump station.

Lake Creek 1, 2 and 4; Stanley Creek - 2 and Fairway Creek – 1 are the bio-monitoring (macroinvertebrate) sampling locations. As a point of clarification Lake Creek 1 and 2, date back to 1979.

B-TMI 5 2-57: *"If needed, the domestic water well located southeast of the tailings impoundment would be used for irrigation during the first three growing seasons; after which time, the well would be plugged and abandoned as required by ARM 36.21.810."*

The company objects to abandoning the well at the industrial site and abandoning the irrigation well at the decant pond area, because these private wells will have future uses.

B-TMI 6 2- 59: 6th bullet; "*The East Impoundment, North East Impoundment, and Cell 3 borrow areas would be planted with lower elevation forest type vegetation."*

The references to an East impoundment and NE impoundment should be **East Borrow and North East Borrow.**

C-TMI 1 3-7: "*The Libby loadout facility is not addressed in the No Action Alternative.*"

This is not correct. The Libby Load-out is currently permitted, bonded and has a reclamation plan. TMI submitted a "Minor Revision" to our Operating Permit for the New Libby Load-out facility on February 7, 2011. We received Approval for the Minor

C-TMI1 Revision from the MT DEQ on February 16, 2011. TMI started using the new load-out during March 2011.

3-26: "*requiring lands disturbed by mining...be reclaimed to comparable stability and utility.*"

A-TMI3 30CFR 228.8(g) is not the USFS's responsibility in this case to interpret DEQ's regulations. In fact 228.8(h) indicates that "certification or approval" by state agencies can be taken as acceptance of compliance with parallel regulations. The State and Federal responsibilities and authorities should be accurately described and kept separate from each other.

E-TMI3 3-47 1st paragraph: "*along an approximately 200 foot length of a tributary of Ross Creek.*"

The FEIS should note the tributary is ephemeral.

3-86 1st paragraph: "*In Lake Creek, non-mine sediment sources are somewhat more substantial, but would still be substantially less than the sediment generated by the reclamation.*"

E-TMI4 The statement is not reasonable. The Proposed Action will not produce sediment to Lake Creek or Stanley-Fairway Creek because the topsoil stockpiles would be left in the current reclaimed condition and FR4628 paved surface would not be removed and replaced with a gravel surface.

Over all the years of monitoring, the numbers of clinger taxa in Stanley Creek have been similar to Fairway Creek and similar between Lake Creek Sites. This metric demonstrates that for both Fairway-Stanley and Lake Creek systems, little sedimentation effects have been noted in any of the streams evaluated. TMI has included the Comprehensive Water Quality Monitoring Programs for Streams adjacent to TMI: Spring 1986 through fall 2009, Year 25 in the Appendix E to this letter.

E-TMI5 3-86, last paragraph: TMI believes the Proposed Action concrete closure/water capture structures in the service and conveyor adits would not have any more potential to "seep" resulting "*in water quality impacts*" than the agencies concrete water capture and diversion structure. No design was included in the DEIS.

3-90, 1st paragraph: "*Because nitrate concentrations would decrease after blasting ceases, closure and reclamation of the mine would reduce nutrient loading to surface water under all alternatives.*"

E-TMI6 The analysis and conclusions provided elsewhere in the DEIS indicate there has been no nutrient impact to Stanley or Lake Creeks from the mine. The implication that the mine has caused impairment to Stanley of Lake Creeks or that mine closure will somehow "reduce nutrient loading" to these creeks is not accurate.

3-114: "*Moreover, the water-holding capacity of the borrow materials is low and varies with the rock content.*"

H-TMI 2

The DEIS is correct that water holding capacity varies with rock content; however, the borrow materials proposed for growth media is composed of organics, clay, silt, sand and gravel. Test plots on Cell 2, embankment slopes and Cell 4 demonstrate the mixed borrow material has adequate water retention for growing grasses, shrubs and trees.

Finally in Appendix F., TMI has included photographs of the tailings facility, that shows the excellent growth on borrow material, photographs of the secondary containment warning system installation, photographs of the topsoil stock pile area and the grass growth on cell #4 – borrow material growth media.

Thank you for the opportunity to provide comments on the DEIS. If you have any questions regarding TMI's comments or would like to discuss the comments or potential changes to the FEIS resulting from the comments, please let us know.

Regards,

Douglas P. Miller
General Mine Manager
Troy Mine, Inc.

Appendix:

A: Closure Operations Manual

B: Dean Culwell, Westech Report, 2011: "Evaluation of Tailings Embankment Revegetation and Borrow Materials, Troy Mine, Lincoln County, Montana, 2011"

C: Rich Prodgers, Bighorn Environmental, "Effectiveness of Two Compost Products and One Mycorrhizal Inoculum in Promoting Nutrient Cycling in Cover Soils Originating as Deep Borrow"

D: Patrick Farmer, "Westech Report Western Toads / Topsoil Stockpiles, July 2011"

E: Comprehensive Water Quality Monitoring Programs for Streams adjacent to Troy Mine: Spring 1986 through Fall 2009, Year 25.

F: Troy Mine Photographs

Individual Comments

2011-06-07 Bernhart B.pdf

Bob Bernhart
4108 Bull Lake Rd
Troy, MT 59935
406-295-5498

June 7, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Thank you for accepting the following comments on the revised reclamation plan for the Troy mine. I would like to focus my comments on the DEIS to the pipeline and impoundment mitigation recommendations. In general, I support the reclamation plan but there are areas that don't make a great deal of sense to me and that I find contradictory or unnecessary.

E1 Why would you want to dig up and disturb more ground if you were going to decommission the existing water pipeline and replace it with a new one for adit discharges? Aren't we trying to minimize TMDL impacts in the watershed? Why not just make safety precautions or improvements to the existing pipeline that has more than adequate capacity and seems to be working just fine?

If you did require replacement, why would you want it buried when it would be much more difficult to monitor in the future? Why would you want to disturb ground to bury it originally and perhaps again to repair or replace the line when it is completely unnecessary?

K1 Wouldn't using the toe pond stockpiled top soils for reclamation impact the western toad that currently has great habitat there now? Why not just use the coarse borrow material east of the impoundment instead? The DIES indicates that this could be just as successful in achieving reclamation goals and criteria. Are the wood based organic amendments that add 1,100 lbs of nitrogen per acre for the mill and impoundment really necessary? What is mycorrhizal fungi and why is it needed for reclamation at the mill? Why are the agencies requiring organic versus chemical fertilizer for reclamation in general?

H3

Thank you for listening and I look forward to seeing the final reclamation plan include some further modifications to address some of the areas I have outlined above.

Respectfully,

Sincerely,

Bob Bernhart

2011-06-07 Erickson I.pdf

Issac Erickson
3367 mt hwy 200
Trout Creek, MT 59874
827-3391

June 7, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state.

For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife.

E7 K2 Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E7 E2 Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

Thank you for your time,

Sincerely,

Issac Erickson

2011-06-07 Jellesed E.pdf

Earlene Jellesed
39 Swanson Ldg. Rd
Troy, MT 59935
406-295-4201

June 7, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:
I work at the Troy Mine and several members of my family work here also. It is very important to me because my children and grandchildren are directly affected by these decisions.
Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road?

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

Earlene Jellesed

2011-06-08 Lloyd S.pdf

Steve Lloyd
Box 983
Hot Springs, MT 59845
406-295-5882 x238

June 8, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Montana DEQ and Kootenai National Forest:

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, elk, deer and moose, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

I am really amazed at how well the disturbed areas have grown over druring the last 28

H3 years. Many areas are fully reclaimed and the trees are over 15 feet tall. It seems like the agency is putting a lot of emphasis on growth material, that is not really needed.

Thanks for your time and consideration.

Sincerely yours,

Sincerely,

Steve Lloyd

2011-06-08 Morkert H. pdf

Troy Mine Revised Reclamation Plan
Draft Environmental Impact Statement

If you would like to provide written comments, you may use this form today and drop it in the comment box at the registration table. You can also take this form home and mail it later to either Emily Corsi (DEQ) or Bobbie Lacklen (USDA Forest Service) at the addresses below. Comments may be faxed to (406) 283-7709 (KNF) or 406-444-4386 (DEQ Director's Office), or hand-delivered to the KNF Supervisor's Office and DEQ Director's Office between the hours of 8:00 a.m. and 4:30 p.m. Written comments must be postmarked by the Postal Service, e-mailed, faxed, or otherwise submitted by 11:59 pm on July 5, 2011.

Bobbie Lacklen
Kootenai National Forest
31374 U.S. Highway 2
Libby, MT 59923-3022
TroyMineReclamation@fs.fed.us

Emily Corsi
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
DEQTroyMine@mt.gov

Name/Organization: Howard Morkert
Address: #Lightning Lane
Trout Creek Mt. 59874
E-mail: lhmork@blackfoot.net **Phone:** 406-827-4090

Comments: No where in the information provided does the matter of cost of each alternative come up, but in these times of government excess higher taxes and high unemployment it should have some weight, (a lot of weight)

G2 The DEQ and KNF alternative would appear to have the highest cost by far - soprise, its some one else's money that they are spending.

It seems to me that no action is not feasable but the government proposal is exceptionally costly and ultimatly the greatest initial land disturbance.

The company proposal may also require some tweaking but offers some of soundest ideas, those that are based in history and experience not subjective ideas, proposals and what ifs.

The ultimate question is will any of the comments matter or is the pride of authorship so strong within the agencies that no matter what is said nothing will change.

Put me down in favor of the proposed action alternative ~~[illegible]~~ (the Company plan) with some tweaking.

But I will be surprised if any of this affects the agencies agenda to put forth the highest possible cost alternative

2011-06-09 Blomdahl J. pdf

Jill Blomdahl
26 Lazy River Rd
Troy, MT 59935
2956056

June 9, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

G3

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€“ cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€“ with some suggestions for necessary changes.

H2

First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected

H2 during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

Thank you for accepting and considering my comment.

Sincerely,

Sincerely,

Jill Blomdahl

2011-06-09 Garcia S. pdf

From: Soraya Garcia
To: DEQ Troy Mine
Subject: Troy Mine Revised Reclamation PLan comments
Date: Thursday, June 09, 2011 9:20:46 AM

Soraya C Garcia
490 Waterfront Rd
Troy, MT 59935

6/9/11

To: Emily Corsi,

After attending the hearing in Troy, MT on 6/8/11 regarding the Troy mine reclamation plan, I do have some comments as a resident of Lincoln County.

E2

First of all, I would like to comment on the subject of the slurry pipe. How many people drive on the mine road to site see???? How many residents live on the mine road??????
Gee.....can I have the power lines along any road in Montana put underground because I dont like what it looks like? So instead of being environmentally safe by having the pipes above ground, it is recommmended that the pipes be buried to ensure the beauty of the surroundings because a few persons dont like how it looks.. Sounds to me like some common sense is not being put into practice over that particuliar issue and one of the reasons behind wanting the pipes put underground.

I would also like to comment on the issue regarding the habitat in that particular area.....It seems that the environmental protection specialists are always finding some sort or animal,plant, or bird to be disturbed when it comes to the organization wanting to change something. Well what about the grizzley bear being transplanted to the area where the mine is located.....Did the F&G think for one minute about the lives of all those employees being put into danger from a bear attack? Those persons are being disturbed and their livelyhood is being attacked also. No common sense was used in that decision, especially when the bears could have been transplanted back to Alaska, to their natural habitat.
Why does it seem like nobody cares about the the economy of our area? The only economy these changes will affect, will be the pocketbooks of the KNF & MDEQ. With no economy in this area....there will be no persons driving around on the mine road to judge whether it is beautiful or not. These agencies are making it impossible for businesses to grow and to help make the economy grow. The mine is so busy jumping through everyone else's hoops to ensure the environmental quality of this area, dont you think that they would ensure the public that they will make sure that the area is left environmentally safe when it ceases to operate.

2011-06-12 Brus C.pdf
(page 1-2)

From: Cary Brus
To: "troyminereclamation@fs.fed.us"; DEQ Troy Mine
Subject: Comment on Troy Mine DEIS
Date: Sunday, June 12, 2011 9:06:36 AM

Dear Bobbie and Emily,

I appreciate the opportunity to comment on the Troy Mine DEIS. I am a geologist with a keen interest in mining. I have read the DEIS and offer the following comments.

I strongly favor alternative **ES.6.2 Proposed Action.**

In summation, this proposal strikes the balance between (a) minimizing adverse environmental impacts associated with a mine reclamation, and (b) economic common sense.

The following comments are directed in support of **ES.6.2 Proposed Action** and against specific actions contemplated in **ES.6.3 Agency-Mitigated Alternatives** as follows:

B3
- Plugging the South Adit an additional 100 feet is overkill and unnecessary. The additional 100 feet of development rock fill has no subsurface benefit and serves only as a "more is better" change.

E2
- A new, buried mine water pipeline replacing (a) two existing 8-inch surface pipelines and (b) the already buried reclaim water line is not a wise idea. A buried line has just as much probability of leaking – some would argue a greater probability – than a surface line. A line is a line, whether underground or on the surface. Underground leak detection systems are beneficial to the vendor selling you the system, but otherwise are grossly unreliable. This adds an additional layer of complexity and human error to an otherwise simple process as someone has to monitor the leak detection system. A leak detected – whether above or below ground – is a post event occurrence. Use the existing above ground lines. They are easier to monitor, detect and repair.

E4
- The agency-mitigated alternative does not take into account the secondary containment systems already being installed on the tailings lines where they cross both Lake and Stanley Creeks. The Troy Mine has been proactively working to address agency concerns for both creek crossings.

E9
- One additional surface water monitoring site and 4 additional monitoring wells near the decant ponds are an unnecessary and wasteful use of capital resources.

H1

- Existing stockpiled topsoil should be left as berms to (a) continue to provide current habitat and (b) prevent sediment loading at Lake Creek. Disturbing and ultimately using the material increases the opportunity for sediment loading. And, the biolife – including a favored toad - currently residing in the berms and topsoil piles will be disturbed.

H3
H4

- The prescription to use "agency-approved, wood-based, organic amendment to raise organic matter content to achieve 1,100 lbs of nitrogen per acre" contradicts a later statement that "chemical fertilizers would not be used under the Agency-Mitigated Alternative." You are specifying a nitrogen load in one sentence.....and later specifying no chemical loading. **Use common sense**. The mine is located in, essentially, a rain forest with an annual rainfall of 30 inches. Almost anything will grow without any fertilizer, nitrogen or otherwise. Second, the unintended consequences of nitrogen loading 1,100 lbs per acre cannot be accurately assessed. Nitrogen is not the issue. Cover material is the critical issue for plant growth. The borrow material for the east borrow pit has already been proven in test plots to successfully grow plant life.

E6

- The use of "imported non-mineralized rock" rather than mine development rock for drainage channel fill is another violation of common sense and fiscal efficiency. The entire mountain is made up of quartzite. Bringing in "imported rock" with its non-native chemical and crystal structure puts the Law of Unintended (*Leaching*) Consequences directly in play. Use the waste rock on hand that is directly native to the specific, localized area. Any concern over using angular waste rock onsite vs. using rounded imported rock for drainage channel fill is a discussion that wastes time. All rock rounds over time.

I1

- The Agency Mitigated Alternative plan for reclaiming roads would, in fact, **INCREASE** the sediment load. The conclusion that replacing 6 miles of **paved surface** on NFSR 4626 with gravel would lead to a decrease in sediment loading is erroneous. The objective of the reclamation is environmental protection, not advancing Kootenai National Forest preferred road maintenance methods.

F1

- The Proposed Action allows maintenance of existing roads for recreational access.

J1

- The statement that "…..the diverse native plant communities that were originally present **would never fully re-establish**" is, again, erroneous. "Never" is a long time. The mine is located in an alpine rain forest where darn near everything will grow in a relatively small amount of borrow

cover material. The bias towards the Agency-Mitigated Alternative is readily apparent.

- And, again, when evaluating alternatives and what is being asked I ask you to please use some common sense and put this in perspective. The mine permit of 2,782 acres a relatively minor footprint in the overall KNF. Furthermore, the 430 acres of surface (on mostly private land, to boot) disturbance is even smaller yet, 85% smaller.

A5

- **Personal comment**: The proposed increase in bonding being contemplated is egregious and harmful to the overall mine project. Jobs, families and people's lives are at stake.

G1

Finally, it is with regret I did not read anywhere in your DEIS any discussion about the unnamed fauna most affected by the Agency-Mitigated Alternative plan: humans, their families, their communities, their mortgage payments, their college savings funds for their children, etc. Job creation and job destruction were never mentioned. This has *always* been the fatal flaw of EIS and DEIS efforts, and is simply wrong.

In summation, I strongly favor alternative **ES.6.2 Proposed Action.**

Cary E. Brus

Cary E. Brus, Sr. VP
Nerd Gas Company LLC
P.O. Box 3003
1701 East "E" Street
Casper, Wyoming 82602

ph: 307.234.0583
fax: 307.234.4631
cell: 307.259.6301
email: cary@mcmurry.net

2011-06-12 Brus T.pdf

Tim Brus
73 road 2daw
Cody, Wy 82414
307 250 4747

June 12, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Tim Brus

2011 - 06 - 13 Bailey H.pdf

From: Hank Bailey
To: DEQ Troy Mine
Cc: lib@bsh-law.com
Subject: DEIS Troy Mine, Lincoln County, Montana
Date: Monday, June 13, 2011 8:46:54 AM

To Whom It May Concern:

I write as a concerned citizen. I am familiar with the Troy Mine and the Draft Environmental Impact Statement related thereto. I am aware of the need to balance responsible and environmentally sound mining practices with economic development and stability, and the need to protect jobs. Though not a citizen of Montana at present, I grew up there and I am quite familiar with its "Big Sky" beauty.

With due regard for all the competing interests and factors, I urge your support of **ES.6.2 Proposed Action.**

I believe this proposal strikes the balance between minimizing adverse environmental impacts and fostering economic stability and growth. I believe **EX.6.3. Agency-Mitigated Alternatives** goes far beyond what is necessary to protect the environment and will have significant detrimental impact on the economy and employment. I freely admit I am not an expert in geology, nor in environmental science, or any related field. Although my undergraduate degree was in Economics, I claim no special abilities in that field either. I simply know that our nation is in the throes of a horrible recession and that excessive government regulation, while often well intentioned, tends to stifle economic activity and growth, and that the costs are unavoidably passed on to every citizen. And that includes me and my family. I also represent a number of rural electric cooperatives who have seen their costs, and thus the costs to their consumer members, rise significantly due to increased government regulation.

With that in mind, I offer the following:

Plugging the South Adit an additional 100 feet is unnecessary. The additional 100 feet of development rock fill has no subsurface benefit and serves only as a "more is better" change.

E2
- A new, buried mine water pipeline replacing (a) two existing 8-inch surface pipelines and (b) the already buried reclaim water line is not a wise idea. A buried line has just as much probability of leaking – some would argue a greater probability – than a surface line. A line is a line, whether underground or on the surface. Underground leak detection systems are beneficial to the vendor selling you the system, but otherwise are grossly unreliable. This adds an additional layer of complexity and human error to an otherwise simple process as someone has to monitor the leak detection system. A leak detected – whether above or below ground – is a post event occurrence. Use the existing above ground lines. They are easier to monitor, detect and repair.

E4
- The agency-mitigated alternative does not take into account the secondary containment systems already being installed on the tailings lines where they cross both Lake and Stanley Creeks. The Troy Mine has been proactively working to address agency concerns for both creek crossings.

E9
- One additional surface water monitoring site and 4 additional monitoring wells near the decant ponds are an unnecessary and wasteful use of capital resources.

H1
- Existing stockpiled topsoil should be left as berms to (a) continue to provide current habitat and (b) prevent sediment loading at Lake Creek. Disturbing and ultimately using the material increases the opportunity for sediment loading. And, the biolife – including a favored toad - currently residing in the berms and topsoil piles will be disturbed.

H3
H4
- The prescription to use "agency-approved, wood-based, organic amendment to raise organic matter content to achieve 1,100 lbs of nitrogen per acre" contradicts a later statement that "chemical fertilizers would not be used under the Agency-Mitigated Alternative." You are specifying a nitrogen load in one sentence.....and later specifying no chemical loading.

H3
H4

Common sense must prevail here. The mine is located in, essentially, a rain forest with an annual rainfall of 30 inches. Almost anything will grow without any fertilizer, nitrogen or otherwise. Second, the unintended consequences of nitrogen loading 1,100 lbs per acre cannot be accurately assessed. Nitrogen is not the issue. Cover material is the critical issue for plant growth. The borrow material for the east borrow pit has already been proven in test plots to successfully grow plant life.

E6

- The use of "imported non-mineralized rock" rather than mine development rock for drainage channel fill is another violation of common sense and fiscal efficiency. The entire mountain is made up of quartzite. Bringing in "imported rock" with its non-native chemical and crystal structure puts the Law of Unintended (*Leaching*) Consequences directly in play. Use the waste rock on hand that is directly native to the specific, localized area. Any concern over using angular waste rock onsite vs. using rounded imported rock for drainage channel fill is a discussion that wastes time. All rock rounds over time.

I1

- The Agency Mitigated Alternative plan for reclaiming roads would, in fact, increase the sediment load. The conclusion that replacing 6 miles of paved surface on NFSR 4626 with gravel would lead to a decrease in sediment loading is erroneous. The objective of the reclamation is environmental protection, not advancing Kootenai National Forest preferred road maintenance methods.

F1

- The Proposed Action allows maintenance of existing roads for recreational access.

J1

- The statement that "…..the diverse native plant communities that were originally present would never fully re-establish" is, again, erroneous and not scientifically based. "Never" is a long time. The mine is located in an alpine rain forest where darn near everything will grow in a relatively small amount of borrow cover material. The bias towards the Agency-Mitigated Alternative is readily apparent.
- And, again, when evaluating alternatives and what is being asked I ask you to please use some common sense and put this in perspective. The mine permit of 2,782 acres a relatively minor footprint in the overall KNF. Furthermore, the 430 acres of surface (on mostly private land, to boot) disturbance is even smaller yet, 85% smaller.

A5

- Personal comment: The proposed increase in bonding being contemplated is egregious and harmful to the overall mine project. **Jobs, families and people's lives are at stake**. PLEASE TAKE THAT INTO CONSIDERATION!

G1

I believe all the focus on "endangered species" and similar environmental concerns often loses sight of what is today, perhaps, an even more endangered species - the family of man, our jobs, our communities, our way of life. Enough is enough. It's time to let the pendulum swing back.

I strongly favor alternative **ES.6.2 Proposed Action.**

Thank you for taking time to read and consider my thoughts.

Henry F. Bailey Jr.
Bailey, Stock & Harmon P.C.
221 East 21st Street
Cheyenne, Wyoming 82001
307.638.7745
307.638.7749 Fax

This email may contain confidential and/or privileged communications. Please do not forward or distribute this communication to any third parties without the sender's permission. If you are not the intended recipient or if you believe you received this email by mistake, please notify the sender immediately and delete this email.

2011-06-13 Bakke H_CRG.pdf
PB

The Cabinet Resource Group

June 13, 2011

Paul Bradford, Forest Supervisor
Kootenai National Forest
31374 US 2
Libby, MT 59923-3022

Re: Troy Mine Reclamation Bond; Draft Environmental Impact Statement

Mr. Bradford,

A1 I am writing on behalf of the Cabinet Resource Group to address the situation with the Troy Mine Reclamation Bond Draft Environmental Impact Statement. As you are aware, CRG has been involved since the bond was declared insufficient in 1999. Since that time, there has been confusion regarding the necessity of an Environmental Assessment or an Environmental Impact Statement. Finally, on or about May 20, 2011 it was published in the Federal Register of the intent to issue an DEIS; that action started a 45 day comment period although the document itself didn't become generally available for several days. Since most of the members of CRG are involved in other endeavors requiring their time, the document is over 1,000 pages, and, after all, it has been eleven years, we feel it is not unreasonable to ask that the comment period be extended for a minimum of 30 days to allow sufficient time to analyze and comment.

I am taking this opportunity to pass along another suggestion made by several people at the public meeting held June 8 in Troy, Montana. Members of CRG's board, including this writer, representatives of MTDEQ, USFS, and Revett Minerals management had informal conversations before and after the formal meeting. What became apparent was a lack of understanding how some of the proposals in the DEIS would translate into

The Cabinet Resource Group

physical operations. The idea, the suggestion, was put forward to have another meeting with representatives from all the interested parties. Perhaps a much more informal meeting in Missoula, while necessarily a public meeting, but conducted as a "round table" discussion where details could be explained and possibly even negotiated. If such a meeting is possible and CRG can be of assistance in organizing it please let me know.

To contact me directly:

Howard Bakke
P O Box 1627
Noxon, MT 59853-1627
406-847-9390
406-531-0925 cell
E-mail: Howlb@Blackfoot.net

Thank you for your attention and consideration of these matters.

Sincerely,

Howard Bakke

Howard Bakke, President
Cabinet Resource Group
P O Box 238
Heron, MT 59844

Cc: Richard Opper, Director
MT DEQ
Helena, MT

2011-06-13 DeVore K_a .pdf

Kim DeVore
205 Storey Blvd
Cheyenne, WY 82009
307-773-7781

June 13, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,
Kim DeVore

Sincerely,

Kim DeVore

2011-06-13 DeVore K_b.pdf
(pages 1-2 of 3)

From: Kim DeVore
To: DEQ Troy Mine
Subject: Troy Mine
Date: Monday, June 13, 2011 2:02:10 PM

Dear Bobbie and Emily,

I appreciate the chance to comment on the Troy Mine DEIS. I am a bank CFO with a seemingly odd interest in mining. Actually the company I indirectly work for has strong interests in mining, land development and oil/gas exploration, therefore I have learned quite a bit just listening. I have read the DEIS and offer the following comments.

I strongly favor alternative **ES.6.2 Proposed Action.**

In summation, this proposal strikes the balance between (a) minimizing adverse environmental impacts associated with a mine reclamation, and (b) economic common sense.

The following comments are directed in support of **ES.6.2 Proposed Action** and against specific actions contemplated in **ES.6.3 Agency-Mitigated Alternatives** as follows:

B3
- Plugging the South Adit an additional 100 feet is overkill and unnecessary. The additional 100 feet of development rock fill has no subsurface benefit and serves only as a "more is better" change.

E2
- A new, buried mine water pipeline replacing (a) two existing 8-inch surface pipelines and (b) the already buried reclaim water line is not a wise idea. A buried line has just as much probability of leaking – some would argue a greater probability – than a surface line. A line is a line, whether underground or on the surface. Underground leak detection systems are beneficial to the vendor selling you the system, but otherwise are grossly unreliable. This adds an additional layer of complexity and human error to an otherwise simple process as someone has to monitor the leak detection system. A leak detected – whether above or below ground – is a post event occurrence. Use the existing above ground lines. They are easier to monitor, detect and repair.

E4
- The agency-mitigated alternative does not take into account the secondary containment systems already being installed on the tailings lines where they cross both Lake and Stanley Creeks. The Troy Mine has been proactively working to address agency concerns for both creek crossings.
- One additional surface water monitoring site and 4 additional monitoring

E9 wells near the decant ponds are an unnecessary and wasteful use of capital resources.

- H1 Existing stockpiled topsoil should be left as berms to (a) continue to provide current habitat and (b) prevent sediment loading at Lake Creek. Disturbing and ultimately using the material increases the opportunity for sediment loading. And, the biolife – including a favored toad - currently residing in the berms and topsoil piles will be disturbed.
- H3 H4 The prescription to use "agency-approved, wood-based, organic amendment to raise organic matter content to achieve 1,100 lbs of nitrogen per acre" contradicts a later statement that "chemical fertilizers would not be used under the Agency-Mitigated Alternative." You are specifying a nitrogen load in one sentence.....and later specifying no chemical loading. **Use common sense**. The mine is located in, essentially, a rain forest with an annual rainfall of 30 inches. Almost anything will grow without any fertilizer, nitrogen or otherwise. Second, the unintended consequences of nitrogen loading 1,100 lbs per acre cannot be accurately assessed. Nitrogen is not the issue. Cover material is the critical issue for plant growth. The borrow material for the east borrow pit has already been proven in test plots to successfully grow plant life.
- E6 The use of "imported non-mineralized rock" rather than mine development rock for drainage channel fill is another violation of common sense and fiscal efficiency. The entire mountain is made up of quartzite. Bringing in "imported rock" with its non-native chemical and crystal structure puts the Law of Unintended (*Leaching*) Consequences directly in play. Use the waste rock on hand that is directly native to the specific, localized area. Any concern over using angular waste rock onsite vs. using rounded imported rock for drainage channel fill is a discussion that wastes time. All rock rounds over time.
- I1 The Agency Mitigated Alternative plan for reclaiming roads would, in fact, **INCREASE** the sediment load. The conclusion that replacing 6 miles of **paved surface** on NFSR 4626 with gravel would lead to a decrease in sediment loading is erroneous. The objective of the reclamation is environmental protection, not advancing Kootenai National Forest preferred road maintenance methods.
- F1 The Proposed Action allows maintenance of existing roads for recreational access.
- J1 The statement that "....the diverse native plant communities that were originally present **would never fully re-establish**" is, again, erroneous. "Never" is a long time. The mine is located in an alpine rain forest where

J1 darn near everything will grow in a relatively small amount of borrow cover material. The bias towards the Agency-Mitigated Alternative is readily apparent.

- And, again, when evaluating alternatives and what is being asked I ask you to please use some common sense and put this in perspective. The mine permit of 2,782 acres a relatively minor footprint in the overall KNF. Furthermore, the 430 acres of surface (on mostly private land, to boot) disturbance is even smaller yet, 85% smaller.

A5

- **Personal comment**: The proposed increase in bonding being contemplated is egregious and harmful to the overall mine project. Jobs, families and people's lives are at stake.

G1 Finally, it is with regret I did not read anywhere in your DEIS any discussion about the unnamed fauna most affected by the Agency-Mitigated Alternative plan: humans, their families, their communities, their mortgage payments, their college savings funds for their children, etc. Job creation and job destruction were never mentioned. This has *always* been the fatal flaw of EIS and DEIS efforts, and is simply wrong. Anywhere you look within the internet, news, print or just general discussion between Americans.....jobs are king. Please do not find yourself guilty of ignoring what the public is worried about and demanding, as your role is to listen and respond knowledgably and appropriately.

In summation, I strongly favor alternative **ES.6.2 Proposed Action.**

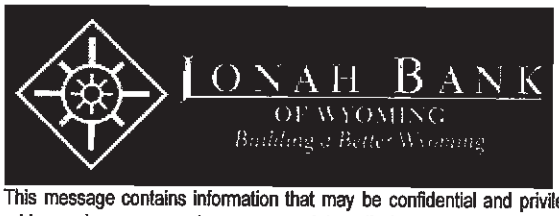
Kim DeVore

Chief Financial Officer

Office: (307) 773-7781 | Fax: (307) 637-2894

205 Storey Boulevard | Cheyenne | WY | 82009

www.jonahbank.com



This message contains information that may be confidential and privileged. Unless you are the addressee (or authorized to receive for the addressee), you may not use, copy, print or disclose to anyone the message or any information contained in the message. If you have received this email in error, please advise the sender by reply and delete the message. Thank you.

2011-06-13 LymanDe.pdf

June 13, 2011

RECEIVED
JUN 15 2011
DEQ
DIRECTOR'S OFFICE

OFFICIAL RECORD

Dear Mr. Opper,

A1 I am writing to request an extension of 45 to 60 days for public comments concerning the Troy Mine Reclamation Plan.

The reclamation plan has dragged on for 11 years and is a large document. Folks that have been following the process and wish to comment have not been given enough time to study the document and comment upon it in a thoughtful manner.

Please reconsider the current time line and extend it so it is fair to the public and their concerns.

This is very important.

Thank you,

Debbie Lyman
34 Beaver Peak Rd 847-2388
Heron, MT 59844
lastlyman@blackfoot.net

2011-06-13 Thompson B.pdf
(pages 1, 2 of 3)

From: Bill Thompson
To: trovminereclamation@fs.fed.us; DEQ Troy Mine
Subject: DEIS Troy Mine
Date: Monday, June 13, 2011 9:09:52 AM

Dear Bobbie and Emily,

I appreciate the opportunity to comment on the Troy Mine DEIS. I am a Banker with a keen interest in economic development of natural resources located in the United States of America. I have read the DEIS and offer the following comments.

I strongly favor alternative **ES.6.2 Proposed Action.**

In summation, this proposal strikes the balance between (a) minimizing adverse environmental impacts associated with a mine reclamation, and (b) economic common sense.

The following comments are directed in support of **ES.6.2 Proposed Action** and against specific actions contemplated in **ES.6.3 Agency-Mitigated Alternatives** as follows:

B3

- Plugging the South Adit an additional 100 feet is overkill and unnecessary. The additional 100 feet of development rock fill has no subsurface benefit and serves only as a "more is better" change.

E2

- A new, buried mine water pipeline replacing (a) two existing 8-inch surface pipelines and (b) the already buried reclaim water line is not a wise idea. A buried line has just as much probability of leaking – some would argue a greater probability – than a surface line. A line is a line, whether underground or on the surface. Underground leak detection systems are beneficial to the vendor selling you the system, but otherwise are grossly unreliable. This adds an additional layer of complexity and human error to an otherwise simple process as someone has to monitor the leak detection system. A leak detected – whether above or below ground – is a post event occurrence. Use the existing above ground lines. They are easier to monitor, detect and repair.

E4

- The agency-mitigated alternative does not take into account the secondary containment systems already being installed on the tailings lines where they cross both Lake and Stanley Creeks. The Troy Mine has been proactively working to address agency concerns for both creek crossings.
- One additional surface water monitoring site and 4 additional monitoring

E9 wells near the decant ponds are an unnecessary and wasteful use of capital resources.

H1
- Existing stockpiled topsoil should be left as berms to (a) continue to provide current habitat and (b) prevent sediment loading at Lake Creek. Disturbing and ultimately using the material increases the opportunity for sediment loading. And, the biolife – including a favored toad - currently residing in the berms and topsoil piles will be disturbed.

H3
H4
- The prescription to use "agency-approved, wood-based, organic amendment to raise organic matter content to achieve 1,100 lbs of nitrogen per acre" contradicts a later statement that "chemical fertilizers would not be used under the Agency-Mitigated Alternative." You are specifying a nitrogen load in one sentence.....and later specifying no chemical loading. **Use common sense**. The mine is located in, essentially, a rain forest with an annual rainfall of 30 inches. Almost anything will grow without any fertilizer, nitrogen or otherwise. Second, the unintended consequences of nitrogen loading 1,100 lbs per acre cannot be accurately assessed. Nitrogen is not the issue. Cover material is the critical issue for plant growth. The borrow material for the east borrow pit has already been proven in test plots to successfully grow plant life.

E6
- The use of "imported non-mineralized rock" rather than mine development rock for drainage channel fill is another violation of common sense and fiscal efficiency. The entire mountain is made up of quartzite. Bringing in "imported rock" with its non-native chemical and crystal structure puts the Law of Unintended (*Leaching*) Consequences directly in play. Use the waste rock on hand that is directly native to the specific, localized area. Any concern over using angular waste rock onsite vs. using rounded imported rock for drainage channel fill is a discussion that wastes time. All rock rounds over time.

I1
- The Agency Mitigated Alternative plan for reclaiming roads would, in fact, **INCREASE** the sediment load. The conclusion that replacing 6 miles of **paved surface** on NFSR 4626 with gravel would lead to a decrease in sediment loading is erroneous. The objective of the reclamation is environmental protection, not advancing Kootenai National Forest preferred road maintenance methods.

F1
- The Proposed Action allows maintenance of existing roads for recreational access.

J1
- The statement that "…..the diverse native plant communities that were originally present **would never fully re-establish**" is, again, erroneous.

J1 "Never" is a long time. The mine is located in an alpine rain forest where darn near everything will grow in a relatively small amount of borrow cover material. The bias towards the Agency-Mitigated Alternative is readily apparent.

- And, again, when evaluating alternatives and what is being asked I ask you to please use some common sense and put this in perspective. The mine permit of 2,782 acres a relatively minor footprint in the overall KNF. Furthermore, the 430 acres of surface (on mostly private land, to boot) disturbance is even smaller yet, 85% smaller.

A5
- **Personal comment**: The proposed increase in bonding being contemplated is egregious and harmful to the overall mine project. Jobs, families and people's lives are at stake.

G1 Finally, it is with regret I did not read anywhere in your DEIS any discussion about the unnamed fauna most affected by the Agency-Mitigated Alternative plan: humans, their families, their communities, their mortgage payments, their college savings funds for their children, etc. Job creation and job destruction were never mentioned. This has *always* been the fatal flaw of EIS and DEIS efforts, and is simply wrong.

In summation, I strongly favor alternative **ES.6.2 Proposed Action.**

Bill Thompson

Vice President

Office: (307) 268-7302 | Cell: (307) 259-9345

777 West First Steet | Casper | WY | 82604

bthompson@jonahbank.com

This message contains information that may be confidential and privileged. Unless you are the addressee (or authorized to receive for the addressee), you may not use, copy, print or disclose to anyone the message or any information contained in the message. If you have received this email in error, please advise the sender by reply and delete the message. Thank you

2011-06-14 Swanson T.pdf

From: Tom Swanson
To: troyminereclamation@fs.fed.us; DEQ Troy Mine
Subject: DEIS Troy Mine
Date: Tuesday, June 14, 2011 10:07:20 AM

TWIMC:

G1 I would like to voice my opinion that I strongly support the adoption of ES.6.2 Proposed action in this matter as this alternative is the best outcome for families of Lincoln County. This Mine is the largest private employer in Lincoln County and needs to be encouraged to stay and prosper.

G2 I reject the Agency Mitigated Alternative ES.6.3 as an attempt to put undo costly requirements on a project that has done a good job of mitigating environmental issues in spite of over-regulation. This 2,782 acre mine permit is a small footprint relative to the jobs the Mine creates for the families of Lincoln County. Additionally, I would advocate that the bond increase for this project is

A5 punitive and outrageous and completely unjustified and without reason; this motive for this increase in bonding should be reexamined.

ES.6.2 Proposed Action makes much better sense than the other considered alternatives; please adopt ES. 6.2 Proposed Action .

Thank you. Tom E. Swanson, 2231 Miracle Drive, Casper, Wy 82609

2011 - 06-14 Waekerlin R.pdf

From: Ron Waeckerlin
To: toyminereclamation@fs.fed.us
Cc: DEQ Troy Mine; "Cary Brus"
Subject: Troy Mine DEIS
Date: Tuesday, June 14, 2011 5:09:13 PM

Greetings,
My name is Ron Waeckerlin. I am a frequent visitor to Montana and have family in the Missoula and Helena regions. I am interested in the current DEIS and alternatives being considered for the Troy Mine in Lincoln County. After review of many of the documents and discussion with experts in the mining and geology fields I urge favorable consideration for ES.6.2 Proposed Action and oppose the ES.6.3 Agency Mitigated Alternatives. The former is a reasonable common sense approach which balances the need for long term environmental protection and sound economic principles. Specifically the added bonding requirements and many of the specific points in the 6.3 AMA seem unrealistic, poorly thought out, and intended for prevent appropriate development of a needed resource. Thanks for your consideration.
Ron Waeckerlin

A5

2011-06-15 LymanDa.pdf

OFFICIAL RECORD

Dear Mr. Opper,

A1

I have been informed that the EIS for the Troy mine reclamation plan has been released for comment. I understand that the interval allowed for comment is 30 days and that interval began some time back. I have been following this issue for years and I would like to submit reasoned comments. There is simply not enough time to adequately appraise the plan as it now stands. I would like to see at least a 60 day extention of the comment period. 90 days would be better and fairer and would allow time for the information to reach all interested parties. Revett has operated for years with no valid reclamation plan. The public should have a good opportunity to review the plan that has finally been submitted. Thank you for any help you can give to extend this comment period.

Sincerely,

Dave Lyman
34 Beaver Peak Road
Heron, MT 59844

406-847-2388

RECEIVED
JUN 15 2011
DEQ
DIRECTOR'S OFFICE

2011-06-16 Ballard D.pdf

From: Dave Ballard
To: DEQ Troy Mine; TroyMineReclamation@fs.fed.us
Subject: Attn: Troy Mine Revised Reclamation Plan
Date: Thursday, June 16, 2011 10:53:18 PM

Bobbie Lacklen
Project Coordinator
Kootenai National Forest

Emily Corsi
Project Coordinator
Montana Department of Environmental Quality

RE: Troy Mine Revised Reclamation Plan

Dear Project Coordinators

I strongly favor the **Proposed Action Alternative**.

G2
A5

The Proposed Action Alternative strikes the best balance between minimizing adverse environmental impacts associated with a mine reclamation, and economic common sense. The additional measures included in the Agency-Mitigated Alternative plan for pipelines, soil replacement, and demolition debris disposal extend beyond the measures necessary to achieve the desired reclamation The resulting extreme increase in bonding requirements places an undue hardship on the ability of the mine to sustain jobs badly needed in this region of Montana. I urge you to choose the common sense balance in the **Proposed Action Alternative.**

Thank you for the opportunity to comment.

Sincerely,

Dave Ballard
5425 Billy Casper Dr.
Billings, MT 59106

2011-06-17 Hough P_FSPW .pdf

Friends of Scotchman Peaks Wilderness

www.ScotchmanPeaks.org

FSPW
PO Box 2061
Sandpoint, ID 83864

Board and Staff

Phil Hough
Chairman,
Exec Director
(208) 946-9127

Doug Ferrell
Vice-Chair
Montana Director
(406) 827-4341

Carol Jenkins
Vice-Chair
Idaho Director
(208) 265-9204

Sarah Lundstrum
Secretary
(406) 755-6304

Jacob Styer
Treasurer
(208)-265-7206

Neil Wimberley
East Bonner County Director
(208) 264-5379

Bill Martin
Board Member
(406) 295-5258

Will Valentine
Board member
(208) 255-1114

Sandy Compton
Program Coordinator
(208)-290-1281

Molly Kieran
Lincoln County Coordinator
(406) 293-2934

Emily Corsi
Montana Department of Environmental Quality
PO Box 200901
Helena, MT 59620-0901

Bobbie Lacklen
Kootenai National Forest
31374 U.S. Highway 2
Libby, MT 59923-3022

Via email: DEQTroyMine@mt.gov
TroyMineReclamation@fs.fed.us

Re: Troy Mine Revised Reclamation Plan, Draft EIS

Dear Ms. Corsi and Ms. Lacklen,

We appreciate all the work that has gone into preparing the draft EIS for the Troy Mine Revised Reclamation Plan. Undoubtedly the final plan will be an improvement over the existing one as a result of these efforts.

We believe that the proposals and efforts of the mine operators as well as the additional mitigation measures suggested by the US Forest Service, when combined in some meaningful measure, and when improved upon further, should be able to produce a much stronger reclamation plan.

A1 The details of the EIS are impressive in their volume, as one would expect in a draft plan so long in the development. We are requesting an extension in the public review and comment period, in order to provide adequate time for ourselves, as well as others, to review, evaluate and make suggestions for improvements. In the end, we think this will enhance the final product.

Please let us know as soon as possible if this will be granted, so that we can respond according to the time frame we will have available to us.

Sincerely,

Phil Hough

Philip Hough
Executive Director
Friends of Scotchman Peaks Wilderness

2011-06-21 Coryell L.pdf

June 21, 2011

RECEIVED

JUN 30 2011

DEQ
DIRECTOR'S OFFICE

Bobbie Lacklen
Project Coordinator
Kootenai National Forest
31374 US 2
Libby, MT 59923-3022

RE: Troy Mine Reclamation Draft Environmental Impact Statement

Greetings:

I support the Preferred Alternative, Agency-Mitigated Alternative for reclamation at the Troy Mine.

B1 I1 Debris from the Troy Mine should be sorted for recycling and disposed of at approved landfill or hazardous waste disposal sites. Waste and construction/demolition debris should not be buried on site. I think the asphalt surface on the access road should remain and be allowed to deteriorate naturally over time.

H5 B5 Tailings pond reclamation should be done according to Agency specifications with two(2) exceptions. I recommend reducing the woody debris placement to 10-15 tons/acre. A flexible range for tonnage is easier to achieve and 25 tons/acre is quite high unless the piece size is very large. Woody debris for reclamation in a forest environment has been a standard practice for decades. I have personally required it and seen it performed over 20 years ago in mine reclamation. Also, I think it would be beneficial to leave approximately 1 (one) acre of the tailings un-reclaimed in case there is renewed interest in using this material for the manufacture of building blocks.

E5 Surface tailings pipelines should not be allowed after mine closure and reclamation. Surface pipelines are too subject to vandalism and significant erosion could occur. Leaving exposed pipelines would be like leaving a time-bomb on site. If in-fact the Mine drainage water would not need treatment, then I would recommend a discharge permit for delivery into the closest channel deemed satisfactory to handle the water load. I think piping water for a long distance after reclamation is a fatal flaw in this reclamation plan.

Sincerely,

Larry Coryell

LARRY CORYELL
109 W. Kootenai Ave.
Troy, MT 59935
406-295-5143

CC: Emily Corsi, Project Coordinator
Montana DEQ
PO Box 200901
Helena, MT 59620-0901

2011-06-22 Ziegler S.pdf

Sam Ziegler
57490 153rd St
Good Thunder, mn 56037
507-524-3674

June 22, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

I am a consumer of products that come out of this mine. I am thankful your research shows that the product can be mined at this site and the WATER can be protected.

G3

The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7

Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water

E1 delivery pipeline. It is currently above ground for the vast majority of its route. It bas been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,
Sam Ziegler

Ps. Thank you for mining this out of MT vs over the ocean.

Sincerely,

Sam Ziegler

2011-06-23 Vincent P.pdf

Patti Jo Vincent
34 Paul Bunyan Lane
Libby, MT 59923
406.293.6137

June 23, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3

The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7

Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1

I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Patti Jo Vincent

2011-06-24 Byers G.pdf

George Byers
5901 W. Lehigh Ave. #12
Denver, CO 80235
720-201-7078

June 24, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To the Montana DEQ and Kootenai National Forest,

G3 I strongly support approval of the Troy Mine's revised and updated reclamation plans. Like all safe and well-run mining operationss, the Troy MIne provides safe, high-tech and well-paying jobs - in this case, nearly 200 of them. This makes the Troy Mine one of the significant job providers in northwestern Montana.

G1 The Troy Mine has been operating for 30 years, and can carry on its operations until closure and through reclamation in a manner that continues to provide jobs and economic benefit while protecting the environment.

E7 DEQ and the USFS have properly chosen the Agency-Mitigated Alternative as the preferred alternative. The thirty-years of responsible and safe mine operations have made a minimal (if any) impact to surface water and wildlife in the area.

E1 The responsible agencies have done a commendable and highly sufficient job of study on the Troy Mine's plans. However, the agencies should reconsider requiring the now-buried water pipeline to be removed as that would cause unneeded surface disturbance. A buried line is harder to monitor and repair if a leak were to occur, so a pipeline on the surface would have environmental benefits exceeding those of a buried pipeline.

Again, I support the preferred alternative with the tweak outlined above with respect to the pipeline.

Thanks for considering my comments,

Sincerely,

George Byers

2011-06-24 Freeman C.pdf

Cort Freeman
2950 bayard St.
Butte, MT 59701
406-782-1719

June 24, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

I'm a resident of Butte, Montana, and understand the value mining has provided to our area. Montana is a resource rich state, and although I know some are outspoken critics of any resoruce extration, I believe the Troy Mine can operate in an envrionmentally sound manner well into the future.

E1 I would like to give my support for the preferred alternative of the resource/reclamation plan as selected by the agencies. However, please give some consideration for not burying the pipeline.I remember when a rock came off the Beartrap hillside and crashed through the wooden flowline that served the Madison Dam Hydroelectric Powerplant near Ennis. That flowline was replaced with steel without any adverse consequences that I know of. It looks just fine.

E3 Maintenance personnel for PPL Montana travel the road daily and keep an eye on it so that timely repairs can be made. And this flowline is right above the Madision River. while burrying it would make the pipeline susceptable to all sorts of unforseen circumstances that could adversly affect the river if there were a blowout.

I1 I also wouldn't dig up the asphalt on the road. but I would have it repaired, maintained, and removed as part of the recalamation plan at the end of he Mine's life.

Thanks for the opportunity to comment. We need good-paying resource jobs in Montana.

Sincerely,

Sincerely,

Cort Freeman

2011-06-24 Johnson M.pdf

Martin Johnson
PO Box 624
whitehall, MT 59759
406-498-8480

June 24, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E7 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Martin Johnson

2011-06-24 Schlepp N.pdf

Nancy Schlepp
506 N Lamborn
Helena, MT 59601
406-442-2130

June 24, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

K1 I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

H1 H2 From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

Thank you for your consideration of my comments.

Respectfully,

Sincerely,

Nancy Schlepp

2011-06-24 Stang B.pdf

Barry Stang
1415 Winne
Helena, MT 59601
406-442-6600

June 24, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Barry Stang

Sincerely,

Barry Stang

2011-06-24 Williams E.pdf

Eric Williams
318 Plum Tree Court
Cheney, WA 99004
509-998-0223

June 24, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Montana DEQ and Kootenai National Forest:

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Sincerely yours,

Sincerely,

Eric Williams

2011-06-25 Harper H.pdf

Holly Harper
PO Box 536
Whitehall, MT 59759
406-287-3862

June 25, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

K1
H1
H2

From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

I am from Whitehall, Montana, which is an economically struggling community with the shining positive factor of the Golden Sunlight Mine, and I work for the Whitehall School District. We have a similar story here as in Troy. When mining operations cease or slow, the economic ripple is wide and sometimes the damages to the community are too large to repair. The economy right now is so bad in rural Montana that to threaten the longevity of a well-established mine is to threaten the longevity of the community itself. Please move rapidly to approve the revised reclamation plans for the Troy mine. Thank you for your consideration of my comments.

Respectfully,

Sincerely,

Holly Harper

2011-06-25 McCallS.pdf

Steve McCall
P.O. box 949
Boulder, MT 59632
4064313866

June 25, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Hello, my name is Steve McCall, I currently work for Golden Sunlight mine near WhiteHall MT. I have been in mining for over thirty years and have seen a lot of changes over the years. These changes have been for the better for everyone and everything involved, I started working at the MT. Tunnels mine in '91, worked there for 16 years and seen the birth of several fawns and calf Elk on reclaimed areas. I also worked at the Basin creek mine located between Basin and Remini and also seen large game animals and water foul flurish and raise there young. I truely love nature and have wittnessed wild life of several species multiply, I truely hope that the decision is in the best interest of ALL. thank you again in advanced, take care. Steve McCall P.O. box 949 Boulder, MT. 59632#406-431-3866

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road?

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

Steve McCall

2011-06-24 ShortenD.pdf

Dave Shorten
Box 135
Jefferson City, MT 59638
406-933-5285

June 25, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1 E1 You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5 The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

I belive in good jobs in Montana.The Troy Mine is a good job.I am now working in Alaska because mineing in montana is hard to do.I would love to work back in Montana and i work with a lot of other people who feel the same.
Please consider the Troy Mine for my sake and many others.
Thank You,
Dave Shorten

Sincerely,

Dave Shorten

2011-06-25 Ware T.pdf

Timothy Ware
2220 Carolina
Butte, MT 59701
4063602020

June 25, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Timothy Ware

2011-06-25 Yant R.pdf

ralph yant
1226 farrell st
butte, MT 59701
4063100172

June 25, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€“ cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€“ with some suggestions for necessary changes.

H2 First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected

H2 during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

I worked in the mining and construction for 45 years and it put food in our bodys and a roof over our heads not to mention the metals in our system for the manufacture of goods. i also visitied the min in 06 and it looked pretty nice up there., these folks do a real nice job keeping it all sooking spiffy.

Thank you for accepting and considering my comment.

Sincerely,
ralph yant

Sincerely,

ralph yant

2011-06-27 Blair F.pdf

Frank Blair
1511 S Stanley Rd
Spokane Valley, WA 99212-3228
509-533-2716

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ:

I have been in the mineral exploration industry since the summer of 1959 and have experiences all of the changes of the BLM,USFS, various NWState regs and input from local anti-mining groups. In many cases the need for the changes were valid and caused by previous mining ventures. However, in the last 10 years it seems the changes can be classified as \\\"If it aint broke don't fixit\\\". We in the industry, the state and federal regulators, and the environmental groups need to realize that there is a critical need to encourage the mineral industry andif we work together everyone will be happy. The form letter below is a good presentation of what this cooperation will do!

Please accept my recommendations to the proposed Troy reclamation revisions. I believe that requiring the company to tear down the existing pipeline that is in great shape to replace it with another one immediately upon decommissioning of the mine is not a reasonable requirement. An even more unreasonable request would be to require the company to bury the line.

E1

At a minimum, the document should contain a discussion about the actual condition of the pipeline, how long it is expected to last and a much stronger discussion of why the pipeline should be buried.

After decommissioning, the pipeline will be carrying nothing but clean water and could last another fifty years before it needs replaced. Perhaps you could allow the pipeline to stay above ground and require the Company to repair or replace the line if it becomes necessary or to provide data about the condition of the line periodically to the agencies. I hope that the final reclamation plan allows the existing pipeline to be used until it needs replaced and that it is replaced with another in the same place alongside the road for easy monitoring into the future.

Thank you for considering my common sense recommendations and thank you for approving the Troy mine reclamation plans so they can continue to employ the almost two

hundred men and women that depend on it.

Sincerely yours,

Sincerely,

Frank Blair

2011-06-27 Chapman C.pdf

Clint Chapman
832 Court St.
Elko, NV 89801
7757779399

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€“ cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€“ with some suggestions for necessary changes.

H2 First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected

H2 during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

Thank you for accepting and considering my comment.

Sincerely,

Sincerely,

Clint Chapman

2011-06-27 Compton M.pdf

Mark Compton
10 N. Post St.
Spokane, MT 99201
509-624-1158

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

As a former resident of Lincoln County, I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

Mark Compton

2011-06-27 Dillon J.pdf

Joseph Dillon
60 First Rd
Whitehall, MT 59759
406 287-5757

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

As a miner and native Montanan, I am fully aware of the impacts mining may have on the environment. I am also aware that mining can and should be done in an environmentally friendly and responsible way.

The mining industry is one of the few industries Montana has to offer. We all can't make a living selling insurance.

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

A5 The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

Joseph Dillon

2011-06-27 Ebisch J. pdf

James Ebisch
12108 N. Forker Rd.
Spokane, WA 99217
509-928-6098

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road? It is much easier to service an above-ground pipeline, especially as it will be bear-proof. Further, in the unlikely event of leaks, they will be apparent if the pipeline is exposed.

E2

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

James Ebisch

2011-06-27 Harrington T_JLDC.pdf

Jefferson Local Development Corporation
309 East Legion
Whitehall, MT 59759
406-287-3282

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

The Jefferson Local Development Corporation has been actively involved in mining operations in Jefferson County and fully understands the importance of reclamation. We appreciate you accepting comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative as you decide on the final determination.

I1 It appears leaving the asphalt in place on the main road leading to the mine site, instead of returning it to dirt, may offer less of an impact on future watershed issues and should be reviewed.

H2 Using the existing soil stockpiles that currently have regrowth would cause additional disturbance in the area that may not be required. It appears that adequate alternative soil is available that would meet guidelines as a a suitable growth medium and would accomplish the reclamation goals established for the site. This option seems to be a win-win and should be considered.

B1 It appears the onsite disposal of inert concrete foundations would not have a negative impact to the location and should be considered as an option.

E1 The disposition and plan for the water pipeline seems to require further investigation. It appears several good points are raised for retention of surface water lines that make sense and could make this a viable option with less ground disturbance.

Thank you for seeking comments and input on the proposed reclamation plan. The opportunity to look at alternative courses of action that make sense will ensure the best plan is adopted.

Sincerely yours,

Tom Harrington

Sincerely,

Jefferson Local Development Corporation

2011-06-27 Kaplan P. pdf

Paul Kaplan
780 Vista Blvd
Sparks, NV 89434
775.331.2375

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

Thanks for your consideration,

Sincerely,

Paul Kaplan

2011-06-27 Larsen K.pdf

keith larsen
877 n 8 w
riverton, Wy 82501
307-856-7557

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

At any rate, please expedite this matter as soon as possible. In my opinion, this process takes way to long and is designed to help people that want to shut down the mining industry. Mining is what made our country strong and I support it wholeheartedly.

Thank you for your time.

Very truly yours,

Sincerely,

keith larsen

2011-06-27 Laughery J. pdf

Jerry Laughery
11 Jefferson Loop
Jefferson City, MT 59638
406-933-5453

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Jerry Laughery

2011 - 06 - 27 Lewis T. pdf

Tom Lewis
PO Box 2053
Richland, Wa 99352

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Tom Lewis

2011 - 06 - 27 McClelland K.pdf

Kevin McClelland
922 N Veranda Dr
Coeur d\\\'Alene, ID 83814
2086601154

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ:

Please accept my recommendations to the proposed Troy reclamation revisions. I believe that requiring the company to tear down the existing pipeline that is in great shape to replace it with another one immediately upon decommissioning of the mine is not a reasonable requirement. An even more unreasonable request would be to require the company to bury the line.

E1 At a minimum, the document should contain a discussion about the actual condition of the pipeline, how long it is expected to last and a much stronger discussion of why the pipeline should be buried.

After decommissioning, the pipeline will be carrying nothing but clean water and could last another fifty years before it needs replaced. Perhaps you could allow the pipeline to stay above ground and require the Company to repair or replace the line if it becomes necessary or to provide data about the condition of the line periodically to the agencies. I hope that the final reclamation plan allows the existing pipeline to be used until it needs replaced and that it is replaced with another in the same place alongside the road for easy monitoring into the future.

Thank you for considering my common sense recommendations and thank you for approving the Troy mine reclamation plans so they can continue to employ the almost two hundred men and women that depend on it.

Sincerely yours,

Sincerely,

Kevin McClelland

2011-06-27-MendenhallS.pdf

Scott Mendenhall
214 Solomon Mtn. Road
Clancy, MT 59634
406-933-5831

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

As a former 4-term state legislator from a district that contains several hard-rock mines, I'm writing to provide comment on the Troy mine reclamation revision.

Specifically, I support the Agency-Mitigated Alternative, with some modifications, as the final alternative for reclamation. There are three areas of modification that I recommend:

1. Pipelines: I oppose the Agency mitigated alternative on this and support the Troy Mine reclamation plan.

E1 E2 There is little compelling reason (other than being old and purported susceptibility to vandalism) to not utilize the existing above-ground 8-inch lines. From an environmental standpoint, burying a new pipe causes greater surface impacts, especially when it would cross wetlands and drainages. This is also true for any needed maintenance or repairs of the pipeline, ie., it would require surface disturbance and associated increased sentimentation. The testing documentation and inspections show the existing lines to be in good shape and adequate to handle the load. It's also an unnecessary expense to require the company to remove the above ground lines and install an underground.

2. Soil Replacement and Amendment. I oppose the Agency mitigated alternative on this and support the Troy Mine reclamation plan.

K1 H1 The agency alternative requirement that soil salvaged in the tailing pond area be used for reclamation rather than borrow soil will increase the risk of sediment impacts to Lake Creek, and will increase the risk of impacts to western toad habitat.
It would also disturb the existing topsoil piles that are fully revegetated and have become valuable habitat for a variety wildlife. It makes no sense to disturb them.

H2 The agencies conclude that borrow soils would result in successful but slower vegetative recover. The speed of revegetation is not a requirement. They also agree that the proposed

action would meet guidelines and equirements. The Company is required to have a bond in place until the requirements are met and the risk of sediment to Lake Creek and disturbance of plants and animals in the area is not worth the risk.

H3 Also, the requirements for use of organic fertilizer, organic matter addition to soil, mulch, and placement of coarse woody debris on reclaimed sites is unwarranted. There is no discussion of the justification, benefits, rational or authority for requiring the addition of woody debris or mulch. More importantly, there is no discussion of if or why these requirements or the agency alternative would achieve Forest reclamation requirements.

3. Demolition Debris Disposal. I oppose the Agency Mitigated Alternative in this regard and suppport the Troy Mine Reclamation Plan.

B1 B2 On-site burial of non-hazardous demolition waste is a standard practice and the unnecessary cost of hauling these inert materials to an offsite disposal area where they would be similarly buried provides no environmental benefit. Either way, the result is the same, burial of the concrete and rebar, only the location is different. There is no documentation of any risk to water quality from burial of building and foundation materials. This is an unnecessary and unwarranted stipulation with no identified, quantifiable, or significant benefit.

Thank you for the opportunity to comment. I look forward to your response.

Sincerely,

Sincerely,

Scott Mendenhall

2011-06-27 Mullaney M.pdf

Michael Mullaney
93 Vandolah Road
Three Forks, MT 59752
406-285-4970

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Hello:

Thank you for allowing me to comment on the proposed revisions to the Troy reclamation plans. I believe that the DEQ's proposed alternative is the best action to take, though I think there needs to be some minor tweaks made before the final action is taken.

E7 The Troy Mine has a long record of water monitoring and the agency seems to also recognize this by not requiring post closure mechanical water treatment, which I fully support. I also understand that the agency wants the reclamation plan to mitigate as many impacts as they can upon decommissioning of the mine, but there seems to be some contradictions in the proposed action plan.

K1 H2 If we truly want to create wildlife habitat and soil stability at the same time, why are we removing the topsoil berm that is already providing awesome habitat for the western toad? I understand that your analysis showed that it may take a bit longer to achieve your desired ends, but how much longer? The trees and shrubs that are currently surrounding the site are growing just fine in the same soil that would be used instead of the topsoil. I understand that you would want to use the topsoil under other circumstances, but because the Western toad uses the berm I believe there should be a variance made to allow for the borrow to be used instead of the previously stripped topsoil to protect the toad's habitat.

E1 E2 Another glaring contradiction is with burying the pipeline that will need to be monitored for decades according to the EIS. If the existing pipeline that has been there for thirty years needs to be removed after another ten years of use, then are you anticipating removing the pipeline every 40 years or so by digging it back up and burying it again? It makes much more sense to require the Company to replace the pipeline if and when necessary, but leave it above ground next to the road for ease of monitoring and accessing the line for any necessary repair or replacement.

Thank you for considering my comments.

Respectfully,

Sincerely,

Michael Mullaney

2011-06-27 Nelson P.pdf

Patricia Nelson
2379 Gateway Oaks Dr., Suite 200
Sacramento, CA 95833
916-679-8747

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,
Patricia L. Nelson, R.E.A.

Sincerely,

Patricia Nelson

2011-06-27 Rasmussen J. pdf

James Rasmussen
105 West Kanab Creek Drive
Kanab, UT 84741
435-644-8208

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

James Rasmussen

2011-06-27 Stevenson T.pdf

Tracy Stevenson
8263 Pine Springs Cove
Sandy, UT 84093

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

Thank you for allowing me to comment on the Troy Mine Draft EIS. I am a long term shareholder of Revett Minerals. I support this proposed mine because it will be state of the art technically, it will comply fully with all Federal and State permit requirements and because the economic development will benefit the local community, the State of Monana and the shareholders of Revett Mnerals.

E7 I belive the results of the envrionmental studies clearly indicate thatte project will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,

Sincerely,

Tracy Stevenson

2011-06-27 Stevers G.pdf

Gail Stevers
15811 W. Willynwood Ln
Nine Mile Falls, WA 99026
509-466-5709

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Hello:

Thank you for allowing me to comment on the proposed revisions to the Troy reclamation plans. I believe that the DEQ's proposed alternative is the best action to take, though I think there needs to be some minor tweaks made before the final action is taken.

E7 The Troy Mine has a long record of water monitoring and the agency seems to also recognize this by not requiring post closure mechanical water treatment, which I fully support. I also understand that the agency wants the reclamation plan to mitigate as many impacts as they can upon decommissioning of the mine, but there seems to be some contradictions in the proposed action plan.

K1 H2 If we truly want to create wildlife habitat and soil stability at the same time, why are we removing the topsoil berm that is already providing awesome habitat for the western toad? I understand that your analysis showed that it may take a bit longer to achieve your desired ends, but how much longer? The trees and shrubs that are currently surrounding the site are growing just fine in the same soil that would be used instead of the topsoil. I understand that you would want to use the topsoil under other circumstances, but because the Western toad uses the berm I believe there should be a variance made to allow for the borrow to be used instead of the previously stripped topsoil to protect the toad's habitat.

E1 E2 Another glaring contradiction is with burying the pipeline that will need to be monitored for decades according to the EIS. If the existing pipeline that has been there for thirty years needs to be removed after another ten years of use, then are you anticipating removing the pipeline every 40 years or so by digging it back up and burying it again? It makes much more sense to require the Company to replace the pipeline if and when necessary, but leave it above ground next to the road for ease of monitoring and accessing the line for any necessary repair or replacement.

Thank you for considering my comments.

Respectfully,

Sincerely,

Gail Stevers

2011-06-27 Viegut S.pdf

Scott Viegut
PO Box 9
Hot Springs, MT 59845
4065446401

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

Scott Viegut

2011-06-27 Walt T.pdf

Taylor Walt
P.O. Box 62
Clayton, ID 83227
208-838-3576

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully, Maintenance Supt. Thompson Creek Mine. Clayton, Idaho

Sincerely,

Taylor Walt

2011-06-27 Watson Da.pdf

David Watson
3037 Rohrer Drive
Lafayette, CA 94549

June 27, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS. I am a mining engineer with over 40 years of experience. I believe our Nation needs raw materials to build a strong economy and to provide JOBS.

The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

G3

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E7

I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has

E1

E1 been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

David Watson

2011-06-27 Watson Do.pdf
(page 1)

Troy Mine Revised Reclamation Plan
Draft Environmental Impact Statement

If you would like to provide written comments, you may use this form today and drop it in the comment box at the registration table. You can also take this form home and mail it later to either Emily Corsi (DEQ) or Bobbie Lacklen (USDA Forest Service) at the addresses below. Comments may be faxed to (406) 283-7709 (KNF) or 406-444-4386 (DEQ Director's Office), or hand-delivered to the KNF Supervisor's Office and DEQ Director's Office between the hours of 8:00 a.m. and 4:30 p.m. Written comments must be postmarked by the Postal Service, e-mailed, faxed, or otherwise submitted by 11:59 pm on July 5, 2011.

Bobbie Lacklen
Kootenai National Forest
31374 U.S. Highway 2
Libby, MT 59923-3022
TroyMineReclamation@fs.fed.us

Emily Corsi
Montana Department of Environmental Qual
P.O. Box 200901
Helena, MT 59620-0901
DEQTroyMine@mt.gov

RECEIVED
JUN 27 2011
DEQ
DIRECTOR'S OFFICE

Name/Organization: DOUGLAS WATSON

Address: PO BOX 1133, TROY, MT 59935-1133

E-mail: doug@troyland.net **Phone:**

Comments: Please see letter dated June 24, 2011 attached. DW

2011_06-27 Watson Do.pdf
(page 2)

June 24, 2011

Emily Corsi
Montana DEQ
PO Box 200901
Helena, MT 59620-0901

Bobbie Lacklen
Kootenai National Forest
31374 US Highway 2
Libby, MT 59923-3022

Ms Corsi and Ms Lacklen,

I attended the June 6 public meeting at Troy High School regarding the Troy Mine Revised Reclamation Plan. I reviewed the three options which were posted on the boards in the back of the meeting room and heard one of you review those proposals during the outset of the meeting.

While I understand your interest in assuring that the reclamation has minimal impact to the environment, I must agree with several of the speakers including our State Senator – Mr. Chas Vincent.

H2 H1 C4

First, unless you have studies to the contrary, you should permit the Troy Mine ("Mine") to follow their plan to cover the reclaimed areas with pit-run and other immediately available products which were demonstrated to foster healthy trees and vegetation. If you have evidence that this study was flawed or if you possess other studies on this type of recovered area that demonstrate that plants cannot grow as reported, please make that evidence available to the public before you deny the Mine's request. The agency alternative in the DEIS indicates that that top soil salvaged in the tailing pond area be used for reclamation rather than borrow soil. I am concerned that use of the toe pond salvaged top soil will result with the following: 1) it would more than likely increase long term risk of sediment impacts to Lake Creek, 2) it will impact documented western toad habitat and 3) it will result in the same reclamation success outcome (return of similar forest vegetation to that before the Mine) as using the borrow soil. According to Mine Representatives the existing topsoil piles are fully revegetated with a thick growth of grass, alders, brush and coniferous trees. The potential impacts to neighbors from dust during soil replacement is higher with the fine grained soils than with the borrow soil. I concur with the Troy Mine request that the agencies to reconsider their decision to require use of the salvaged soil.

E2 Next, there is no need to bury the existing water/slurry lines. They are not an eyesore to the local population and pose no health and safety risk if left alone. In fact, it seems apparent to me that the disturbance to the existing road when digging deep ditches and burying your proposed new tailing line will have a far better chance of causing soil sediment to enter the creek than there would be if left alone. Further, it is my

E3 understanding that the Troy mine waters during the 11 year temporary shut-down quickly reached drinking quality standards without any treatment. The risk of future contamination from ground disturbance to bury a line seems unnecessary when the existing lines are carrying waters meeting groundwater standards." Again, if you have evidence that shows this to be untrue in a location like this with similar ore and waste byproducts, please present this evidence to the public before forcing your changes upon the Mine.

B1 I have no concern about the Mine leaving the old concrete foundations in place upon termination of activities. If they create an unacceptable eyesore (and I do not agree that they will) simply require them to be covered with pit run – borrow material and planted. Digging them up and re-burying the concrete in another location accomplishes nothing of value.

I1 Finally, the requirement to completely remove the existing paved road is also of no real value. Currently there are a number of paved road remnants in the area, mostly from former logging activities. The pavement is easier to ride upon than the surface of many local gravel roads. Erosion appears to be less than I see along the edges of most dirt or gravel roads. The process of removing the road is simply a waste of funds. If the ultimate plan is to close the roadway to motorized public use, that plan should be articulated to the public now.

We can all agree that mining practices have changed dramatically over the past fifty years. Some of this positive change was the result of increased regulations; the other key part is due to companies taking a stand for environmental stewardship.

Please seriously consider my thoughts and those of other area citizens before imposing additional unnecessary requirements upon the Troy Mine which has done a very good job of taking care of the property during its operations over the past few years.

Sincerely,

Douglas E. Watson
PO Box 1133
Troy, MT 59935-1133
doug@troyland.net

2011-06-27 Welsh J. pdf

From: John Welsh
To: DEQ Troy Mine; TroyMineReclamation@fs.fed.us
Subject: Attn: Troy Mine Revised Reclamation Plan
Date: Monday, June 27, 2011 12:50:44 PM

Ladies, Gentlemen, and Others:
We think mineral production is good. We pay taxes. We suggest you approve the Revised Reclamation Plan for the Troy Mine and let us continue to be productive contributors to our great country. Perhaps you should encourage others to mine so that our great country does not become the property of foreign countries who hold our debt.
Regards,
John D. Welsh, P.E.

2011-06-28 Axe D. pdf

david axe
6093 Kootenai River Rd.
Libby, MT 59923
4062939203

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please accept my following comments for the proposed reclamation plan revisions at the Troy mine. I fully support the mine and their desire to continue operating under the Company Proposed Action.

E7 K1 With thirty years of documented analysis and several studies completed during the impoundments history showing no environmental impacts to water or wildlife this plan should be approved.

D1 We as a society have very few examples where we actually extract mineral resources from deposits such as these that are so benign and have no long lasting negative impacts to the environment. I have seen firsthand the impoundment and the abundance of existing wildlife that cohabitates it. The fisheries have had zero negative impacts from this impoundment and the attenuation study done while the mine was dormant clearly illustrates what to expect when this operation is decommissioned.

G3 Between now and then, allowing this permit to move forward will allow for the mine to continue operating in a responsible manner. The contribution of millions of dollars every month into the local and state economy will continue and the 190 employees and their families will have continued job security.
The eviromental issue are not a problem. The problem is these jobs are needed in this community. And speedy approval is needed. Not like the red tape the Libby mine is going through. Again this community needs this mine and the libby creek mine as well.

I urge the agencies to approve this plan as soon as possible and thank you for allowing me to comment.

Sincerely,

Sincerely,

david axe

2011-06-28 Beito A.pdf

Arlyne M. Beito
408 Valley of the Moon Rd
Troy, MT 59935
406-295-4170

June 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Thank you for accepting the following comments on the revised reclamation plan for the Troy mine. I would like to focus my comments on the DEIS to the pipeline and impoundment mitigation recommendations. In general, I support the reclamation plan but there are areas that don't make a great deal of sense to me and that I find contradictory or unnecessary.

E1 Why would you want to dig up and disturb more ground if you were going to decommission the existing water pipeline and replace it with a new one for adit discharges? Aren't we trying to minimize TMDL impacts in the watershed? Why not just make safety precautions or improvements to the existing pipeline that has more than adequate capacity and seems to be working just fine?

If you did require replacement, why would you want it buried when it would be much more difficult to monitor in the future? Why would you want to disturb ground to bury it originally and perhaps again to repair or replace the line when it is completely unnecessary?

K1 Wouldn't using the toe pond stockpiled top soils for reclamation impact the western toad that currently has great habitat there now? Why not just use the coarse borrow material east of the impoundment instead? The DIES indicates that this could be just as successful in achieving reclamation goals and criteria. Are the wood based organic amendments that

H3 add 1,100 lbs of nitrogen per acre for the mill and impoundment really necessary? What is mycorrhizal fungi and why is it needed for reclamation at the mill? Why are the agencies requiring organic versus chemical fertilizer for reclamation in general?

B1 When reclamation occurs, the non-hazardous material should be relocated back into the mine and then the adit should be sealed shut. Lastly, there is no reason to tear out the

I1 access road and other surrounding roads. Just leave them alone and it will be just fine.

Thank you for listening and I look forward to seeing the final reclamation plan include

some further modifications to address some of the areas I have outlined above.

Respectfully,

Sincerely,

Arlyne M. Beito

2011-06-28 Brothers J.pdf

Josh Brothers
35984 u.s. hwy 2
libby, MT 59923
4062915124

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,

Sincerely,

Josh Brothers

2011-06-28 Brown D.pdf

Doris Brown
721 Flower Creek Road
Libby, MT 59923
(406)293-4663

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,

Sincerely,

Doris Brown

2011-06-28 Cohan W.pdf

William Cohan
2293 Broadway
Grand JUnction, CO 81507
970 254 0128

June 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me. In addtion, what is the potential for waterquality distubance from an inert material such as concrete? Have either the KNF or DEQ any valid and documented scientific evidence at their disposal that establishes tyhe potential of adverse water quality impacts from buried reinforced concrete. If so they are obligated to divulge that information to the public. Burying demolished reiforced concrete material on site has long been a recognized and approved method for site reclamation at many projects other than mining related.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

Thank you for your time.

Very truly yours, W T Cohan, P.Eng.

Sincerely,

William Cohan

2011 - 06 - 28 Endicott Sand R. pdf

From: steve endicott
To: TroyMineReclamation@fs.fed.us
Subject: Mine Reclamation
Date: 06/28/2011 05:00 PM

We tried in vain to give our comments through Firefox on the web. So, we will send them by email.
We are now retired here. Steve grew up in Libby. We are happy that the Troy Mine is in operation. We have not worked at the mine or had any relatives who work or worked at the mine. We believe that some of the plans for reclamation are excessive and unnecessary and would jeopardize the future of the mine.
Thank you, Steve and Ruth Ann Endicott

G2

2011-06-28 Facer D. pdf

Dennis Facer
367 Sunny Meadow Court
Afton,, WY 83110
208.761.3149

June 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Thank you for accepting the following comments on the revised reclamation plan for the Troy mine.

I have been involved for 35 years with mining in SE Idaho where we mine phosphate for fertilizer production. I am very familiar with reclamation technics.

I would like to focus my comments on the DEIS to the pipeline and impoundment mitigation recommendations. In general, I support the reclamation plan but there are areas that don't make a great deal of sense to me and that I find contradictory or unnecessary.

E1 Why would you want to dig up and disturb more ground if you were going to decommission the existing water pipeline and replace it with a new one for adit discharges? Aren't we trying to minimize TMDL impacts in the watershed? Why not just make safety precautions or improvements to the existing pipeline that has more than adequate capacity and seems to be working just fine?

If you did require replacement, why would you want it buried when it would be much more difficult to monitor in the future? Why would you want to disturb ground to bury it originally and perhaps again to repair or replace the line when it is completely unnecessary?

K1 Wouldn't using the toe pond stockpiled top soils for reclamation impact the western toad that currently has great habitat there now? Why not just use the coarse borrow material east of the impoundment instead? The DIES indicates that this could be just as successful in achieving reclamation goals and criteria.

H3 Wood based organic amendments that add 1,100 lbs of nitrogen per acre for the mill is excessive and not necessary for successful reclamation. I have seen numerous examples of great reclamation without this excessive application of wood organics.

H3 I disagree with the agencies requiring organic versus chemical fertilizer for reclamation. Again, i work in the mining industry and have utilized \\\"regular\\\" chemical fertilizer for successful reclamation. This is my business, and regular fertilizers are very save and much for effective when applied properly. The soils can be tested and the proper amounts of N,P,K and other trace nutrients applied.

Thank you for listening and I look forward to seeing the final reclamation plan include some further modifications to address some of the areas I have outlined above.

Respectfully,
Dennis Facer
Director Mine Development
J.R. Simplot Company.

Sincerely,

Dennis Facer

2011-06-28 Hill L.pdf

Louis Hill
1315 Red Fox Road
Arden Hills, MN 55112
651-717-4074

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Montana DEQ and Kootenai National Forest:

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination. I am making these suggestions to keep the costs down.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Sincerely yours,

Sincerely,

Louis Hill

2011-06-28 LangdykeS.pdf

Steven Langedyke
1218 Bailey Cr Cir
Soda Springs, ID 83276

June 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Steven Langedyke

2011-06-28 MastelT-JLDC.pdf

From: Mastel, Tara
To: DEQ Troy Mine; TroyMineReclamation@fs.fed.us
Subject: Attn: Troy Mine Revised Reclamation Plan
Date: Tuesday, June 28, 2011 9:31:59 AM

Hello,

I support the development of the Troy mine. The draft EIS shows a responsible plan for reclamation. The jobs are sorely needed in the area and the state would benefit as well.

Thank you for considering my comment.

Tara Mastel
Jefferson Local Development Corporation
P.O. Box 1079
Whitehall MT, 59759
406.287.3282 Office
406.461.7843 Cell

2011-06-28 McCanse R.pdf

Roberta McCanse
270 Indian Pipe Rd
Libby, MT 59923
8168684172

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please accept my following comments for the proposed reclamation plan revisions at the Troy mine. As someone who lives surrounded by Forest Service land these issues are of particular concern to me.

With reference to the Executive Summary, Proposed Action â€" ES.6.2.1 Water Management

E8 I do not see any estimate of how long it will take to remediate nitrogen and copper in decant ponds to a level that is compatible with, and does not foul, local streams and lakes.

E10 Further, how do we know that runoff from the toe ponds is safe for irrigation? If nitrogen is in this water so is copper.

E8 Why is there no plan for reclaiming nitrogen and copper from this discharge water rather than simply discharging it into ponds that no matter how well constructed will still pose a threat to surface and ground water supplies in the event of the extreme weather conditions that climate change is precipitating.

With reference to Executive Summary, Proposed Action -ES.6.2.2 Reclamation -

H2 J2 E10 Borrow sites, if they must be used, must be identified in order to minimize the transport of noxious weeds to areas of revegetation. Sources of irrigation water must also be identified and tested.

H3 J2 Why must such poor soils be used? Chemical fertilizers endanger the environment and only benefit those who profit from their manufacture. Certainly organic amendments are to be preferred. More attention should be paid to continued efforts to control noxious weeds. These will continue to flourish regardless of the purity of the seeds used for revegetation.

J2 Reclamation should include the replanting of native trees as well as grasses. Second growth that develops naturally is usually of poorer quality.

B1 With regard to infrastructure, all of the building materials, asphalt, and all desolation materials, should be removed completely from the site. To leave them buried simply invites future exposure and disrespects the natural beauty of the area. Roads left in place pose environmental hazzards as do the many people would not hesitate to use motorized vehicles to despoil this area.

With reference to Executive Summary, ES.6.3 Agency-Mitigated Alternative â€"

I heartily support the alternatives proposed here, especially regarding adit closure, long term monitoring, and the installation of automatic leak detection and emergency overflow systems. This is our water that is at risk. Protections proposed cannot be considered extreme.

With reference to Executive Summary, ES.6.3.2 Reclamation

Again, organic amendments are much to be preferred over chemical fertilizer. Professional monitoring of tailings should be a moral given. Reclamation bond should be increased to cover circumstances conveniently not considered by Troy Mining.

E6 The use of non-mineralized rock for the construction of water channels appears to be another needed environmental safeguard.

I3 With regard to infrastructure, certainly the reuse of asphalt as a component of gravel for our roads is to be encouraged. Again, per my statement above, to leave construction trash in place insults the natural beauty of our environment.

With reference to Executive Summary, ES. 7 Environmental Consequences

It is obvious that the Agency-Mitigated Alternative is more protective of our environment. I therefore support all safeguards they propose, especially the professional monitoring for extended periods of time and the construction of new pipelines. Certainly roads that are unneeded by the Forest Services should be properly removed. Hunters and other who wish to enjoy the area would still be allowed to do this on foot.

Sincerely,

Roberta McCanse

2011-06-28 Morris D.pdf

Dwight Morris
102 Schoolhouse Lk Rd
Troy, MT 59935
406-295-7221

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Hello:

Thank you for allowing me to comment on the proposed revisions to the Troy reclamation plans. I believe that the DEQ's proposed alternative is the best action to take, though I think there needs to be some minor tweaks made before the final action is taken.

E7 The Troy Mine has a long record of water monitoring and the agency seems to also recognize this by not requiring post closure mechanical water treatment, which I fully support. I also understand that the agency wants the reclamation plan to mitigate as many impacts as they can upon decommissioning of the mine, but there seems to be some contradictions in the proposed action plan.

K1 H2 If we truly want to create wildlife habitat and soil stability at the same time, why are we removing the topsoil berm that is already providing awesome habitat for the western toad? I understand that your analysis showed that it may take a bit longer to achieve your desired ends, but how much longer? The trees and shrubs that are currently surrounding the site are growing just fine in the same soil that would be used instead of the topsoil. I understand that you would want to use the topsoil under other circumstances, but because the Western toad uses the berm I believe there should be a variance made to allow for the borrow to be used instead of the previously stripped topsoil to protect the toad's habitat.

E1 E2 Another glaring contradiction is with burying the pipeline that will need to be monitored for decades according to the EIS. If the existing pipeline that has been there for thirty years needs to be removed after another ten years of use, then are you anticipating removing the pipeline every 40 years or so by digging it back up and burying it again? It makes much more sense to require the Company to replace the pipeline if and when necessary, but leave it above ground next to the road for ease of monitoring and accessing the line for any necessary repair or replacement.

Thank you for considering my comments.

Respectfully,

Sincerely,

Dwight Morris

2011-06-28 Nicholl B.pdf

Bert Nicholl
P.O. Box 382
Alberton., MT 59820
406-531-6832

June 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

K1 I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

H1 H2 From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

I am employed by Western States Equipment Company. I support mining and drilling in our state. We need more jobs in Montana.
Thank you for your consideration of my comments.

Respectfully,

Sincerely,

Bert Nicholl

2011-06-28 Pauley L. pdf

Lenny Pauley
304 Spencer Rd.
Libby, MT 59923
406-283-1448

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Thank you for accepting the following comments on the revised reclamation plan for the Troy mine. I would like to focus my comments on the DEIS to the pipeline and impoundment mitigation recommendations. In general, I support the reclamation plan but there are areas that don't make a great deal of sense to me and that I find contradictory or unnecessary.

G1 I work at a Local hardware store that provides services for the Troy Mine, if the mine closes for any length of time could cause the lose of jobs in our business due to the lose of a 195 mining jobs. It works fine now why mess with it leave alone.

E1 Why would you want to dig up and disturb more ground if you were going to decommission the existing water pipeline and replace it with a new one for adit discharges? Aren't we trying to minimize TMDL impacts in the watershed? Why not just make safety precautions or improvements to the existing pipeline that has more than adequate capacity and seems to be working just fine?

If you did require replacement, why would you want it bouried when it would be much more difficult to monitor in the future? Why would you want to disturb ground to bury it originally and perhaps again to repair or replace the line when it is completely unnecessary?

K1 H3 Wouldn't using the toe pond stockpiled top soils for reclamation impact the western toad that currently has great habitat there now? Why not just use the coarse borrow material east of the impoundment instead? The DIES indicates that this could be just as successful in achieving reclamation goals and criteria. Are the wood based organic amendments that add 1,100 lbs of nitrogen per acre for the mill and impoundment really necessary? What is mycorrhizal fungi and why is it needed for reclamation at the mill? Why are the agencies requiring organic versus chemical fertilizer for reclamation in general?

Thank you for listening and I look forward to seeing the final reclamation plan include

some further modifications to address some of the areas I have outlined above.

Respectfully,

Sincerely,

Lenny Pauley

2011-06-28 PerryC.pdf

Carol Perry
777 hwy 237
Afton, Wy 83110
208-873-3750

June 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

K1 I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

H1 H2 From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

Thank you for your consideration of my comments.

Respectfully,

Sincerely,

Carol Perry

2011-06-28 Pickering C.pdf

CHARLES PICKERING
488 TERRACE VIEW
LIBBY, MT 59923
406-293-5594

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3

The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€“ cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€“ with some suggestions for necessary changes.

H2

First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected

H2 during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

G1 This mine has given valuable employment to an area that needs it and has not caused any harm to the forest, air, animals or vegetation around or streams if the powers that be would check. We NEED this source of employment for our area!!!

Thank you for accepting and considering my comment.

Sincerely,
Charles and Jane Pickering

Sincerely,

CHARLES PICKERING

2011-06-28 RossN.pdf

Nicholas Ross
475 E. Greg St., Ste. 119
Sparks, NV 89431
(775) 200-9878

June 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Nicholas Ross

2011-06-28 Selle B.pdf

Brady Selle
235 Hummingbird Ln
Troy, MT 59935
406-295-4229

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

I came to Troy 9 years ago as the Superintendent of Schools at a time when the mine was not in operation. Since then I have seen the economic impact in our area. I can not imagine what this community would have been like without the Troy Mine. They have been wonderful partners in many aspects of our community.

More importantly, I have spent all 9 years living and playing beside Lake Creek. The creek is a wonderful drainage that is clean, clear and a great fishery. Who would ever know that a mine existed toward the beginning of creek. I believe that the mine personnel have been great stewards of the land and water.

Due to this confidence and past history, I feel that the mine workers and managment are very capable of reclaiming the mine in a practical and effective manner.

B1 The plan containes some very sound and necessary components. I believe that it is totally necessary to cap or cover all of the tailing areas as well as demolishing all buildings. It does seem to go a bit to far in requiring the mine to tear up all of the asphalt and cement and haul it away. If you are going to bury it somewhere, why not on the mine site where no one will even know that it existed.

I know that the mine has done well in the past and I have full confidence in their ability to clean up after themselves when they are done.

Thank you for accepting and considering my comment.
Sincerely,

Sincerely,

Brady Selle

2011-06-28 SipolsR.pdf

Reinis Sipols
7 Wesley Drive
West Milford, NJ 07480
914 282 1450

June 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€" one half of which are purchased in Montana â€" are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€" and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

Reinis Sipols

2011-06-28 stoorJ.pdf

Jim Stoor
3878 Wayan Loop
Wayan, ID 83285
208-574-2574

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:
My name is Jim Stoor and I am a Miner in the state of Idaho. I have been in mining for 19 years now and have seen a huge change in how mining operations handle their mining practices and their reclamation. I can say that I have worked in the Phosphate patches of Idaho for most of my mining career and have seen many changes. I see the mining industry working together to return the areas in which they mine back to its original state or as close to as humanly possible. When I started out in mining this was not always the case, but today I see that happening with most of the mines in this area and the mines in Nevada where I worked. As I have read the impact statements and the proposal that have been offered by all parties I can truly say that each side has tried to work with each other in order to protect the environment. The issue that I take is that the Troy Mine is probably being asked to take steps that are not based on fact but on someones own determination.

A5 Troy Mine has had to raise their bonds for reclamation that probably well exceeds the cost but shows good faith in the practices that they believe in. The following is part of a form letter that is being summitted, but that I totally would put my support behind. I know that I am not a local person, but when it comes to mining it affects us all whether you work in Montana, Idaho or wherever. Allow the history of the mine to dictate the future mining and reclamation practices.

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state.

For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife.

E7 Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E1
E2

Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

Thank you for your time,

Jim Stoor
Mill Relief Coordinator
JR Simplot
Smoky Canyon Mine

Sincerely,

Jim Stoor

2011-06-28 StrykerC.pdf

Chester Stryker
80 Ring Loop RD.,
Troy, MT 59935
406-295-9511

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment. Keep this mine and get the other mines OPEN !!!

Sincerely,
Chester Stryker

Sincerely,

Chester Stryker

2011-06-28 Weisenbach J. pdf

Jon Weisenbach
351 Rustic Ave.
Libby, MT 59923-2926
4062932193

June 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road?

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

Jon Weisenbach

2011-06-29 Ahearnk.pdf

From: Ken Ahearn
To: DEQ Troy Mine; TroyMineReclamation@fs.fed.us
Subject: Attn: Troy Mine Revised Reclamation Plan
Date: Wednesday, June 29, 2011 9:27:09 AM

Ken Ahearn
416 Strand Ave
Missoula, MT 59801
406-207-3449

June 29, 2011

Dear Kootenai National Forest and Montana DEQ:

I have personally visited the mine site and have recreated in the area for the last 20 years. I fully appreciate the job being done by the people responsible for the operation of the Troy Mine and entrust them to understand what is best for this area. I have copied the following statement from the Mining Association website simply because I agree with their proposal. I strongly support mining in Montana and would like to see the most common sense approach implemented.

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Ken Ahearn

Ken Ahearn
Parts Supervisor
Western States Equipment-Missoula
406-721-4050
kenahearn@wseco.com

2011-06-29 Bowe L. pdf

Lori Bowe
6318 Kootenai River Road
Libby, MT 59923
(406) 293-7156

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Bobbie and Emily,

Thank you for your diligent role in the Draft Environmental Impact Statement for the Troy Mine Revised Reclamation Plan.

This project is incredibly important to the communities of Lincoln County and our state. The Troy Mine's wages, taxes, and consumption of local goods and services benefits our schools, as well as the local and state economy. I am pleased to see that all parties involved in the EIS are taking careful consideration of good stewardship practices that will ensure that the benefits of the mine do not outweigh the cost.

I have some suggestions reguarding the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I wish to address the pipelines, acess road, fill for the tailings area, and demolition debris disposal.

E2 A pipeline leak either above or below ground is undesireable; with careful monitoring to detect leaks, the existing above ground pipelines will mean faster leak detection and repair, easier access, and less disturbance than burying pipeline. If sensors could be installed in the above ground line, that would be wise. If the effectiveness of the decant ponds would be compromised by stormwater, burming the ponds is wise also.

I1 The access road to the mine could be beneficial to keep in place for facilitating any necessary repairs (not to mention it is a scenic drive for people who are interested in seeing the area).

B1 As long as the site is properly filled and revegetated, burying concrete, rebar, and other materials that will not cause toxic decomposition products on site will save fuel and landfill space with very minimal disturbance to the Kootenai National Forest.

I appreciate the time you have taken to consider my comments. I trust you will come up with a great solution!

Sincerely yours,

Sincerely,

Lori Bowe

2011-06-29 HammonsJ.pdf

Jim Hammons
PO Box 1030
Troy, MT 59935
406-295-5590

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ:

My name is Jim Hammons and I live in Troy. I have been a city councilman and Mayor here in Troy and I have seen firsthand the social and economic disasters that have happened to the Troy, Libby area due to the restrictions and litigation imposed on the natural resource based economy here in Lincoln County.

No one wants to see the environmental disaster of past mining in Montana. But we also don't want to put such stringent restrictions on mining and logging that we drive this companies out of the country to places where there are no environmental laws to protect the environment.

There has got to be middle ground. The pendulum is swinging too far to the side of the extremist and obstructionist.

Please accept my recommendations to the proposed Troy reclamation revisions. I believe that requiring the company to tear down the existing pipeline that is in great shape to replace it with another one immediately upon decommissioning of the mine is not a reasonable requirement. An even more unreasonable request would be to require the company to bury the line.

E1

At a minimum, the document should contain a discussion about the actual condition of the pipeline, how long it is expected to last and a much stronger discussion of why the pipeline should be buried.

After decommissioning, the pipeline will be carrying nothing but clean water and could last another fifty years before it needs replaced. Perhaps you could allow the pipeline to stay above ground and require the Company to repair or replace the line if it becomes necessary or to provide data about the condition of the line periodically to the agencies. I hope that the final reclamation plan allows the existing pipeline to be used until it needs replaced and that it is replaced with another in the same place alongside the road for easy

monitoring into the future.

Thank you for considering my common sense recommendations and thank you for approving the Troy mine reclamation plans so they can continue to employ the almost two hundred men and women that depend on it.

Sincerely yours,

Sincerely,

Jim Hammons

2011-06-29 HartungH.pdf

hank hartung
130 piney rd.
troy, MT 59935
406-291-4888

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,

Sincerely,

hank hartung

2011-06-29 Holcomb K. pdf

Karyn Holcomb
2323 Snowshoe Rd.
Libby, MT 59923
293-3318

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

Karyn Holcomb

2011-06-29 Matthews J.pdf

jay matthews
1130 Idaho ave
libby, MT 59923

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

I feel its time to get on with it, yes the mining industy, in the past has had a reputation of

\\\" rape and run \\\" when it comes to clean up and accountabilty. This mining group seems more than willing to do the right thing. The more time that is spent hand wringing and squinting accross the table at each other is just going to increase the cost. lets not jeopordise the few good jobs that remain in this county with needless costs. It's the same old song, people that need to make the dissision won't for fear of there job could is on the line.

Respectfully yours,
Jay D. Matthews

Sincerely,

jay matthews

2011-06-29 moore B. pdf

Bob Moore
1402 Nevada Ave
Libby, MT 59923
406-293-7380

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

K1 I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

H1 H2 From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead. Remember the old adage: \\\"If it aint broke don't try and fix it\\\". You have to use common sense and not just say \\\" Rules are Rules.

Respectfully,

Sincerely,

Bob Moore

2011-06-29 Watson F. pdf

Fred Watson
7804 Millicent Way
Shreveport, LA 71105

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state.

For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife.

E7 K2 Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E1 E2 Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

Thank you for your time,

Sincerely,

Fred Watson

2011-06-29 WilkinsB.pdf

brian wilkins
221 mahoney rd
libby, MT 59923
4062935929

June 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Thank you for accepting the following comments on the revised reclamation plan for the Troy mine. I would like to focus my comments on the DEIS to the pipeline and impoundment mitigation recommendations. In general, I support the reclamation plan but there are areas that don't make a great deal of sense to me and that I find contradictory or unnecessary.

E1 Why would you want to dig up and disturb more ground if you were going to decommission the existing water pipeline and replace it with a new one for adit discharges? Aren't we trying to mimimize TMDL impacts in the watershed? Why not just make safety precautions or improvements to the existing pipeline that has more than adequate capacity and seems to be working just fine?

If you did require replacement, why would you want it buried when it would be much more difficult to monitor in the future? Why would you want to disturb ground to bury it originally and perhaps again to repair or replace the line when it is completely unnecessary?

K1 H3 Wouldn't using the toe pond stockpiled top soils for reclamation impact the western toad that currently has great habitat there now? Why not just use the coarse borrow material east of the impoundment instead? The DIES indicates that this could be just as successful in achieving reclamation goals and criteria. Are the wood based organic amendments that add 1,100 lbs of nitrogen per acre for the mill and impoundment really necessary? What is mycorrhizal fungi and why is it needed for reclamation at the mill? Why are the agencies requiring organic versus chemical fertilizer for reclamation in general?

Thank you for listening and I look forward to seeing the final reclamation plan include some further modifications to address some of the areas I have outlined above.

Respectfully,

Sincerely,

brian wilkins

2011-06-30 Bowman L. pdf

Larry Bowman
12242 Bull Lake Road
Troy, MT 59935
(406) 295-5122

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

G1 To whom it may concern. I support the Troy Mine. It has been the best employer in Lincoln county for the last 30+ years. It has proven over and over again to be environmentally sound with no impact on the water quality or wildlife. The benefits to the comunities in northwest Montana are huge. I believe that the citizens of northwest Montana are tired of all the enviromentalist lawsuits that have been filed to harrass and slow down this project and others in Montana. The economy demands that we have these jobs and the benefits to help the people who are trying to make a living here, not moving in to live in their summer homes. Thank-you.

Sincerely,

Larry Bowman

2011-06-30 Briggs M. pdf

Mark Briggs
81 Daly RD
Whitehall, MT 59759
4062872027

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Montana DEQ and Kootenai National Forest:

I work at Golden Sunlight and I appriciate you taking the time to read this letter.

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Sincerely yours,

Sincerely,

Mark Briggs

2011-06-30 Chewing B. pdf

Bud Chewning
193 Farm to Market Road
Libby, MT 59923
406-293-3601

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Bud Chewning

2011-06-30 Clements G. pdf

George Clements
PO Box 813
Whitehall, MT 59759
406-287-3906

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Hello:

Thank you for allowing me to comment on the proposed revisions to the Troy reclamation plans. I believe that the DEQ's proposed alternative is the best action to take, though I think there needs to be some minor tweaks made before the final action is taken.

E7 The Troy Mine has a long record of water monitoring and the agency seems to also recognize this by not requiring post closure mechanical water treatment, which I fully support. I also understand that the agency wants the reclamation plan to mitigate as many impacts as they can upon decommissioning of the mine, but there seems to be some contradictions in the proposed action plan.

K1 H2 If we truly want to create wildlife habitat and soil stability at the same time, why are we removing the topsoil berm that is already providing awesome habitat for the western toad? I understand that your analysis showed that it may take a bit longer to achieve your desired ends, but how much longer? The trees and shrubs that are currently surrounding the site are growing just fine in the same soil that would be used instead of the topsoil. I understand that you would want to use the topsoil under other circumstances, but because the Western toad uses the berm I believe there should be a variance made to allow for the borrow to be used instead of the previously stripped topsoil to protect the toad's habitat.

E1 E2 Another glaring contradiction is with burying the pipeline that will need to be monitored for decades according to the EIS. If the existing pipeline that has been there for thirty years needs to be removed after another ten years of use, then are you anticipating removing the pipeline every 40 years or so by digging it back up and burying it again? It makes much more sense to require the Company to replace the pipeline if and when necessary, but leave it above ground next to the road for ease of monitoring and accessing the line for any necessary repair or replacement.

Thank you for considering my comments.

Respectfully,

Sincerely,

George Clements

2011-06-30 CloughR.pdf

Robert Clough
1120 Mt. Ave
Libby, MT 59923
293-5257

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

RDear Ms. Corsi and Ms. Lacklen:

Thank you for the opportunity to comment on the proposed revisions to the Troy reclamation plans. I would like to give my support for the preferred alternative as selected by the agencies, but would like to see some modifications to it.

I1 I don't understand why you would be taking the asphalt off of the road and returning the road surface to dirt. Wouldn't this create more BMP work to ensure that TMDLs are as low as possible? The current road needs some repair, but the costs of those repairs would be virtually insignificant compared to the long term work and maintenance you would be avoiding by doing so. I would imagine as this is a Forest Service road that it will also have I2 a gate on it not far from the tailings impoundment, which would allow the asphalt to have a very good life span for continued access for monitoring of the pipelines carrying water from the adit.

E2 This brings me to my next issue with the preferred alternative. I don't understand why you want to require the Company to bury the pipeline underground when it could be monitored and accessed easily if it was left above ground and next to the road. Putting strict monitoring requirements on the existing line until it truly needs replaced and making them bond to replace it with an above ground line seems like the most common sense approach that will have the least impact to the watershed long term.

Please consider my suggestions before making your final decision.

Sincerely, Robert Clough

Sincerely,

Robert Clough

2011-06-30 Davis S. pdf

Emily Corse
Montana Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901

June 30, 2011

Project Coordinator,

This comment is in regard to a Troy Mine flier which arrived in my mail box.

My main concern is an apparent attempt to ram through something as a large employer, raising questions that can not be researched and acted upon by the July 5, 2011 deadline.

I request that a print copy of the EIS and all issues being considered be sent to me at the address below and the comment period extended long enough to provide the evaluation and comment time needed.

A1

The Community is struggling to attract economic investment from sources who resist being stuck with the irresponsibility of W.R. Grace, Montanore and I need to make sure Troy Mine is not another stack on the pile.

People in a news story found themselves responsible for the toxic mess quick covered on property sold to them as their home so, in that vein and as it stands now, I say: Yes, it makes perfect sense to hold the cream skimmers liable for their messes.

Thank you.

Stanley H. Davis
3264 Iron Creek Road (mail)
559 Copper Mountain Road (residence)
Troy, Montana 59935

RECEIVED

JUL 05 2011

DEQ
DIRECTOR'S OFFICE

2011-06-30 Dibble A. pdf

Al Dibble
475 Northwood Ave
Libby, MT 59923
406-293-3434

July 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

G1 It seems to me that the Troy mine has been a great part of Lincoln County. They have provided safe employment to a significant number of workers, paying good wages, and seem to be a responsible guardian of the environment. I would hate to see what would happen if they were to shut down. I saw what happened in Libby when the National Forests were (in effect) shut down. The economy collapsed and the forests suffered from additional fires!

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1 E1 You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5 The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some

things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Al Dibble

Sincerely,

Al Dibble

2011-06-30 Dimock T. pdf

Tim Dimock
207 Circle Dr
Bozeman, MT 59715
406-491-1071

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

Thank you for the opportunity to comment on the proposed revisions to the Troy reclamation plans. I would like to give my support for the preferred alternative as selected by the agencies, but would like to see some modifications to it.

I1 I2 I don't understand why you would be taking the asphalt off of the road and returning the road surface to dirt. Wouldn't this create more BMP work to ensure that TMDLs are as low as possible? The current road needs some repair, but the costs of those repairs would be virtually insignificant compared to the long term work and maintenance you would be avoiding by doing so. I would imagine as this is a Forest Service road that it will also have a gate on it not far from the tailings impoundment, which would allow the asphalt to have a very good life span for continued access for monitoring of the pipelines carrying water from the adit.

E2 This brings me to my next issue with the preferred alternative. I don't understand why you want to require the Company to bury the pipeline underground when it could be monitored and accessed easily if it was left above ground and next to the road. Putting strict monitoring requirements on the existing line until it truly needs replaced and making them bond to replace it with an above ground line seems like the most common sense approach that will have the least impact to the watershed long term.

As a President of the Montana Mining Association, I have had many dealings with the management from Troy mines, and would like to say that they are very proffessional and make managing their impact on the environment a priority.

Please consider my suggestions before expeditiously making your final decision.

Sincerely,

Sincerely,

Tim Dimock

2011-06-30 Erickson L. pdf

Montana DEQ and Kootenai National Forest:

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Sincerely yours,

Lawanda M. Erickson
44 Halo Drive
Troy, MT 59935

Please respond

RECEIVED
JUN 30 2011
DEQ
DIRECTOR'S OFFICE

2011-06-30 Henderson R.pdf

Rick Henderson
1006 Hwy 55
Whitehall, MT 59759
406-287-2063

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3

The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7

Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1

I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Rick Henderson

2011-06-30 Hurd B. pdf

Bernard Hurd
2381 Nordic Loop
Whitefish, MT 59937
406-892-1778

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Lady's and Gentlemen of the MDEQ and KNF

I am a third generation native born Montana resident. With two additional generations added by my family. My Grand folks homesteaded on Lake Creek back in the 1910's. The Bull Lake, Spar Lake, Stanley Creek, and Lake Creek area is very important to me. I would not want it not taken care of.
I have also become close to the mine sight with their support toward the area. The Troy officers and employees are very respectful and show great concern regarding all aspects of land use and its environment. They are closer to the ground and conditions and believe that certain action changes to the decommission process could be better for all. It is my pleasure that the Troy Mine and DEQ evaluate legitimate changes with less stress on the wildlife habitat and soil stability.
My family and I appreciate your consideration of my comments.

Regards,

Bernard G. Hurd--CEO
Northwest Parts and Equipment
5460 Hwy 2 West
Columbia Falls, MT 59912

Sincerely,

Bernard Hurd

2011-06-30 Keehn S.pdf

sheri keehn
po 62
grover, wy 83122
307-887-1742

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

Thank you for the opportunity to comment on the proposed revisions to the Troy reclamation plans. I would like to give my support for the preferred alternative as selected by the agencies, but would like to see some modifications to it.

I1 I don't understand why you would be taking the asphalt off of the road and returning the road surface to dirt. Wouldn't this create more BMP work to ensure that TMDLs are as low as possible? The current road needs some repair, but the costs of those repairs would be virtually insignificant compared to the long term work and maintenance you would be avoiding by doing so. I would imagine as this is a Forest Service road that it will also have I2 a gate on it not far from the tailings impoundment, which would allow the asphalt to have a very good life span for continued access for monitoring of the pipelines carrying water from the adit.

E2 This brings me to my next issue with the preferred alternative. I don't understand why you want to require the Company to bury the pipeline underground when it could be monitored and accessed easily if it was left above ground and next to the road. Putting strict monitoring requirements on the existing line until it truly needs replaced and making them bond to replace it with an above ground line seems like the most common sense approach that will have the least impact to the watershed long term.

Please consider my suggestions before making your final decision.

Sincerely,

Sincerely,

sheri keehn

2011-06-30 Kendall J. pdf

Julie Kendall
247 Libby Creek Rd.
Libby, MT 59923
406-293-6698

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Julie Kendall

Sincerely,

Julie Kendall

2011-06-30 KetchumR.pdf

Rudy Ketchum
1251 Caledonia Street
Butte, MT 59701
406-723-2500

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Rudy Ketchum

Sincerely,

Rudy Ketchum

2011-06-30 Lanz V. pdf

Vanessa Lanz
1126 Cruiser Lane, Unit F
Belgrade, MT 59714
406-924-6542

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ:

Please accept my recommendations to the proposed Troy reclamation revisions. I believe that requiring the company to tear down the existing pipeline that is in great shape to replace it with another one immediately upon decommissioning of the mine is not a reasonable requirement. An even more unreasonable request would be to require the company to bury the line.

E1 At a minimum, the document should contain a discussion about the actual condition of the pipeline, how long it is expected to last and a much stronger discussion of why the pipeline should be buried.

After decommissioning, the pipeline will be carrying nothing but clean water and could last another fifty years before it needs replaced. Perhaps you could allow the pipeline to stay above ground and require the Company to repair or replace the line if it becomes necessary or to provide data about the condition of the line periodically to the agencies. I hope that the final reclamation plan allows the existing pipeline to be used until it needs replaced and that it is replaced with another in the same place alongside the road for easy monitoring into the future.

Thank you for considering my common sense recommendations and thank you for approving the Troy mine reclamation plans so they can continue to employ the almost two hundred men and women that depend on it.

Sincerely yours,

Sincerely,

Vanessa Lanz

2011-06-30 Lingel S. pdf

Sharon Lingel
236 Hummingbird Lane
Troy, MT 59935
295-9453

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road?

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

Sharon Lingel

2011-06-30 MoeH.pdf

Harry Moe
812 W. Balsam
Libby, MT 59923
406-293-4870

July 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€" cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€" with some suggestions for necessary changes.

H2 First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected

H2 during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

Thank you for accepting and considering my comment.

Sincerely,
Harry Moe

Sincerely,

Harry Moe

2011-06-30 moodrym.pdf

Mike Moodry
1806 Haggin Ave
Anaconda, MT 59711
406-287-2044

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

I am currently employed by Barrick Inc's Golden Sunlight mine. I've worked in the mining industry most of my adult life and owe much of the good fortune I've attained to the mining industry. I feel it is in Montana's best interest to support mining and other natural resource jobs in our beautiful state.

Thank you for accepting the following comments on the revised reclamation plan for the Troy mine. I would like to focus my comments on the DEIS to the pipeline and impoundment mitigation recommendations. In general, I support the reclamation plan but there are areas that don't make a great deal of sense to me and that I find contradictory or unnecessary.

E1 Why would you want to dig up and disturb more ground if you were going to decommission the existing water pipeline and replace it with a new one for adit discharges? Aren't we trying to minimize TMDL impacts in the watershed? Why not just make safety precautions or improvements to the existing pipeline that has more than adequate capacity and seems to be working just fine?

If you did require replacement, why would you want it buried when it would be much more difficult to monitor in the future? Why would you want to disturb ground to bury it originally and perhaps again to repair or replace the line when it is completely unnecessary?

K1 H3 Wouldn't using the toe pond stockpiled top soils for reclamation impact the western toad that currently has great habitat there now? Why not just use the coarse borrow material east of the impoundment instead? The DIES indicates that this could be just as successful in achieving reclamation goals and criteria. Are the wood based organic amendments that add 1,100 lbs of nitrogen per acre for the mill and impoundment really necessary? What is mycorrhizal fungi and why is it needed for reclamation at the mill? Why are the agencies requiring organic versus chemical fertilizer for reclamation in general?

Thank you for listening and I look forward to seeing the final reclamation plan include some further modifications to address some of the areas I have outlined above.

Respectfully,

Sincerely,

Mike Moodry

2011-06-30 mortensen c.pdf

Clint Mortensen
125 saddle ln
Butte, MT 59701
4064986177

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Montana DEQ and Kootenai National Forest:

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Sincerely yours,

Sincerely,

Clint Mortensen

2011-06-30 Oedewaldt C. pdf

Carol Oedewaldt
34338 US Hwy 2
Libby, MT 59923
406-293-5326

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:
I believe that the Troy Mine is a valuable asset to Lincoln County and Montana. I have visited the mine and was impressed with the work they are doing. They are genuinely concerned about the environment and their working conditions. Please allow them to continue their work. They have proven themselves.

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 We need the jobs in northwest Montana. Please keep them here. The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Sincerely,
Carol Oedewaldt

2011-06-30 Owens M-and-Anderson M.pdf

From:	CoonAdoor@aol.com
To:	DEQ Troy Mine; TroyMineReclamation@fs.fed.us
Subject:	Attn: Troy Mine Revised Reclamation Plan
Date:	Thursday, June 30, 2011 7:21:37 PM

To Whom It May Concern:

As requested by all parties involved, I am submitting a short comment regarding the requirements to be followed by the Troy Mine. My wife and I live in the Yaak area and are full-time residents in this area and the state of Montana.

As everyone knows, this is nothing new and the Troy Mine appears to have complied in their responsibilities to the community, federal and state governments. As an outsider, it amazes me to see the amount of changes placed on the Troy Mine over the years to "do the right thing", and watch them adapt to the (sometimes whims) of the many participating groups involved. Some common sense would a long way in protecting all. We as nation need what the Troy Mine, and other business', provide. To go over-board on any business' rule requirements is a travesty in our way of life.

We feel the Troy Mine has succeeded in following the red-tape on this matter. Thank you for your time and consideration.

R/S
Michael Owens
Monica Anderson

2011-06-30 PhillipsT. pdf

Tom Phillips
6330 Dawn Drive
Belgrade, MT 59714
406-388-1072

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

Thank you for the opportunity to comment on the proposed revisions to the Troy reclamation plans. I would like to give my support for the preferred alternative as selected by the agencies, but would like to see some modifications to it.

I1 I don't understand why you would be taking the asphalt off of the road and returning the road surface to dirt. Wouldn't this create more BMP work to ensure that TMDLs are as low as possible? The current road needs some repair, but the costs of those repairs would be virtually insignificant compared to the long term work and maintenance you would be avoiding by doing so. I would imagine as this is a Forest Service road that it will also have I2 a gate on it not far from the tailings impoundment, which would allow the asphalt to have a very good life span for continued access for monitoring of the pipelines carrying water from the adit.

E2 This brings me to my next issue with the preferred alternative. I don't understand why you want to require the Company to bury the pipeline underground when it could be monitored and accessed easily if it was left above ground and next to the road. Putting strict monitoring requirements on the existing line until it truly needs replaced and making them bond to replace it with an above ground line seems like the most common sense approach that will have the least impact to the watershed long term.

Please consider my suggestions before making your final decision.

Sincerely,

Sincerely,

Tom Phillips

2011-06-30 ReboS.pdf

steve rebo
582 dome mtn. ave.
libby, MT 59923
406-293-5853

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3

The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€“ cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€“ with some suggestions for necessary changes.

H2

First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected

H2 during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

Thank you for accepting and considering my comment.

Sincerely,
Steve Rebo

Sincerely,

steve rebo

2011-06-30 ScharfD.pdf

Darrell Scharf
P.O. Box 263
Whitehall, MT 59759
406-287-5802

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

I generally support the conclusions of the preferred alternative.

Thank you for considering my comment.

Sincerely,

Sincerely,

Darrell Scharf

2011-06-30 Seeman J. pdf

Judy Seeman
waterfront road
Troy, MT 59935
291-8058

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Leave things the way they are, why destroy what is already there. A BIG waste of money and time.

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not henefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the

mitigation measures and the final reclamation plan.

Respectfully yours,
Judy Seeman

Sincerely,

Judy Seeman

2011-06-30 Sholey F. pdf

Frank Sholey
5 Whitetail Dr
Whitehall, MT 59759
406-498-6946

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ:

Please accept my recommendations to the proposed Troy reclamation revisions. I believe that requiring the company to tear down the existing pipeline that is in great shape to replace it with another one immediately upon decommissioning of the mine is not a reasonable requirement. An even more unreasonable request would be to require the company to bury the line.

E1 At a minimum, the document should contain a discussion about the actual condition of the pipeline, how long it is expected to last and a much stronger discussion of why the pipeline should be buried.

After decommissioning, the pipeline will be carrying nothing but clean water and could last another fifty years before it needs replaced. Perhaps you could allow the pipeline to stay above ground and require the Company to repair or replace the line if it becomes necessary or to provide data about the condition of the line periodically to the agencies. I hope that the final reclamation plan allows the existing pipeline to be used until it needs replaced and that it is replaced with another in the same place alongside the road for easy monitoring into the future.

Thank you for considering my common sense recommendations and thank you for approving the Troy mine reclamation plans so they can continue to employ the almost two hundred men and women that depend on it.

Sincerely yours,

Sincerely,

Frank Sholey

2011-06-30 Slatter S.pdf

Seth Slatter
253 Mt Hwy 2 East
Whitehall, MT 59759

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state.

For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife.

E7
K2 Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E1
E2 Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

Thank you for your time,

Sincerely,

Seth Slatter

2011-06-30 Stolpk.pdf

Kelly Stolp
PO Box 1281
Boulder, MT 59632
406-490-3533

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

As the Safety and Security Director for a Gold Mine I am totally in suport of the Troy Mine. Mining is important to the State of Montana.
Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

Kelly Stolp

2011-06-30 Thompson M.pdf

Mark Thompson
400 Stagecoach Rd
Butte, MT 59701
406-782-5731

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Montana DEQ and Kootenai National Forest:

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Sincerely yours,

Sincerely,

Mark Thompson

2011-06-30 Tuohimaa .R.pdf

Ron Tuohimaa
PO Box 238
Three Forks, Montana 59752-0238

Montana Department of Environmental Quality

Reference: Troy Mine Revised Reclamation Plan Draft EIS - File Code: 2810/1950.

To Whom it May Concern:

G3 The current unemployment rate of Troy Montana is 11.3%, significantly higher than the current, but stagnant, national average. The typical household income in this town is only 50% of the median household income of the United States.

While it is true that the Troy Mine has an impeccable record relative to safety, environmental accord and quality and on that alone the Troy Mine's Revised Reclamation Plan Draft EIS should be approved, I would like to comment on the one factor that never seems to have any implicit value in these matters – human life and liberties.

It is high time to put an intrinsic value on human dignity. It is the moment to realistically diminish the significance of the chants, demonstrations, imprudence and arrogance of extreme environmental factions.

Natural resource extractors, and the industries that subsist because of them, all over this nation, are experiencing a denial for normal existence and livelihoods because of the moral corruption, irresponsible implications and intimidation tactics instituted by these organizations.

The entire State of Montana, through deception by environmental groups, has suffered a great deal of decline in economic growth. All the while, these groups maintain a larger-than-life 'donate' button on their website with never a care or concern for the livelihoods they continue to destroy.

I beseech you to continue to give the people of Troy their dignity and self-esteem.

Yours truly,

Ron Tuohimaa

2011-06-30 WesleyF.pdf

fred wesley
667 shalom dr
libby, MT 59923
406. 293.5690

June 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

fred wesley

2011-07-01 Erickson3.pdf

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Steven Erickson
44 Halo Drive
Troy, MT 59935

RECEIVED
JUL 01 2011
DEQ
DIRECTOR'S OFFICE

2011-07-01 Farmer L. pdf

Lacie Farmer
1382 Kootenai River Road
Libby, MT 59923
406.293.7430

July 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

My name is Lacie Farmer and I am a Libby public school teacher. I live and work in Libby, and the Troy Mine is a vital part of our economy. Many families of mine are employed at the mine, and we need these jobs to keep our schools up and running. I hear that there is a reclamation plan that you are offering comments on. I am in full support of the reclamation plan, but I believe there are a few alterations that can be done that are more cost effective and safe for the environment.

E1 First off, I have visited the Troy mine and seen the piping along the road that leads to the tailings. I have heard you have proposed to bury these lines. Why do they need to be buried and replaced if they are working fine now? I would think that ease of access would be easier for the mine if something did need replaced. If you put in place a bond asking them to replace and monitor the pipeline, that would allow for ease of access and a common sense approach.

I1 Secondly, please consider NOT taking off the asphalt and making it a dirt road. I would think this would make the air quality worse in this area, and our area is already boxed in enough with bad air quality as is. Asphalt would be easy to maintain and repair as it is already there.

Thank you for taking the time to listen to my support and concern about the proposed plan.

Sincerely,

Sincerely,

Lacie Farmer

2011-07-01 FreeburyD.pdf

dan freebury
228 white ave
libby, MT 59923
406-293-8944

July 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done whileDear Montana DEQ and Kootenai National Forest:

Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The
E7 rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,Dan Freebury
i'm retired and i feel the mine should be opened we need the jobs here and i don't feel the enviroment is being hurt keep it open please the mine was closed and additional studies

conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,

Sincerely,

dan freebury

2011-07-01 Haugen M. pdf

milo haugen
111 michelle lane
libby, MT 59923
406-293-6786

July 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

cc Montana DEQ and Kootenai National Forest:

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I have worked for 46 years in the construction industry, with about half of the years in the reclamation aspect of the industry.

I have supervised mine recamation projects in four different states. I believe I have some hands on knowledge of what will work in the field and what won't. Some things look good on paper but actually create great problems down the road. The reclamation process should be done in a practical long term solution approach.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Sincerely yours,

Sincerely,

milo haugen

2011-07-01 Heinert R. pdf

Ralph Heinert
PO Box 577
Libby, MT 59923

July 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I have personally visited this mine and viewed the underground operations, the disposal sites and how the tailings pond are being managed. It is apparent to me that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was completed while the mine was closed and with the additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. As your own scientific data indicates, these deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the agency has solid, reliable data documenting the absense of any adverse impacts and substantial evidence to support a decision to re-permit the mine and its proposed reclamation plans.

B1 It also makes common sense to dispose of the the materials on site after the mine has completed its lifespan and to disturb the site as little as possible during reclamation where the scars of activity have already healed themselves through time, revegitation, etc.

G3 As to the social/economic impact, this operation is very important to the well-being of Lincoln and Sanders counties. There are 185 or more men and women working at this operation with nearly 40 million dollars per year in real dollars being distributed into Montana's economy through vendors, payroll, and taxes.

It is easy to see how important this operation is to the well-being of the two counties and communities in the area where they currently represent some of the highest unemployment numbers in the state. The loss of these mining jobs and subsequent revenue would without question increase an already very bad employment situation.

Considering that there will be no significant impacts to the environment by approving this mine's reclamation plans, and operations, I would emplore you approve the plans without any further delay.

Sincerely,

Sincerely,

Ralph Heinert

2011-07-01 McGlassonJ.pdf

James McGlasson
324 White Ave
Libby, MT 59923
4062932552

July 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

As a member of the Libby community, I am very concerned with the welfare of the people in our area. This welfare has been negatively impacted by distant decision makers with no understanding of the impact of their decisions or the science of forest maintenance. Are the forests to be used or ignored to the harm of the community and to the forest itself?

Responsible uses of the forests reduce the fire danger, provide employment for the community, and reduce our trade imbalance while maintaining the quality of the environment for the native animals of the forest.

Wolves and grizzly bears were not eliminated from the environment because of roads or lumber harvest. They were purposely eliminated because of their perceived danger to life and livestock. There will be a price to coexist with them but the price currently imposed is unnecessary and out of reason.

A current and very important issue is the impediments placed on the completion of the EIS for the Troy and Montanore mines. I appeal to you as a decision maker on these issues to responsibly remove the irresponsible arguments holding up the approval for these projects.

Sincerely,

James McGlasson

2011-07-01 McGlassonL.pdf

FS R1
RECEIVED
JUN 5 - 2011
REGIONAL FORESTER

7/1/2011

Dear Leslie,

As a significant decision maker in affairs affecting our community, I ask for your consideration and action regarding my concerns.
I am a "Libbyite," from Libby MT, a community being ordained to die by decisions and indecisions of various corporate, environmentalist and numerous inter-government agencies.

Libby is surrounded by God-given riches designed for the well being of our community and nation - forests of timber as far as the eye can see & beyond,
mountains filled with precious metals, lakes and streams for fishing & hunting, an intelligent workforce proven capable of harvesting these resources using sound stewardship.
Yet we sit here with no work because we are not allowed to touch it, 75% of the land owned and controlled by the government, and telling us what we can or can't do with our own property.

After persevering for many years, and expending all resources, many businesses have had to shut down, or move elsewhere. The rest of us are feeling strangled with all options being forbidden. We can't even have a splash pad for children in our city park (using water fit for drinking) without cost prohibitive legalities. The "powers that be" do not acknowledge our situation in these terms, but it is the reality.

The Montanore Mine project has spent more money on satisfying the environmental concerns for the grizzly bear than our new hospital would cost. Animals are considered more important than people. It is also disturbing that because environmentalists will not accept smelting operations in this country, all mining products must be shipped overseas - as tho that solves anything but ensuring our demise thru higher costs, and the prosperity of our competition in other nations.

Both the Montanore and Troy mines are repeatedly being required to satisfy additional requirements, a continually rising bar, that stops progression indefinitely, while our taxes pay for their obstructionism and dysfunction.

Many of these requirements are seen by local experts as made by "book learner authorities" with no practical_hands-on experience or thinking whatsoever. I'm sure you have access to these requirements and no need for me to repeat them here.

I am asking and praying for you to be a voice for common sense in decisions that will allow these mines to start producing, and save not only our community but our country. Our country desperately needs your sensible intervening leadership in these matters, as well as other areas of influence.

Sincerely,

Laura E McGlasson

Laura E McGlasson
324 White Ave
Libby MT 59923
406-293-2552
lmcg@frontier.com

2011-07-01 NichollsJ.pdf

joe nicholls
617 waterloo rd
whitehall, MT 59759
(406)498-3773

July 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

Thank you for the opportunity to comment on the proposed revisions to the Troy reclamation plans. I would like to give my support for the preferred alternative as selected by the agencies, but would like to see some modifications to it.

I1 I don't understand why you would be taking the asphalt off of the road and returning the road surface to dirt. Wouldn't this create more BMP work to ensure that TMDLs are as low as possible? The current road needs some repair, but the costs of those repairs would be virtually insignificant compared to the long term work and maintenance you would be avoiding by doing so. I would imagine as this is a Forest Service road that it will also have
I2 a gate on it not far from the tailings impoundment, which would allow the asphalt to have a very good life span for continued access for monitoring of the pipelines carrying water from the adit.

E2 This brings me to my next issue with the preferred alternative. I don't understand why you want to require the Company to bury the pipeline underground when it could be monitored and accessed easily if it was left above ground and next to the road. Putting strict monitoring requirements on the existing line until it truly needs replaced and making them bond to replace it with an above ground line seems like the most common sense approach that will have the least impact to the watershed long term.

Please consider my suggestions before making your final decision.

Sincerely,

Sincerely,

joe nicholls

2011-07-01 Oman T. pdf

Timothy Oman
8615 Pheasant Drive
Missoula, MT 59808
406-543-5877

July 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

K1 I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

H1 From what I understand, it isn't going to cost any more to use the borrow or the topsoil
H2 that has been set aside, but it may take a bit longer for the borrow to produce the same reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

I have lived in Montana all but 5 years of my life and I am 56 years old this year. I have seen a lot of good jobs leave this state not to mention that when this happens the state loses a lot of revenue, and good people. How do we stop this? We need to let projects like this one and others continue because they intend to follow the rules. Let us open up the resources of this state responsibly so we can all continue to live well here and not just subsist. It is not popular opinion that should dictate to us what we do, especially when it is from out of state people, but is up to us Montanans to do so. In closing, I say belp the people of Montana stay here.

Thank you, Respectfully Tim Oman

2011-07-01 Schwab S. pdf

Steve SCHWAB
PO BOX 73
WHITHEHALL, MT 59759
406.287.3465

July 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Hello:

Thank you for allowing me to comment on the proposed revisions to the Troy reclamation plans. I believe that the DEQ's proposed alternative is the best action to take, though I think there needs to be some minor tweaks made before the final action is taken.

E7 The Troy Mine has a long record of water monitoring and the agency seems to also recognize this by not requiring post closure mechanical water treatment, which I fully support. I also understand that the agency wants the reclamation plan to mitigate as many impacts as they can upon decommissioning of the mine, but there seems to be some contradictions in the proposed action plan.

K1 H2 If we truly want to create wildlife habitat and soil stability at the same time, why are we removing the topsoil berm that is already providing awesome habitat for the western toad? I understand that your analysis showed that it may take a bit longer to achieve your desired ends, but how much longer? The trees and shrubs that are currently surrounding the site are growing just fine in the same soil that would be used instead of the topsoil. I understand that you would want to use the topsoil under other circumstances, but because the Western toad uses the berm I believe there should be a variance made to allow for the borrow to be used instead of the previously stripped topsoil to protect the toad's habitat.

E1 E2 Another glaring contradiction is with burying the pipeline that will need to be monitored for decades according to the EIS. If the existing pipeline that has been there for thirty years needs to be removed after another ten years of use, then are you anticipating removing the pipeline every 40 years or so by digging it back up and burying it again? It makes much more sense to require the Company to replace the pipeline if and when necessary, but leave it above ground next to the road for ease of monitoring and accessing the line for any necessary repair or replacement.

Thank you for considering my comments.

Respectfully,

Sincerely,

Steve SCHWAB

2011-07-01 weightmanlh.pdf

Kerry Weightman
49 capp lane
Whitehall, MT 59759
560-6455

July 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.
Let's keep some common sense in this process.
Thank you for accepting my comments. I eagerly await your response!

Sincerely,Kerry Weightman

Sincerely,

Kerry Weightman

2011-07-02 Bennett D. pdf

Donald Bennett
904 E. Missoula Ave.
Troy, MT 59935

July 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

K1 I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

H1 H2 From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

Thank you for your consideration of my comments.

Respectfully,

Sincerely,

Donald Bennett

2011-07-02 GuthrieG.pdf

Garman Guthrie
797 Northwood Avenue
Libby, MT 59923
406 293 3877

July 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

It is beyond understanding how the environtmalists can come up with their idiotic nonsense with no thought or compassion for the 195 or so family jobs involved. I'm sure a lot of this nonsense comes from people out of the large eastern cities who have never had to struggle to support their families as a lot of us Montanians have.

Let's knock off this nonsense and let the workers keep making an honest living to support their families and help struggling Lincoln County get back on its feet.

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,

Garman V. Guthrie

Sincerely,

Garman Guthrie

2011-07-02 Habeck D. pdf

E. Dianne Habeck
72 Ave. C
Libby, MT 59923
406--293-2246

July 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Montana DEQ and Kootenai National Forest:

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Please take into consideration the importance of this mine in our community as you plan its future. We need jobs, not unnecessary regulations that would cost the mining company millions of dollars that could go to workers to feed their families.

Sincerely yours,

Sincerely,

E. Dianne Habeck

2011-07-02 James C. pdf

Connor James James
421 Dome Mountain Ave.
Libby, MT 93950
831 402 7122

July 3, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I believe this would be a great idea, it would bring jobs and substantially help the economy in this area, please do the right thing and help families who are in need of jobs and support your local neighbor. Thank you for taking the time to read these many comments

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Connor James James

2011-07-02 McMenaminJ.pdf

John McMenamin
32 Halo Ct.
Troy, MT 59935
406 295 9079

July 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

K1 I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

H1 H2 From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

Thank you for your consideration of my comments.

Respectfully,
John McMenamin

Sincerely,

John McMenamin

2011-07-02 RileyC.pdf

Chuck Riley
P O Box 522
Libby, MT 59923

July 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Chuck Riley

2011-07-02 Snyder C.pdf

colleen Snyder
PO Box 248
Libby, MT 59923
406-293-7422

July 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3

The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€“ cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€“ with some suggestions for necessary changes.

H2

First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected

H2 during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

Thank you for accepting and considering my comment.

Sincerely,

Sincerely,

colleen Snyder

2011-07-02 Snyder D. pdf

Dan Snyder
PO box 248
Libby, MT 59923
406-293-7422

July 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road?

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

Dan Snyder

2011-07-02 Spell J. pdf

JoAnn Spell
904 E. Missoula
Troy, MT 59935

July 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1 E1 You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5 The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

JoAnn Spell

2011-07-02 SpellR.pdf

Ronald Spell
904 E. Missoula Ave.
Troy, MT 59935

July 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Ronald Spell

2011-07-02 Tallmadge N. pdf

Nancee Tallmadge
PO Box 1073
Troy, MT 59935
4062959969

July 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Thank you for accepting the following comments on the revised reclamation plan for the Troy mine. I would like to focus my comments on the DEIS to the pipeline and impoundment mitigation recommendations. In general, I support the reclamation plan but there are areas that don't make a great deal of sense to me and that I find contradictory or unnecessary.

E1 Why would you want to dig up and disturb more ground if you were going to decommission the existing water pipeline and replace it with a new one for adit discharges? Aren't we trying to minimize TMDL impacts in the watershed? Why not just make safety precautions or improvements to the existing pipeline that has more than adequate capacity and seems to be working just fine?

If you did require replacement, why would you want it buried when it would be much more difficult to monitor in the future? Why would you want to disturb ground to bury it originally and perhaps again to repair or replace the line when it is completely unnecessary?

K1 H3 Wouldn't using the toe pond stockpiled top soils for reclamation impact the western toad that currently has great habitat there now? Why not just use the coarse borrow material east of the impoundment instead? The DIES indicates that this could be just as successful in achieving reclamation goals and criteria. Are the wood based organic amendments that add 1,100 lbs of nitrogen per acre for the mill and impoundment really necessary? What is mycorrhizal fungi and why is it needed for reclamation at the mill? Why are the agencies requiring organic versus chemical fertilizer for reclamation in general?

Thank you for listening and I look forward to seeing the final reclamation plan include some further modifications to address some of the areas I have outlined above.

Respectfully,

Sincerely,

Nancee Tallmadge

2011-07-03 Hesse C.pdf

Chris A. Hesse, P.Eng.
2701 Lake Hollywood Dr.
Los Angeles, CA 90068
323 463-8851

July 3, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ:

Please accept a general comment to the Troy Mine DEIS, which I have not had the opportunity to study in detail.

Some years ago, I was involved in U.S. Borax's near-by copper-silver prospect which is now being developed by Mines Management Inc. I therefore have some knowledge of the area.

I would recommend that MDEQ continue to make all reasonable efforts to allow the mineral deposits of the region to be developed and operated in an environmentally responsible manner, without unnecessary cost-increasing restrictions. The region needs the opportunity for economic growth and employment.

Thank you for for allowing me to comment on this matter.

Sincerely yours,

Sincerely,

Chris A. Hesse, P.Eng.

2011-07-04 BrulandB.pdf

Barry Bruland
2171 Bull Lake Road
Troy, MT 59935
406-291-3684

July 4, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

G3 The Troy Mine employs 195 men and women, but there are also a large number of people that are employed because of the Mine. I do not understand why you people are always
A5 changing the rules. The mine has posted bond moneys accepted by you people in the past. Why do you need more money? Question what happens to the interest on this money.
B1 E1 I1 Also in my opinion it is stupid to destroy the buildings, roads, and pipelines. The forest service is so smart, can't they find another use for this site?
It appears to me that you people do not care about the people of Troy, all you care about is making it harder on the Troy Mine to stay open and make a future for there employee.

Sincerely,

Barry Bruland

2011-07-04 Guisewiter.pdf

Renee Guisewite
P.O. Box 246
Troy, MT 59935
406-295-9948

July 4, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€" specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

In addition, no one could have vocalized my thoughts better than Bruce Vincent. DITTO TO EVERYTHING HE SAID.

Sincerely,

Renee Guisewite

Sincerely,

Renee Guisewite

2011-07-04 MaynardRandJ.pdf

Rusty and Joan Maynard
P.O. Box 371
Troy, MT 59935
295-6506

July 4, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

I am a retired school teacher/pastor living in Troy for 12 years with ties/history/family going back to the 1930's. My wife was raised here in Troy and the Bull Lake area, so we care greatly about the environment and the availability of jobs. We agree with the following letter.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Rusty and Joan Maynard

Sincerely,

Rusty and Joan Maynard

2011-07-04 Rice B. pdf

Sharon Rice
202 Honeysuckle Lane
Libby, MT 59923
406 293-5867

July 4, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,
Sharon Rice; I am an old lady that has had a bad stroke. I don't know a lot about this, but I have learned that if there is a problem, some do-gooder will report it. In the meantime, our people need the jobs. I really believe that Lincoln County problems should be handled by those who live here.

Sincerely,

Sharon Rice

2011-07-05 Anderson T. pdf

From: Tammy Anderson
To: DEQ Troy Mine
Subject: Troy Mine
Date: Tuesday, July 05, 2011 7:54:36 AM
Attachments: SENDER_EMAILctander@kvis@@net.png

E7

It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

I also think we need to realize that 'Revett' is a smaller mining company compared to many others that can afford the big bucks ransom this DEIS demands. They mine silver here not gold!

B1

I also find it interesting how the DEQ thought it would be just great to put asbestos contaminated soil at the Troy landfill for a price to city of Troy, yet an inert matter such as remainder of cement buildings etc... Can't be buried on the current mine site. I recall that DEQ's offer of planting and such after the asbestos contaminated soil at the Troy landfill did not include even a tiny fraction of the ridiculous amount of material is being demanded of the Troy mine to replant. I find the double standard ridiculous.

G3
A5

While I understand the effort to prepare this DEIS, I wonder why so little effort is given to a how this impacts a community (or 3) Genesis mine employs 190 people, double that number if you consider a spouse and double it again if we estimate a 2 dependants for each. Now we're closer to 800 people that those 190 paychecks affect. Then we also need to think of the small business owners in these communities that see the trickle down of these paychecks, and we also need to consider the taxes that go into these communities, the metal mines taxes to the school.

As a small business owner I feel the effects of these paychecks to my business and it is my hope that The Troy Mine not throw their hands up in exasperation because of the the very expensive demands of this DEIS and decide that the ore body they would like to go after is simply not worth it.

Thank You for considering my comments.

Sincerely,
Tammy Anderson.

2011-07-05 CarsonM.pdf

MONTY CARSON
691 N 400 W
SALT LAKE CITY, UT 84103
801-363-6736

July 5, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state.

For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife.

E7 K2 Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E1 E2 Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

Thank you for your time,

Sincerely,

MONTY CARSON

2011-07-05 Dolezal.pdf

Lawrence Dolezal
800 Kilbrennan Lake Road
Troy, MT 59935
406-295-9865

July 6, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E7 In the thirty years this mine and tailings impoundment have been in place significant, solid, reliable data has accumulated to support your preferred alternative. Thank you for acknowledging the supporting data for the preferred alternative that appears to me to be the most logical option before you.

E1 There are a number of key points that stand out to me, and I expect you've heard comments regarding them from many others. I do not understand why an existing pipeline is proposed to be torn out in place of new construction of miles of underground pipeline. The current pipeline has served well. Significant unnecessary ground disturbance may be avoided by retaining the existing pipeline.

B1 I do not understand the reasoning behind the suggestion that it is necessary to haul non-hazardous construction materials off site to be buried rather than burying these inert materials, such as concrete, on site within the mine. It is also illogical to add unnecessary
I1 steps to suggest removing asphalt and disturbing grown-in, healed road surfaces while decommissioning the mine.

K1 I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

H1
H2 From what I understand, it will not cost much more to utilize borrow versus the topsoil that has been set aside, but it may take longer for the borrow to produce the same reclamation goals, if used. It seems that saving habitat that is currently being created and allowing a

K1 little longer to create more is a win-win for all. Why disturb already healed and re-vegetated earth from the toe of the tailings impoundment pond and create more disturbed area when it is unnecessary?

H1 H2 I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

Thank you for your consideration of my comments.

Respectfully,

Sincerely,

Lawrence Dolezal

2011-07-05 Erickson O. pdf

Bobbie Lacklen
Project Coordinator
Kootenai National Forest
31374 US 2
Libby, MT 59923-3022

RECEIVED
JUL 05 2011
DEQ
DIRECTOR'S OFFICE

Ms. Lacklen,

I would like to comment on the Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement (DEIS).

I am a third generation miner. As a youth, I saw raw tailings material and its impact on the South Fork of the Coeur d'Alene River running through my home town in North Idaho. Those days are long gone. The upper South Fork of the CDA River is now clear and clean and mining continues in the Silver Valley. I came to the Kootenai in 1979 and helped start the ASARCO Troy Project. I worked there until the end and beyond. I returned in 2011 as a safety and health consultant. I have seen the worst and in Troy Mine's case the best of what underground mining can be as evidenced by the mine's minimal impact to the environment. I applaud the KNF and the DEQ for recognizing this fact throughout the DEIS, and I believe it has firm conclusive monitoring data to justify its decision.

It stands to reason that any time the earth is disturbed there is a possibility of watershed and wetland degradation and the habitat disturbance of sensitive species, which in the case of the tailings impoundment issue is the western toad. Minimizing soil disturbance whenever possible will be the most prudent course of action during decommissioning and reclamation of the mine site as I am sure you will agree.

B2 I fail to understand the justification for digging up, breaking up and hauling off the concrete building foundations as per the decommissioning plans. If it is the agencies' belief the foundations will impact water quality, then where in Montana or elsewhere in the Great Northwest is it acceptable for it to be buried. Buried concrete and rebar will have no environmental impact on the Stanley Creek and Lake Creek watershed.

E1 E2 On your recent tour of the mine's South Adit (June 9, 2011), I am sure you focused some attention to the water pipeline along the mine road. The tall grasses along the road hide the pipeline in many locations this time of the year and often snow masks the pipeline during the winter months. The existing pipeline has many, many decades of service left in it. It is reasonable to believe the pipeline monitoring, early visual detection of seeps, leaks or breaks, and the ability to facilitate necessary repairs could be done more efficiently and in much less time in its present location than if it were buried. Again, digging up seven and a half miles of ground creates habitat disturbance and allows the possibility of watershed and wetland degradation when there is no foreseeable need. After 30 years, there is no basis for the assumption the pipeline would be subject to vandalism any more so than a live copper conductor power line running adjacent to every road in Lincoln County.

I1 There is no environmental benefit to returning the mine road to a dirt road as it was prior to 1980. It is reasonable to believe there will be a sediment impact on the Stanley Creek and Lake Creek watershed if the pavement is dug up and returned to a dirt road. In addition, dust from vehicular traffic will be greatly increased.

H1
H2
H3

I realize the topsoil forming the toe ponds was intended to cap the tailings impoundment upon reclamation, but that was before it became a well vegetated wildlife habitat and sensitive species habitat for the western toad and a wetland for migratory water fowl. The borrow material on the east side of the impoundment area has been proven to be an excellent alternative to topsoil for returning the area to a natural forest state with the use of fertilizer alone and without woody debris.

There is no significant environmental benefit in hauling off the foundation material, burying a new pipeline, returning the mine road to dirt or using the top soil and woody debris for reclamation of the tailings impoundment. This is an unwarranted justification for increasing the reclamation bond.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully,

Owen R. Erickson

Owen R. Erickson

2011-07-05 Hammerschmidt Eand L. pdf

7/1/11

Ed & Lorraine

TROY • MONTANA

RECEIVED

JUL 05 2011

DEQ
DIRECTOR'S OFFICE

Emily Corsi

WE RECEIVED THE GREEN
INS MINERS NEED YOUR HELP
FORM. UNFORTUNATELY WE
DO NOT HAVE A COMPUTER
BUT WE WILL DO SUPPORT
ANY PROJECTS THE TROY MINE
COMES UP WITH - TROY
NEEDS THE MINE!

Ed & Lorraine
Hammerschmidt

Ed A. Hammerschmidt
2478 Bull Lake Rd.
Troy, MT 59935

2011-07-05 Johnson R. pdf

Rich Johnson
127 Bench Road
Whitehall, MT 59759
406 287 3716

July 5, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1 E1 You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5 The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

Rich Johnson

2011-07-05 JonesT.pdf

Tom Jones
93 Whitetail Way
Troy, MT 59935
406-295-0154

July 6, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

Thank you for your time.

Very truly yours,
Tom Jones

Sincerely,

Tom Jones

2011-07-05 Kneller D. pdf

dan kneller
442 woodland hgts. rd.
libby, MT 59923
2933061

July 5, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

Adding to that note, it seems to me that the government agencies that are trying to make these new rules are not doing it with the environment in mind. Instead, they are trying to make it impossible to do business in this country. If the new rules are implemented it will set a presidency that all new business would be subject to. This only makes it impossible or unrealistic for any new business to look here to locate. This is my home, and a clean environment is very important to me. I need to work preferably here as well. I believe that this can happen but the government needs to be a little more realistic in the rules they try to impose on any one trying to make a living here.

Thank you for your time.

Very truly yours,
Robert D Kneller

Sincerely,

dan kneller

2011-07-05 ~~Barnes~~ Regh S. pdf

James Regh,Sr
95 Regh Ave
Libby, MT 59923
406-293-6020

July 6, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state.

For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife.

E7 K2 Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E1 E2 Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

The mine has been a good neighbor for many years and as a contractor who worked on the original construction I know that Asarco and now Genesis are extremely conscious of enviromental concerns. As far as removing the 2 pipelines & replacing with buried pipe I

think the old adage-\\\"if its not broke don't fix it\\\".

Thank you for your time,

Sincerely,

James Regh,Sr

2011-07-05 SmithE.pdf

Edwina Smith
270 Indian Pipe Rd.
Libby, MT 59923
818-728-5429

July 5, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

E1
I1
H3

I oppose the Troy Mine Reclamation plan as inadequate for safeguarding the environment and holding polluters accountable. Specifically, the owners want to use old outdated pipelines instead of replacing them for safety. They don't want to have to remove the roads they cut and restore the land. And they intend to apply chemical fertilizer in replanting instead of the organic type recommended by the EPA. All of this is to save the owners costs while endangering the rest of us and the land.

I understand that people desperately want jobs, but that should not be an excuse for the owners to cut corners. The requirements that the EPA proposes are reasonable and necessary to insure that the land and water of this beautiful area are not poisoned with mine spilloffs and chemicals. People have short memories, it seems. The story of W.R. Grace and the asbestos contamination should give everyone pause to consider what happens when mine owners are not held to stringent regulations, given any leeway and not held stricly accountable for what they do. For once could we learn from history?

I strongly support the EPA impact statement proposals and urge that they be adopted. Please do not let the mine owners exploit the need for jobs to avoid environmentally necessary costs in order to generate extra profits for stockholders.

Thank you for your consideration of these comments.

Sincerely,

Edwina Smith

2011-07-06 Foote A.pdf

Andrew Foote
PO Box 788
Libby, MT 59923
406-291-0498

July 6, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The mining industry is critical to future jobs in Montana and especially in the NW part. The price of silver has doubled in the past year and will more than likely double if not triple in the next year. The demand is not only increasing from industry such as solar panel manufacturing but also from investment demand as worldwide fiat currencies are becoming more unstable.

The contents of the silver vein in the Troy and Rock Creek area are among the purest in the world as it contains 60% copper and 40% silver. So other minerals that are normally associated with silver mines such as zinc, lead, and tin are not there in the tailings to contaminate the ground.

G3 The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€" cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in

property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€“ with some suggestions for necessary changes.

First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

Thank you for accepting and considering my comment.

Sincerely,
Andrew Foote

Sincerely,

Andrew Foote

2011-07-06 Hesse C. pdf

From: Chris Hesse
To: Corsi, Emily
Subject: Re: Troy Mine Revised Reclamation Plan
Date: Wednesday, July 06, 2011 12:08:36 PM

Emily:
Sorry, it seems to have gotten lost in the ethernet - I can't retrieve it.
The comment was a general one. In the late 80's I was involved with U.S. Borax during the discovery and early exploration of the copper-silver mineral deposit in the region, which is now being developed by Mines Management Inc. In my capacity I had a chance to observe the economic situation in northwest Montana at that time. My recent comment was to encourage the Department to use every effort to allow the development of any mineral deposits there in an environmentally responsible manner, all else being equal. This is technically possible; the environmental objections raised in the previous EIS of the nearby ASARCO project can be overcome.
Unless things have changed, the region needs all the economic help it can get.
Full disclosure: I am a minor shareholder in Mines Management.
Thanks for the renewed opportunity to comment.
Chris Hesse, P.Eng.

From: "Corsi, Emily" <ECorsi@mt.gov>
To: Chris Hesse <cahesse@att.net>
Sent: Wed, July 6, 2011 7:21:10 AM
Subject: RE: Troy Mine Revised Reclamation Plan

Chris,

Do you have a copy of the letter you wrote? If so, you can send it directly to me, and I can replace it. My e-mail address is ecorsi@mt.gov

Emily W. Corsi
MEPA Coordinator
Montana Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901
Phone: 406-444-2813
Fax: 406-444-1374
ecorsi@mt.gov

From: Chris Hesse [mailto:cahesse@att.net]
Sent: Tuesday, July 05, 2011 6:15 PM
To: Corsi, Emily
Subject: Re: Troy Mine Revised Reclamation Plan

The "Original Message" is not the letter I wrote. I give up!

From: "Corsi, Emily" <ECorsi@mt.gov>
To: "cahesse@att.net" <cahesse@att.net>
Sent: Tue, July 5, 2011 10:21:38 AM
Subject: RE: Troy Mine Revised Reclamation Plan

Chris,

Thank you for your comment.

Emily W. Corsi
MEPA Coordinator
Montana Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901
Phone: 406-444-2813
Fax: 406-444-1374
ecorsi@mt.gov

-----Original Message-----
From: cahesse@att.net [mailto:cahesse@att.net]
Sent: Sunday, July 03, 2011 12:32 PM
To: troymine@miningmontana.com
Subject: Troy Mine Revised Reclamation Plan

Hello,
Attached is a letter stating my views on the Troy Mine Revised Reclamation Plan . Thank you for allowing me to submit my comments.

Sincerely,
Chris A. Hesse, P.Eng.

2011-07-06 Miller E. pdf

Elvie Miller
50 Meadowlark Ln
Libby, MT 59923
406-250-7715

July 6, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

My name is Elvie Miller, one of the family owners of Meadowlark Log Homes in Libby, Montana. I am writing in support of the Troy Mine in details outlined farther below.

In the industry I am involved in of building log homes, we have been affected by the almost total lack of stewardship of our forest. What has happened to the logging industry resulting in forests that are no longer harvested and managed, is a tragedy that can hardly be fathomed. The rich forests we have here can provide all the wood our company needs and a hundred more companies, but because of so called \\\"environmental\\\" issues, we now must buy our logs from Canada at a far greater cost. It is a burden for us to stay in business and it would not have to be this way. Is this the great American dream- where runaway \\\"environmental\\\" laws rule to supposedly \\\"save\\\" our resources, but it's ok if the people perish? How about some laws to protect their jobs to keep them from starving instead of the wolves, etc?

My personal opinion is that some of these \\\"environmental\\\" laws are actually doing far more harm to the environment than good- restricting the harvesting of resources. I pray for the day when these crimes will come to light and justice will once more rule. We will awake with a shock when our well- intentioned ideas come back to hurt us, such as when massive fires occur due to lack of management and thinning.

With this in mind, please consider doing what's best for the big picture and not merely a politically correct decision such as \\\"restoring\\\" something that is just ok the way it is.

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3

The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€“ cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€“ with some suggestions for necessary changes.

H2

First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

Thank you for accepting and considering my comment.

Sincerely,

Elvie Miller
Meadowlark Log Homes

--
Elvie and Rebekah Miller
cell 406 250 7715
home 406 293 9011

Sincerely,

Elvie Miller

2011-07-08 Uphus S. pdf

Sharel Uphus
PO Box 857
Whitehall, MT 59759
406-491-5036

July 8, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Montana DEQ and Kootenai National Forest:

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Sincerely yours,

Sincerely,

Sharel Uphus

2011-07-12 McGillM.pdf

Marc McGill
1309 Airth Ave.
Libby, MT 59923
283-1084

July 12, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please accept my following comments for the proposed reclamation plan revisions at the Troy mine. I fully support the mine and their desire to continue operating under the Company Proposed Action.

E7 With thirty years of documented analysis and several studies completed during the impoundments history showing no environmental impacts to water or wildlife this plan should be approved.

K1 We as a society have very few examples where we actually extract mineral resources from deposits such as these that are so benign and have no long lasting negative impacts to the environment. I have seen firsthand the impoundment and the abundance of existing wildlife that cohabitates it. The fisheries have had zero negative impacts from this impoundment and the attenuation study done while the mine was dormant clearly illustrates what to expect when this operation is decommissioned.

D1

G3 Between now and then, allowing this permit to move forward will allow for the mine to continue operating in a responsible manner. The contribution of millions of dollars every month into the local and state economy will continue and the 190 employees and their families will have continued job security.

I urge the agencies to approve this plan as soon as possible and thank you for allowing me to comment.

Sincerely,

Sincerely,

Marc McGill

2011-07-15 Bennion J-MCC.pdf

Jon Bennion
89 Whitetail
Clancy, MT 59634
406-442-2405

July 15, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

Thank you for allowing me to comment on the Troy Mine Draft EIS. The Montana Chamber of Commerce is very committed to promoting natural resource development projects, but only if they will be done in ways that minimize impacts to the environment.

After reviewing the studies, I believe the agency mitigated preferred alternative is the right action moving forward, but I would like to suggest a few modifications to it before the ROD is issued.

E7 First, I would like to applaud the agency for recognizing that the current water treatment at the site for 30 years now has been a complete success, and that no further additional requirements such as a water treatment facility will be necessary. The water being discharged from the Troy mine (even while in operation) meets drinking water standards, and aquatic standards are met within two inches of filtration at the tailings impoundment, as has been illustrated during the thirty years of aggressive monitoring. With the low copper and nitrate levels being attenuated with relative ease during operations, previous monitoring of the water while operations were idle provides clear and defensible scientific data that these low levels of copper and nitrates are significantly reduced even further and will pose no threat to either surface or groundwater upon decommissioning.

H1 K1 H2 After reading through the preferred actions during the final reclamation of the tailings impoundment, I question the use of the topsoil that is being proposed to be used at a cap on the impoundment. This requirement will needlessly disturb the area immediately adjacent to Lake Creek and the great wildlife habitat that has resulted around the toe ponds over the last 30 years. The Western Toad, a sensitive species, has found this area to be great habitat and it makes no sense to adversely impact it when there is other material that could be used that will more than adequately meet reclamation standards. The proposed action by Revett was to use the course borrow that is approximately 3,000 feet away as the cap material. This material has been proven to be more than adequate for reclamation as has been illustrated in the documented test plots over the last several years.

E1
E2
E3

I also question the need to replace the seven miles of pipelines that have several decades of safe use left in them and the requirement to bury replacement lines. If there is a need to replace the pipelines that will essentially be carrying clean water, they should be left above ground next to the access road, where they are currently located. Should there be a leak in a buried line, how long would it be before detected? How much disturbance will be required every time the line is to be inspected? If the mine operates for another 10 years, the logic requiring the lines to be replaced then would require then to be replaced every 40 years. Does it make sense to disturb the entire watershed by digging up seven miles of pipeline every 40 years regardless of the pipeline's condition? Leaving the lines above ground will allow for much easier monitoring and replacement should the lines ever need it. The long term impacts to the watershed with this proposed action should be heavily considered and revisited before a final determination is made.

I1

One last suggestion I would like to make is regarding the access road itself. The proposed alternative would have the company remove the asphalt and return to a gravel surface. Why is this being required? MTâ€™s 62nd legislature just passed a piece of legislation regarding TMDLâ€™s that was aimed at reducing opportunities for sediments to get into waterways. One of the best ways to minimize sediment loads is to put asphalt on roads; this requirement seems to fly in the face of the same mitigation requirements that led to the road being covered with asphalt in the first place.

G3

In closing, I would like to comment on the importance of this applications approval. This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. These areas have some of the highest unemployment rates in the state, but have hundreds of folks eager and ready to work. There are over 190 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes. Good development projects like the Troy Mine help the overall state economy as well.

Montana has always been the â€œTreasure State,â€• and we must do everything we can to help keep it that way. This project allows us to develop some of those treasures, while also protecting the natural treasures of the land and water for future generations.

Thank you for considering my support for the agency mitigated alternative, and the common sense modifications that should be reconsidered before the ROD is issued.

Sincerely,

Jon Bennion
Government Relations Director
Montana Chamber of Commerce
406-442-2405, ext. 104
jon@montanachamber.com

Sincerely,

Jon Bennion

2011-07-22 McLeodP.pdf

From: Pat McLeod
To: TroyMineReclamation@fs.fed.us; DEQ Troy Mine
Subject: Troy Mine EIS
Date: Friday, July 22, 2011 7:34:21 AM

RE: Environmental Impact Study for the Troy Mine Tailings Impoundment Reclamation Plan

Please consider:

B1
F1
H3
H1
E12

- placing the buildings in the mine.
- leaving the paved road to leading to Spar Lake open to the public.
- using composite to provide the organic material needed for the top soil. Leave the top soil that was stock piled where it is because it is now supporting new vegetation.
- assuring monitoring and recording for any signs of harmful material.

Thank you

Pat McLeod
904 Winchester Ct
Friendswood, TX 77546

pat_mcleod@yahoo.com

2011-07-24 Lopushok P.pdf

From: peter lopushok
To: Paul Bradford; DEQ Troy Mine
Subject: EIS for troy Mine Taillings
Date: Sunday, July 24, 2011 11:43:32 PM

Gentalman,

H1 The original plan called for reclaiming top soil that was stockpiled below the impoundment, the mine managers are reluctand to do so, I say they should do so.

I1 I2 F2 The present paved mine road should be left intact. The portion leading to the Spar Lake fork should remain open for public use. Beyond the fork, the mine road should be gated. The removal of the paved road and replace it with gravel is an unnecessary, uneconomical and unsound project. As for the agencies advise, of hauling the concreate block buildings

B1 to Colorado for disposal, because of the rebar, they could be placed in the mine. If it's the steel rebar in the buildings that is of agencies concern, then why hasn't the 500 tons of iron released into the tailings impoundment annually through the milling prosses been analyzed.

E12 In accordance with EPA's Emergency Planning and Community Right to Know Act (EPCRA) Section 313 Toxics Release Inventory (TRI) we request a TRI log for as far back as possible. There are a lot of solvents, grease, lube oils and cleaning agents that should be accounted for.

E13 An investigation of the "Midnight Barrel Burials " must be included in the EIS and the barrels contents must be known to create a useful EIS.

Sincerely,

Peter Lopushok
Cabinet Resource Group, board member
221 Mt. Hwy 200
Heron Mt. 59844
pclopushok@wildblue.net
406-847-2330

2011-07-26 GariglettiR.pdf

From: Randy Gariglietti
To: troyminereclamation@fs.fed.us
Subject: Troy Mine
Date: 07/26/2011 03:17 PM

This letter is in regard to the Environmental Impact Study for the Troy Mine Tailings Impoundment Reclamation Plan.

H1 The original [*i.e. proposed]* plan called for reclaiming top soil that was stockpiled below the impoundment. Since then, toe ponds and natural regeneration have made this plan questionable. Revett has expressed concern that disturbance of this already vegetated area would create great potential for siltation into Lake Creek, and we share this concern. Revett suggests borrowing material from the east

H2 side of the tailings impoundment to cover the tailings, pointing out that the soil is already supporting trees on the reclaimed lower slopes of the tailing dike. DEQ is concerned that more organic materials are needed and we agree with this. [redacted]

H3 [redacted]

I1 The [redacted]. The portion leading to the Spar Lake fork should

I2 remain open for public use. Beyond the fork, the road should be gated. Removal of the paved road to replace with gravel is an unnecessary, uneconomical and unsound project.

B1 Rather than--as the agencies advise-- hauling the buildings to another disposal site or --as Revett has suggested -- digging a hole and burying them, [redacted] If it is the steel rebar in the buildings that is of agency concern, then why hasn't the 500 tons of iron released into the tailings impoundment annually through the milling process been analyzed?

E12 [redacted] *[be made available].* There are a lot of solvents, grease, and lube oils that should be accounted for.

E13 [redacted]. Testimony given under oath from a former mine manager and ground penetrating radar surveys prove barrels are buried in the tailings. We hope that no toxic compounds were in these barrels, but the initial denial, the night time disposal, and the admission of alleged "just flocculents" causes great concern. The barrels'contents must be known to create a useful EIS.

Thank you,
Randy Gariglietti
1574 Lake Creek Road
Troy, Mt 59935

2011-07-28 Anderson C. pdf

Cole Anderson
625 Schoolhouse Lk Road
Troy, MT 59935
4062955340

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ:

Please accept my recommendations to the proposed Troy reclamation revisions. I believe that requiring the company to tear down the existing pipeline that is in great shape to replace it with another one immediately upon decommissioning of the mine is not a reasonable requirement. An even more unreasonable request would be to require the company to bury the line.

E1 At a minimum, the document should contain a discussion about the actual condition of the pipeline, how long it is expected to last and a much stronger discussion of why the pipeline should be buried.

After decommissioning, the pipeline will be carrying nothing but clean water and could last another fifty years before it needs replaced. Perhaps you could allow the pipeline to stay above ground and require the Company to repair or replace the line if it becomes necessary or to provide data about the condition of the line periodically to the agencies. I hope that the final reclamation plan allows the existing pipeline to be used until it needs replaced and that it is replaced with another in the same place alongside the road for easy monitoring into the future.

Thank you for considering my common sense recommendations and thank you for approving the Troy mine reclamation plans so they can continue to employ the almost two hundred men and women that depend on it.

Sincerely yours,

Sincerely,

Cole Anderson

2011-07-28 Beard J. pdf

Justin Beard
185 Bighorn Way
Troy, MT 59935
4062959454

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Justin Beard

2011-07-28 Boswell M.pdf

Mark Boswell
po box 457
Troy, MT 59935
295-9016

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Mark Boswell

2011-07-28 BrickerD.pdf

Derek Bricker
375 Conifer
Libby, MT 59923
4062831204

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Thank you for accepting the following comments on the revised reclamation plan for the Troy mine. I would like to focus my comments on the DEIS to the pipeline and impoundment mitigation recommendations. In general, I support the reclamation plan but there are areas that don't make a great deal of sense to me and that I fmd contradictory or unnecessary.

E1 Why would you want to dig up and disturb more ground if you were going to decommission the existing water pipeline and replace it with a new one for adit discharges? Aren't we trying to minimize TMDL impacts in the watershed? Why not just make safety precautions or improvements to the existing pipeline that has more than adequate capacity and seems to be working just fine?

If you did require replacement, why would you want it buried when it would be much more difficult to monitor in the future? Why would you want to disturb ground to bury it originally and perhaps again to repair or replace the line when it is completely unnecessary?

K1 H3 Wouldn't using the toe pond stockpiled top soils for reclamation impact the western toad that currently has great habitat there now? Why not just use the coarse borrow material east of the impoundment instead? The DIES indicates that this could be just as successful in achieving reclamation goals and criteria. Are the wood based organic amendments that add 1,100 lbs of nitrogen per acre for the mill and impoundment really necessary? What is mycorrhizal fungi and why is it needed for reclamation at the mill? Why are the agencies requiring organic versus chemical fertilizer for reclamation in general?

Thank you for listening and I look forward to seeing the final reclamation plan include some further modifications to address some of the areas I have outlined above.

Respectfully,

Sincerely,

Derek Bricker

2011-07-28 Carlberg L. pdf

Levi Carlberg
2107 Farm to Market
Libby, MT 59923
4062932318

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Levi Carlberg

2011-07-28 CaudillR.pdf

Ron Caudill
80 Wood Street
Libby, MT 59923
293-6909

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road?

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

Ron Caudill

2011-07-28 Chambers R. pdf

Roland Chambers
12 Pillick Ridge Lane
Noxon, MT 59853
529-5294

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,

Sincerely,

Roland Chambers

2011-07-28 Colgan B. pdf

Ben Colgan
PO Box 1050
Troy, MT 59935
4062911239

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Thank you for accepting the following comments on the revised reclamation plan for the Troy mine. I would like to focus my comments on the DEIS to the pipeline and impoundment mitigation recommendations. In general, I support the reclamation plan but there are areas that don't make a great deal of sense to me and that I find contradictory or unnecessary.

E1 Why would you want to dig up and disturb more ground if you were going to decommission the existing water pipeline and replace it with a new one for adit discharges? Aren't we trying to minimize TMDL impacts in the watershed? Why not just make safety precautions or improvements to the existing pipeline that has more than adequate capacity and seems to be working just fine?

If you did require replacement, why would you want it buried when it would be much more difficult to monitor in the future? Why would you want to disturb ground to bury it originally and perhaps again to repair or replace the line when it is completely unnecessary?

K1 H3 Wouldn't using the toe pond stockpiled top soils for reclamation impact the western toad that currently has great habitat there now? Why not just use the coarse borrow material east of the impoundment instead? The DIES indicates that this could be just as successful in achieving reclamation goals and criteria. Are the wood based organic amendments that add 1,100 lbs of nitrogen per acre for the mill and impoundment really necessary? What is mycorrhizal fungi and why is it needed for reclamation at the mill? Why are the agencies requiring organic versus chemical fertilizer for reclamation in general?

Thank you for listening and I look forward to seeing the final reclamation plan include some further modifications to address some of the areas I have outlined above.

Respectfully,

Sincerely,

Ben Colgan

2011-07-28 ConnerD.pdf

Denise Conner
106 Ski Road
Libby, MT 59923
293-7145

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Denise Conner

2011-07-28 Coon P. pdf

Paul Coon
83 Swanson Rd
Troy, MT 59935
4062938876

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Paul Coon

2011-07-28 JaynesK.pdf

Kirk Jaynes
PO Box 624
Libby, MT 59923
291-5328

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

Thank you for your time.

Very truly yours,

Sincerely,

Kirk Jaynes

2011-07-28 JulsonR.pdf

Ross Julson
930 Quartz Rd
Libby, MT 59923
4062935278

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

Thank you for the opportunity to comment on the proposed revisions to the Troy reclamation plans. I would like to give my support for the preferred alternative as selected by the agencies, but would like to see some modifications to it.

I1 I don't understand why you would be taking the asphalt off of the road and returning the road surface to dirt. Wouldn't this create more BMP work to ensure that TMDLs are as low as possible? The current road needs some repair, but the costs of those repairs would be virtually insignificant compared to the long term work and maintenance you would be avoiding by doing so. I would imagine as this is a Forest Service road that it will also have
I2 a gate on it not far from the tailings impoundment, which would allow the asphalt to have a very good life span for continued access for monitoring of the pipelines carrying water from the adit.

E2 This brings me to my next issue with the preferred alternative. I don't understand why you want to require the Company to bury the pipeline underground when it could be monitored and accessed easily if it was left above ground and next to the road. Putting strict monitoring requirements on the existing line until it truly needs replaced and making them bond to replace it with an above ground line seems like the most common sense approach that will have the least impact to the watershed long term.

Please consider my suggestions before making your final decision.

Sincerely,

Sincerely,

Ross Julson

2011-07-28 Keller K.pdf

Kyle Keller
PO Box 1058
Libby, MT 59923
4062931902

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road?

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

Kyle Keller

2011-07-28 LameyC.pdf

Cody Lamey
225 Redfox
Lolo, MT 59847
283-1101

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

K1 I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

H1 From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same
H2 reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

Thank you for your consideration of my comments.

Respectfully,

Sincerely,

Cody Lamey

2011-07-28 Lampshire T. pdf

Tom Lampshire
12 Lodgepole Lane
Thompson Falls, MT 59873
546-2853

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

Tom Lampshire

2011-07-28 Leir R. pdf

Randy Leir
803 Dakota Av
Libby, MT 59923
4062934624

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

Randy Leir

2011-07-28 LeivestadRO.pdf

July 28, 2011

Paul Bradford, Forest Supervisor
Kootenai National Forest
31374 US 2
Libby, MT 59923-3022

RE: Public Comments re Troy Mine Reclamation Plan

Dear Sir:

E13 It is important that prior to other reclamation work, the buried barrels MUST be dug up to determine what is inside before they corrode and leak their contents. The toxic materials used must be made public. Maybe there is nothing toxic inside but the shroud of secrecy is puzzling.

J3 A5 Finally, there must be 1) enough organic soil to properly revegetate the entire tailings impoundment, and 2) a reclamation and contingency bond large enough to cover the cost of a worst case scenario.

Thank you.

Sincerely,

Ole Leivestad
Rusti Leivestad

Ole and Rusti Leivestad
28 Fern Hollow Drive
Trout Creek, MT 59874

AUG 01 2011
RECEIVED

2011-07-28 Leverette K.pdf

Kurt Leverette
PO Box 925
Troy, MT 59935
249-4909

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state.

For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife.

E7 K2 Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E1 E2 Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

Thank you for your time,

Sincerely,

Kurt Leverette

2011-07-28 LymanDa.pdf

From: D Lyman
To: DEQ Troy Mine
Subject: Troy Mine draft EIS - reclamation
Date: Thursday, July 28, 2011 7:28:55 PM

Richard Opper, Director
Montana Department of Environmental Quality

Dear Mr. Opper,
I am writing to submit my comments regarding the Troy Mine Tailings (and other) Reclamation Plan draft EIS. My comments are summarized below.

E11 My primary concerns have always been related to water, its pollution as a result of mine development and operation and its disposal back into the environment. The EIS should identify and specify all water resources that have been or will be impacted by the operation or the closing of the mine. Monitoring, in 'perpetuity', if necessary to assure the best possible treatment or simple discharge should be required. A complete inventory of all chemicals, solvents, fuels and other serious pollutants should be provided by Revett in the form of a Toxic Release Log. Any spill sites identified in the EIS should be evaluated and treated as needed as a part of the Reclamation Plan.

E12

I1 The paved mine road should be left intact to reduce the volume of dust on the road leading to Spar Lake. The road that forks off of the Spar Lake road should be gated. All other parking areas, storage areas, material staging areas should be covered with topsoil and re-vegetated. The buildings should be stripped of all hazardous materials and recyclable materials and then be demolished. The hazardous materials should be removed from the site for proper disposal and the recyclable materials could be sold. The remaining building rubble should be trucked back into the mine for disposal.

I2

B1

E13 Since I have been following the Troy mine since it was built, I would like to request that the EIS call for a complete investigation and resolution of the missing, buried barrels that are in the tailings piles. Since no one has any certain knowledge of the contents but all parties acknowledge their existence, Revett should investigate, identify the contents and then proceed with whatever treatment is required before reclaiming the tailings piles.

H3 The tailings piles should be covered with topsoil to an appropriate depth and if there is not enough topsoil available at the site I would suggest hiring a large slash chipper to process waste wood and other organic material for mixing with the available topsoil so that the job can be done right. The covered piles should be re-vegetated with appropriate plants and trees.

J2

Sincerely,
Dave Lyman
34 Beaver Peak Road
Heron, MT 59844
406-847-2388

2011-07-28 LymanDe. pdf

From: D Lyman
To: DEQ Troy Mine
Subject: Troy Mine draft EIS - reclamation
Date: Thursday, July 28, 2011 7:52:21 PM

Richard Opper, Director
Montana Department of Environmental Quality
Dear Mr. Opper,
I am writing to submit my comments regarding the Troy Mine Tailings (and other) Reclamation Plan draft EIS. My comments are summarized below.

E11 My primary concerns have always been related to water, its pollution as a result of mine development and operation and its disposal back into the environment. The EIS should identify and specify all water resources that have been or will be impacted by the operation or the closing of the mine. Monitoring, in 'perpetuity', if necessary to assure the best possible treatment or simple

E12 discharge should be required. A complete inventory of all chemicals, solvents, fuels and other serious pollutants should be provided by Revett in the form of a Toxic Release Log. Any spill sites identified in the EIS should be evaluated and treated as needed as a part of the Reclamation Plan.

I1 The paved mine road should be left intact to reduce the volume of dust on the road leading to Spar Lake. The road that forks off of the Spar Lake road should be gated. All other parking areas, storage

I2 areas, material staging areas should be covered with topsoil and re-vegetated. The buildings should be stripped of all hazardous materials and recyclable materials and then be demolished. The

B1 hazardous materials should be removed from the site for proper disposal and the recyclable materials could be sold. The remaining building rubble should be trucked back into the mine for disposal.

Since I have been following the Troy mine since it was built, I would like to request that the EIS call for a complete investigation and resolution of the missing, buried barrels that are in the tailings

E13 piles. Since no one has any certain knowledge of the contents but all parties acknowledge their existence, Revett should investigate, identify the contents and then proceed with whatever treatment is required before reclaiming the tailings piles.

H3 The tailings piles should be covered with topsoil to an appropriate depth and if there is not enough topsoil available at the site I would suggest hiring a large slash chipper to process waste wood and

J2 other organic material for mixing with the available topsoil so that the job can be done right. The covered piles should be re-vegetated with appropriate plants and trees.

Sincerely,
Debbie S. Lyman
34 Beaver Peak Road
Heron, MT 59844
406-847-2388

2011-07-28 mclindenD.pdf

Daniel Mclinden
PO Box 44
Noxon, MT 59853
4068472693

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

Daniel Mclinden

2011-07-28 Moe R. pdf

Ron Moe
311 Parmenter Cr Rd
Libby, MT 59923
4062938358

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road?

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

Ron Moe

2011-07-28 Pattie D. pdf

Donald Pattie
PO Box 901
Troy, MT 59935
4062959489

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Donald Pattie

2011-07-28 PettyD.pdf

Dean Petty
121 Shingle Mill LP
Bonners Ferry, ID 83805
208-946-9744

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state.

For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife.

E7 K2 Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E1 E2 Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

Thank you for your time,

Sincerely,

Dean Petty

2011-07-28 Ratliff D. pdf

Donald Ratliff
111 Vista Loop
Kalispell, MT 59901
4062147205

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Montana DEQ and Kootenai National Forest:

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Sincerely yours,

Sincerely,

Donald Ratliff

2011-07-28 RoseJ.pdf

Joseph Rose
PO 1094
Troy, MT 59935
4062955538

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Joseph Rose

2011-07-28 Shaw J.pdf

Jim Shaw
104 Granite St.
Libby, MT 59923
291-6561

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Jim Shaw

2011-07-28 Singbeil T.pdf

Tad Singbeil
PO Box 1464
Noxon, MT 59853
498-8623

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

Tad Singbeil

2011-07-28 Thorstenson R.pdf

Rod Thorstenson
PO Box 197
Libby, MT 59923
334-1944

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road?

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

Rod Thorstenson

2011-07-28 WallaceV.pdf

Vaughn Wallace
106 Ski Road
Libby, MT 59923
293-7145

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

Thank you for the opportunity to comment on the proposed revisions to the Troy reclamation plans. I would like to give my support for the preferred alternative as selected by the agencies, but would like to see some modifications to it.

I1 I don't understand why you would be taking the asphalt off of the road and returning the road surface to dirt. Wouldn't this create more BMP work to ensure that TMDLs are as low as possible? The current road needs some repair, but the costs of those repairs would be virtually insignificant compared to the long term work and maintenance you would be avoiding by doing so. I would imagine as this is a Forest Service road that it will also have a gate on it not far from the tailings impoundment, which would allow the asphalt to have a very good life span for continued access for monitoring of the pipelines carrying water from the adit.

I2

E2 This brings me to my next issue with the preferred alternative. I don't understand why you want to require the Company to bury the pipeline underground when it could be monitored and accessed easily if it was left above ground and next to the road. Putting strict monitoring requirements on the existing line until it truly needs replaced and making them bond to replace it with an above ground line seems like the most common sense approach that will have the least impact to the watershed long term.

Please consider my suggestions before making your final decision.

Sincerely,

Sincerely,

Vaughn Wallace

2011-07-28 Warner J. pdf

Joe Warner
56 W Pipe Cr Rd
Libby, MT 59923
4062932482

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Joe Warner

2011-07-28 Wilson A. pdf

Austin Wilson
2317 MT Hwy 200
Trout Creek, MT 59874
847-9669

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state.

For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife.

E7 K2 Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E1 E2 Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

Thank you for your time,

Sincerely,

Austin Wilson

2011-07-28 WurzB.pdf

Ben Wurz
63 timberlane
Libby, MT 59923
4062937485

July 28, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Thank you for accepting the following comments on the revised reclamation plan for the Troy mine. I would like to focus my comments on the DEIS to the pipeline and impoundment mitigation recommendations. In general, I support the reclamation plan but there are areas that don't make a great deal of sense to me and that I find contradictory or unnecessary.

E1 Why would you want to dig up and disturb more ground if you were going to decommission the existing water pipeline and replace it with a new one for adit discharges? Aren't we trying to minimize TMDL impacts in the watershed? Why not just make safety precautions or improvements to the existing pipeline that has more than adequate capacity and seems to be working just fine?

If you did require replacement, why would you want it buried when it would be much more difficult to monitor in the future? Why would you want to disturb ground to bury it originally and perhaps again to repair or replace the line when it is completely unnecessary?

K1 H3 Wouldn't using the toe pond stockpiled top soils for reclamation impact the western toad that currently has great habitat there now? Why not just use the coarse borrow material east of the impoundment instead? The DIES indicates that this could be just as successful in achieving reclamation goals and criteria. Are the wood based organic amendments that add 1,100 lbs of nitrogen per acre for the mill and impoundment really necessary? What is mycorrhizal fungi and why is it needed for reclamation at the mill? Why are the agencies requiring organic versus chemical fertilizer for reclamation in general?

Thank you for listening and I look forward to seeing the final reclamation plan include some further modifications to address some of the areas I have outlined above.

Respectfully,

Sincerely,

Ben Wurz

2011-07-28 Zajanc G. pdf

Gary Zajanc
318 Wards Rd
Libby, MT 59923
4062931130

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ:

Please accept my recommendations to the proposed Troy reclamation revisions. I believe that requiring the company to tear down the existing pipeline that is in great shape to replace it with another one immediately upon decommissioning of the mine is not a reasonable requirement. An even more unreasonable request would be to require the company to bury the line.

E1 At a minimum, the document should contain a discussion about the actual condition of the pipeline, how long it is expected to last and a much stronger discussion of why the pipeline should be buried.

After decommissioning, the pipeline will be carrying nothing but clean water and could last another fifty years before it needs replaced. Perhaps you could allow the pipeline to stay above ground and require the Company to repair or replace the line if it becomes necessary or to provide data about the condition of the line periodically to the agencies. I hope that the final reclamation plan allows the existing pipeline to be used until it needs replaced and that it is replaced with another in the same place alongside the road for easy monitoring into the future.

Thank you for considering my common sense recommendations and thank you for approving the Troy mine reclamation plans so they can continue to employ the almost two hundred men and women that depend on it.

Sincerely yours,

Sincerely,

Gary Zajanc

2011-07-29 Benson M. pdf

Mitchell Benson
PO Box 654
Troy, MT 59935
295-5014

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3

The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€“ cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€“ with some suggestions for necessary changes.

H2

First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected

H2 during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

Thank you for accepting and considering my comment.

Sincerely,

Sincerely,

Mitchell Benson

2011-07-29 Boespflug D. pdf

Darby Boespflug
1461 Sundowner CT APT A
San Diego, CA 92126

July 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please accept my following comments for the proposed reclamation plan revisions at the Troy mine. I fully support the mine and their desire to continue operating under the Company Proposed Action. I have many family members working a the mine who may be out of a good job if the mine does not continue operating. It is a good resource for the residents of Troy, as well as Libby.

E7 With thirty years of documented analysis and several studies completed during the impoundments history showing no environmental impacts to water or wildlife this plan should be approved.

K1 D1 We as a society have very few examples where we actually extract mineral resources from deposits such as these that are so benign and have no long lasting negative impacts to the environment. I have seen firsthand the impoundment and the abundance of existing wildlife that cohabitates it. The fisheries have had zero negative impacts from this impoundment and the attenuation study done while the mine was dormant clearly illustrates what to expect when this operation is decommissioned.

G3 Between now and then, allowing this permit to move forward will allow for the mine to continue operating in a responsible manner. The contribution of millions of dollars every month into the local and state economy will continue and the 190 employees and their families will have continued job security.

I urge the agencies to approve this plan as soon as possible and thank you for allowing me to comment.

Sincerely,

Sincerely,

Darby Boespflug

2011-07-29 Boespflug N.pdf

Nate Boespflug
1461 Sundowner CT APT A
San Diego, CA 92126

July 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please accept my following comments for the proposed reclamation plan revisions at the Troy mine. I fully support the mine and their desire to continue operating under the Company Proposed Action.

E7 K1 D1

With thirty years of documented analysis and several studies completed during the impoundments history showing no environmental impacts to water or wildlife this plan should be approved.

We as a society have very few examples where we actually extract mineral resources from deposits such as these that are so benign and have no long lasting negative impacts to the environment. I have seen firsthand the impoundment and the abundance of existing wildlife that cohabitates it. The fisheries have had zero negative impacts from this impoundment and the attenuation study done while the mine was dormant clearly illustrates what to expect when this operation is decommissioned.

G3

Between now and then, allowing this permit to move forward will allow for the mine to continue operating in a responsible manner. The contribution of millions of dollars every month into the local and state economy will continue and the 190 employees and their families will have continued job security.

I urge the agencies to approve this plan as soon as possible and thank you for allowing me to comment.

Sincerely,

Sincerely,

Nate Boespflug

2011-07-29 BrownJ.pdf

Justin Brown
2462 Montana HWY 200
Trout Creek, MT 59874
827-8181

July 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Justin Brown

2011-07-29 Brown M.pdf

Matt Brown
160 Swamp Creek Loop
Trout Creek, MT 59874
827-0438

July 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

Matt Brown

2011-07-29 Byrd J. pdf

John Byrd
565 Spencer Rd
Libby, MT 59923
4062919571

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

John Byrd

2011-07-29 DavisW.pdf

Ward Davis
249 Copper Mt Rd
Troy, MT 59935
4062955558

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1 E1 You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5 The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

Ward Davis

2011-07-29 Dolan M. pdf

Mark Dolan
PO Box 302
Troy, MT 59935
4062955867

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please accept my following comments for the proposed reclamation plan revisions at the Troy mine. I fully support the mine and their desire to continue operating under the Company Proposed Action.

E7
K1
D1

With thirty years of documented analysis and several studies completed during the impoundments history showing no environmental impacts to water or wildlife this plan should be approved.

We as a society have very few examples where we actually extract mineral resources from deposits such as these that are so benign and have no long lasting negative impacts to the environment. I have seen firsthand the impoundment and the abundance of existing wildlife that cohabitates it. The fisheries have had zero negative impacts from this impoundment and the attenuation study done while the mine was dormant clearly illustrates what to expect when this operation is decommissioned.

Between now and then, allowing this permit to move forward will allow for the mine to continue operating in a responsible manner. The contribution of millions of dollars every month into the local and state economy will continue and the 190 employees and their families will have continued job security.

I urge the agencies to approve this plan as soon as possible and thank you for allowing me to comment.

Sincerely,

Sincerely,

Mark Dolan

2011-07-29 Erickson O. pdf

Owen Erickson
61 Halo Drive
Troy, MT 59935
291-7095

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,

Sincerely,

Owen Erickson

2011-07-29 Farmer C. pdf

Cory Farmer
1384 Kootenai River Rd
Libby, MT 59923
406.293.1018

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,

Sincerely,

Cory Farmer

2011-07-29 Foote C. pdf

Chris Foote
PO Box 125
Troy, MT 59935
291-6346

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7 Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1 I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,

Sincerely,

Chris Foote

2011-07-29 Fredin 8.pdf

Stephanie Fredin
169 Mt Zion Rd
Libby, MT 59923
406-293-6335

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

G1 The price of silver is high right now, so the mine becomes very profitable for this area. Also, unemployment in Libby/Troy area is at 20%. We need jobs and the mine provides good paying ones.

Thank you for your time.

Very truly yours,

Sincerely,

Stephanie Fredin

2011-07-29 Hawthorne C. pdf

Chris Hawthorne
PO Box 12
Troy, MT 59935
295-7005

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3 The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€“ cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€“ with some suggestions for necessary changes.

H2 First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected

H2 during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

Thank you for accepting and considering my comment.

Sincerely,

Sincerely,

Chris Hawthorne

2011-07-29 Higareda M. pdf

Mike Higareda
1015 Nevada Ave.
Libby, MT 59923
293-3581

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

Thank you for the opportunity to comment on the proposed revisions to the Troy reclamation plans. I would like to give my support for the preferred alternative as selected by the agencies, but would like to see some modifications to it.

I1 I don't understand why you would be taking the asphalt off of the road and returning the road surface to dirt. Wouldn't this create more BMP work to ensure that TMDLs are as low as possible? The current road needs some repair, but the costs of those repairs would be virtually insignificant compared to the long term work and maintenance you would be avoiding by doing so. I would imagine as this is a Forest Service road that it will also have

I2 a gate on it not far from the tailings impoundment, which would allow the asphalt to have a very good life span for continued access for monitoring of the pipelines carrying water from the adit.

E2 This brings me to my next issue with the preferred alternative. I don't understand why you want to require the Company to bury the pipeline underground when it could be monitored and accessed easily if it was left above ground and next to the road. Putting strict monitoring requirements on the existing line until it truly needs replaced and making them bond to replace it with an above ground line seems like the most common sense approach that will have the least impact to the watershed long term.

Please consider my suggestions before making your final decision.

Sincerely,

Sincerely,

Mike Higareda

2011-07-29 HolcombM.pdf

Mike Holcomb
213 W Balsam
Libby, MT 59923
4062933520

July 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

Thank you for your time.

Very truly yours,

Sincerely,

Mike Holcomb

2011-07-29 Holder J. pdf

Jeff Holder
154 Noerman Av
Libby, MT 59923
4062938220

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€" one half of which are purchased in Montana â€" are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€" and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

Jeff Holder

2011-07-29 JensenC.pdf

Clint Jensen
PO Box 71
Heron, MT 59844
4068472127

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

Clint Jensen

2011-07-29 JungstM.pdf

Matt Jungst
37694 Hwy 2
Libby, MT 59923
293-6491

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state.

For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife.

E7 K2 Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E1 E2 Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

Thank you for your time,

Sincerely,

Matt Jungst

2011-07-29 Kanzler K. pdf

Kent Kanzler
PO Box 1041
Troy, MT 59935
291-2638

July 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road?

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

Kent Kanzler

2011-07-29 KimK.pdf

Kasie Kim
208 W. Balsam St.
Libby, MT 59923
406-293-5696

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state.

E7 For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife.

K2 Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E1 E2 Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

Thank you for your time,

Sincerely,

Kasie Kim

2011-07-29 KochD.pdf

Dan Koch
PO Box 32
Troy, MT 59935
295-7066

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

K1
H1
H2

I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

Thank you for your consideration of my comments.

Respectfully,

Sincerely,

Dan Koch

2011-07-29 KyrissJ.pdf

Jon Kyriss
PO Box 772
Libby, MT 59923
4062912798

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

Jon Kyriss

2011-07-29 LauttR.pdf

Rod Lautt
173 Frazey Lp
Libby, MT 59923
4062917437

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

Rod Lautt

2011-07-29 Lucibello C. pdf

Charla Lucibello
918 Idaho Ave PMB 179
Libby, MT 59923
406-334-0185

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Charla Lucibello

Sincerely,

Charla Lucibello

2011-07-29 mackM.pdf

Margaret Mack
2044 Rocky draw Road
troy, MT 59935
4062955207

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

Thank you for your time.

Very truly yours,

Sincerely,

Margaret Mack

2011-07-29 Matott J. pdf

Judy Matott
180 Parmenter Ave.
Libby, MT 59923
406-293-3366

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Montana DEQ and Kootenai National Forest:

G1 Both the Troy Mine, and Montanore Mine have met evry demand thus far. STOP DELAYS, STOP MAKING UNNECESSARY, MORE COSTLY, DEMANDS. PUTOUR PEOPLE TO WORK AT THE MONTANORE MINE, AND KEEP THE TROY MINE GOING. DON'T KILL JOBS ... HELP CREATE THEM! BOTH MINES HAVE JUMPED THROUGH ENOUGH HOOPS.

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water

E1 quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Sincerely yours,

Sincerely,

Judy Matott

2011-07-29 Medlinger R. pdf

Ryan Medlinger
1037 Kern
Troy, MT 59935
295-5529

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

Ryan Medlinger

2011-07-29 PeekJ.pdf

Johnny Peek
89 Vaughn Ln Space 3
Libby, MT 59923
4062930935

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Please accept my comments for the Troy Mine revised reclamation plans that have been submitted to your agency. After reading most of the DEIS, I wanted to applaud the agency and the diligent work that it has done in coming up with its preferred alternative.

E1 I would like to comment on two things that I believe may need changed before the final decision to move forward with your preferred approach is made. One is the pipeline that you are requiring to be buried. I'm no hydrologist, but it just seems silly to be burying a pipeline that may need dug up and replaced later if in fact you are accurate that the water needs to go through the infiltration process at the impoundment. Why tear up the entire hillside when you could just put it above ground next to the road as it is now for easy access in case there is a problem decades down the road?

H1 K1 Another is with regards to the toe ponds that have all the topsoil that is being recommended to cover the impoundment for reclamation. There has been a lot of praise to the company because of the habitat that has been created for the western toad. It would seem like a no brainer that they use the course borrow to reclaim it even if it takes a bit longer to achieve the standards required. How long will it take to replace the habitat for the western toad?

Thanks for your consideration,

Sincerely,

Johnny Peek

2011-07-29 Pepiot J.pdf

Joe Pepiot
217 Estate Dr
troy, MT 59935
4062959974

July 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,

Sincerely,

Joe Pepiot

2011-07-29 Posselt K. pdf

Kim Posselt
15417 Bull Lake Road
Troy, MT 59935
295-9581

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ:

E1

Please accept my recommendations to the proposed Troy reclamation revisions. I believe that requiring the company to tear down the existing pipeline that is in great shape to replace it with another one immediately upon decommissioning of the mine is not a reasonable requirement. An even more unreasonable request would be to require the company to bury the line.

At a minimum, the document should contain a discussion about the actual condition of the pipeline, how long it is expected to last and a much stronger discussion of why the pipeline should be buried.

After decommissioning, the pipeline will be carrying nothing but clean water and could last another fifty years before it needs replaced. Perhaps you could allow the pipeline to stay above ground and require the Company to repair or replace the line if it becomes necessary or to provide data about the condition of the line periodically to the agencies. I hope that the final reclamation plan allows the existing pipeline to be used until it needs replaced and that it is replaced with another in the same place alongside the road for easy monitoring into the future.

Thank you for considering my common sense recommendations and thank you for approving the Troy mine reclamation plans so they can continue to employ the almost two hundred men and women that depend on it.

Sincerely yours,

Sincerely,

Kim Posselt

2011-07-29 Savage S. pdf

Scott Savage
2175 Bull Lk Rd
Troy, MT 59935
4062954039

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Scott Savage

2011-07-29 Scott M. pdf

Michael Scott
PO Box 261
Troy, MT 59935
291-9702

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

Michael Scott

2011-07-29 Shaw J. pdf

John Shaw
46493 Hwy 2
Libby, MT 59923
4062915662

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Kootenai National Forest and Montana DEQ:

Please accept my comments for the proposed reclamation revision at the Troy mine. I am fully supportive of the Troy mine and the success that it has had with controlling and mitigating environmental impacts while it has been in operation.

With all of the studies that have been done on the rock and all of the monitoring that has proven no impacts should make this an easy decision. Reading through some of the proposed mitigation measures that have been suggested, it obvious that there has been a very in depth analysis of the revision. It also looks like there is a bit of overkill with some of the suggestions.

I1
E1

You want to take the asphalt out and take it down to dirt again? You feel that you need to dig up the entire existing pipeline and replace it with another line that must be buried? The existing pipelines are sufficient to transport the very clean water from the adit down to the impoundment. Why not disturb less ground and ensure further safety precautions on the existing line that has plenty of capacity to get the job done? Isn't our goal to have the least amount of disturbance necessary?

A5

The men and women at the Troy Mine operate a very safe, very productive, environmentally benign operation. We all want proper reclamation plans approved by the regulators and we certainly want proper bond requirements. That said, there are some things that simply aren't necessary, may not benefit the environment and don't make sense. I approve of the preferred alternative as put forth by the agencies but would like to see some modifications made to in the Record of Decision that reflect proper but not excessive reclamation plans.

Please keep these considerations in mind when making your final decisions on the mitigation measures and the final reclamation plan.

Respectfully yours,

Sincerely,

John Shaw

2011-07-29 Shea M. pdf

Michael Shea
691 Northwood
Libby, MT 59923
406-293-7270

July 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

Thank you for extending the comment period. I want to express my support for the Troy mine. Extensive evaluation, responsivness by the mine oprators and strong enviromnetal safeguards make this an extraction operation that can be a job poroducer locally as well as meet the nation consumtion needs for metals.

Thank you, Michael Shea

Sincerely,

Michael Shea

2011-07-29 StindtD.pdf

Danny Stindt
551 Silver Tip Way
Troy, MT 59935
291-1619

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

Danny Stindt

2011-07-29 ThompsonT.pdf

Timothy Thompson
12652 Bull Lake Rd
Troy, MT 59935
4062959216

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

Thank you for your time.

Very truly yours,

Sincerely,

Timothy Thompson

2011-07-29 VennE.pdf

Echo Jo Venn
51 Hutchison Lane
Miles City, MT 59301
406.531.00207

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Echo Jo Venn

2011-07-29 Venn8.pdf

Justin L. Venn
51 Hutchison Lane
Miles City, MT 59301
406.672.0205

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

Thank you for your time.

Very truly yours,

Sincerely,

Justin L. Venn

2011-07-29 Vincent B. pdf

Brandon Vincent
1168 Farm To Market RD
Libby, MT 59923
291-4543

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Montana DEQ and Kootenai National Forest:

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 I would like to see the asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. You might require the asphalt to be repaired in places that it needs to be, but I believe it would be a short term investment that will pay long term dividends for the watershed.

H1 I also believe that using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad, and I believe that using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 I also think that breaking up the foundations and burying the concrete onsite would be just fine rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 Requiring the company to bury the pipeline when it could just be replaced with another above ground line doesn't make sense either. It seems that if you are serious about water quality and TMDL impacts, you wouldn't want to be disturbing an entire hillside to bury the line not to mention disturbing the ground and the advanced reclamation down the road if the line were to need replacement or repair. Leaving the pipeline above ground and next to the road with asphalt on it makes the most sense in my opinion.

Thanks for your time and consideration.

Sincerely yours,

Sincerely,

Brandon Vincent

2011-07-29 Vincent8.pdf

Scott Vincent
51243 Hwy 2
Libby, MT 59923
293-7042

July 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

Scott Vincent

2011-07-29 VincentV.pdf

Vance Vincent
37 Broadwater
Billing, MT 59103
406.293.1935

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

The owners of the mine and the mine workers have done all they can to ensure the best possible out come from the mine, please support them in keeping them working.

Thank you for your time.

Very truly yours,

Sincerely,

Vance Vincent

2011-07-29 Williams G.pdf

George Williams
269 Farm To Market
Libby, MT 59923
293-1345

July 29, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3

The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€" cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€" with some suggestions for necessary changes.

H2

First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected

H2 during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

Thank you for accepting and considering my comment.

Sincerely,

Sincerely,

George Williams

2011-07-30 Coe P. pdf

patty coe
po564
plains, MT 59859
406-826-3714

July 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

I would like to comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3

The Troy Mine has emerged as a shining light in the tough economic picture of northwestern Montana. The mine made it through the dark days of the recession with pay cuts from top to bottom but not one single employee was laid off. The mine, now with ownership that includes the employees themselves through stock options, now underscores the hopeful economic potential of mining for an area that, for a decade, has led the state with catastrophically high unemployment.

Numbers tell the story. Troy Mine now represents over 190 jobs, over $14 million in payroll, over $10 million in goods and services purchased in Montana, over $1.4 million in metal mines taxes for our schools, and over $1.25 in other state and local taxes.

If an incredibly conservative rollover factor of 2 is used to generate an idea of total local impact in this isolated and depressed area, the Troy Mine serves to economically support an additional 380 local jobs in other main street businesses and local government. This is a huge impact on the area.

E7

Thankfully, this economic impact comes with little impact to the environment. In fact, the EIS recognizes this fact when it repeats the conclusions of 30 years of evaluation of water quality that have shown no impacts to the water quality in the mine's area streams. If society wants to have 'green' metals production, Troy Mine is a good source for providing that need.

E1

I generally support the conclusions of the preferred alternative. I have some questions about the reclamation requests in the document â€“ specifically as it concerns the water delivery pipeline. It is currently above ground for the vast majority of its route. It has been in use for nearly 30 years and seems to be functioning as needed and desired. Once the mine is no longer operating, this pipe will just carry water. Therefore, I think it is not

E1 in the best interest of the environment to disturb ground for the many miles that would be need to remove the above ground line and install a new line underground the entire way. This just seems to reflect a desire to remove the visual of the pipe â€“ as if it is a negative thing to share with the public of the future.

E2 I, for one, like to see evidence of the ingenuity of man and think that personal opinion about visual qualities should not trump the need to be environmentally sound. Repair and replacement work in the future would be way less disturbing if the pipe was above ground and easy to access. The agency claims that the above ground pipeline would provide a target for vandalism does not square with the local experience of 30 years of that same pipeline's existence without one incident.

Thank you for considering my comment.

Sincerely,
patty coe

Sincerely,

patty coe

2011-07-30 Cuffem.pdf

From: mcuffe@interbel.net
To: DEQ Troy Mine; TroyMineReclamation@fs.fed.us
Subject: Comments on Troy Mine Re-Permitting
Date: Saturday, July 30, 2011 6:52:59 PM

Date: July 30, 2011
From: Rep. Mike Cuffe, Montana House District 2
To: Montana DEQ and Kootenai National Forest:

I attended the re-permitting meeting for the proposed revisions for the Revett Mine near Troy, MT., a few weeks ago. I didn't say anything at the time because I'm certainly not a mining expert. But driving home, I realized I am an expert on people of Lincoln County, on the Revett crew and the Revett operation and management.

I spent 2010 going door to door as I campaigned for the responsibility as representative to the Montana Legislature for House District 2, which includes most of rural Lincoln County, Eureka, and borders on both Libby and Troy populations. I spent January through April in Helena trying to help find jobs like these and operations like this one. I have visited with the director of DEQ and the KNF supervisor, so they know my feelings.

I personally know many of the miners employed at that copper mine. Guys like Paul Coon, Belvin Jellesed, Rod Thorstenson, Kelly Cannon and Robert Gonzales. I know how they think and how they work. They are the cream of the crop. I worked with them in the plywood plant in Libby. They were in my work crews. I have watched them grow and raise families. They care about their communities. They are proud of what they do.

I know how this company operates, and I know what employees think of this management team. I know what the community thinks of this company. This company does things right. When they make a mistake, they fix it quick. Not because some regulation says to but because their corporate culture is to do the right thing and to do things right.

As a decision maker and a policy maker, I know it is smart to consider their input. When you make your decisions on re-permitting, please don't leave the human factor out of the equation. Our families need good jobs. Our state needs taxpayers. Our environment needs operators like Revett. You agency officials need folks like these.

How often do you schedule a two hour meeting that draws a crowd like the one I attended? It was a good natured crowd, proud of this operation. There was no rock throwing, no critics, no disgruntled employees, no complaining environmentalists. It was just a bunch of good communioty people backing up a popular company. It got over quickly because people had no complaints.

Most Montana communities dream of an operation like this coming to their home town.

I remember meetings years ago when this mine was proposed by ASARCO, and I recall all the doomsday stories about boom and bust with an evironmental disaster left behind. Look around us today. This is a great mine operated by a great crew who have great pride in how their company does things.

Thank you for accepting my comments to the proposed revisions to the Troy Revised Reclamation Plan preferred alternative. I have just a couple of suggestions for you before you make your final determination.

I1 --Let asphalt remain on the main road leading to the mine site. Removing it and returning it to dirt will just create more BMP work trying to mitigate for TMDL's in the watershed. Repair it as needed.

H1 H2 --Using the readily available materials that is suitable for growth medium located on the mine to reclaim the tailing impoundment would be the better option. The topsoil that has been saved for that purpose has become great habitat for the western toad. Using the other material instead will grow the trees and shrubs necessary to ensure proper reclamation.

B1 --Breaking up the foundations and burying the concrete onsite makes sense rather than digging them up, breaking them up and burying them somewhere else. It's just concrete and won't impact water quality any more than the rip rap along the Bull Trout stream at the bottom of the mountain.

E1 --Keep the pipeline above ground. Don't disturb an entire hillside to bury the line and create a potential future complication if the line were to need replacement or repair later on.

I realize my comments are lengthy, but they are sincere. They reflect my personal feelings, as well as my official position as state representative for House District 2. I trust they will be read and seriously considered. Issue the new permit without unreasonable demands.

Respectfully yours,
Rep. Mike Cuffe,
Montana House District 2

2011-07-30 MosleyD.pdf

DIANE MOSLEY
109 Cottonwood Rd.
Heron, MT 59844
(406) 847-2024

July 30, 2012

Paul Bradford, Forest Supervisor
Kootenai National Forest
31374 US 2
Libby, MT 59923-3022

Richard Opper, Director
Montana Dept. Environmental Quality
PO Box 200901
Helena, MT 59620-0901

Re: Troy Mine Tailings Impoundment Reclamation EIS

Gentlemen:

My comments:

I1 1. Present paved mine road should be left intact. Removing & replacing the paved road with gravel is not economical or sound.

H3 2. Agree that more organic material is needed for impoundment reclamation - possibly mixing wood chips, rotted hay to some top soil from the east side of the impoundment.

E13 3. Investigation of the admitted barrel burial in the impoundment (also proven by ground-penetrating radar) must be included in the EIS. Contents must be clearly identified for proper EIS.

E12 4. A Toxic Release Inventory Log with full history should be required to account for all solvents, grease & lube oils.

B1 5. Suggest that buildings planned for removal be placed in the mine rather than buried or hauled away.

Thank you for the opportunity to submit comments.

Sincerely,

Diane Mosley

DIANE MOSLEY

AUG 02 2011
RECEIVED

2011-07-30 Mosley M.pdf

MILTON H. MOSLEY
109 Cottonwood Rd.
Heron, MT 59844
(406) 847-2024

July 30, 2012

Paul Bradford, Forest Supervisor
Kootenai National Forest
31374 US 2
Libby, MT 59923-3022

Richard Opper, Director
Montana Dept. Environmental Quality
PO Box 200901
Helena, MT 59620-0901

Re: Troy Mine Tailings Impoundment Reclamation EIS

Gentlemen:

My comments:

H3 1. Agree that more organic material is needed for impoundment reclamation - possibly mixing wood chips, rotted hay to some top soil from the east side of the impoundment.

I1 2. Present paved mine road should be left intact. Removing & replacing the paved road with gravel is not economical or sound.

B1 3. Suggest that buildings planned for removal be placed in the mine rather than buried or hauled away.

E13 4. Investigation of the admitted barrel burial in the impoundment (also proven by ground-penetrating radar) must be included in the EIS. Contents must be clearly identified for proper EIS.

E12 5. A Toxic Release Inventory Log with full history should be required to account for all solvents, grease & lube oils.

Thank you for the opportunity to submit comments.

Sincerely,

MILTON H. MOSLEY

AUG 02 2011
RECEIVED

2011-07-30 SharpB.pdf

Brian Sharp
1317 Montana Ave
Libby, MT 59923
406 2912495

July 30, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

K1
H1
H2

I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife babitat, we should use the borrow material instead.

Thank you for your consideration of my comments.

Respectfully,

SSG Sharp, Brian J
ODA 0313, Alpha Company, 3rd BN, 10th Special Forces Group (Airborne)

Sincerely,

Brian Sharp

2011-07-31 Farmer K. pdf

Ken Farmer
148 Manor Drive
Libby, MT 59923
406-293-8470

August 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

G3 The Troy Mine Reclamation plans needs to be approved and permitted for several reasons. The operation is a huge asset to northwest Montana and provides over 190 good paying family wage jobs in an area that has the highest unemployment in the state. WE NEED JOBS!

E7 K2 For over thirty years the mine has been depositing its tailings in the impoundment and there has not been any significant impact to the areas streams or wildlife. This reclation plan will have little and most likely no effect on any wildlife in the area and as studies have shown recently the impact studies to wildlife are largely invalid and are hyped by environmentlists and supported by our liberal judges. For example grizzly bears are not supposed to cross major highways, however a couple yearsa go a large male grizzly was killed by a truck on Highway 200 in Lincoln, Montana.

Several studies have been done that confirm this and I believe that allowing them to amend their reclamation plan to continue operating is a no brainer. It seems that both the USFS and the DEQ has done a thorough job of analyzing the revised reclamation plans, though there seems to be some recommendations that would actually create more disturbance than should be necessary.

E1 E2 Removing the water pipeline that is buried below the surface (if it is decided that it needs to be replaced) seems impractical as it wouldn't hurt anything to just leave it and remove the pipeline that is above ground. Completely burying a new pipeline (which I'm not convinced is even needed) seems to contradict the desire of all parties to ensure that the lines can be monitored and that there is ability to quickly detect any leakage or break in the line and just as quickly get necessary repairs made while disturbing the least ground or water resources as possible.

That being said, I'm confident the agency will listen to those that have more experience than I in this area and arrive at common sense mitigations while approving this reclamation

permit. But I would like to go on record as supporting the preferred alternative with some modifications to the requirements for the pipeline.

Thank you for your time,

Sincerely,

Ken Farmer

2011-07-31 Farmer 8.pdf

Susan Farmer
148 Manor Drive
Libby, MT 59923
406-293-8470

July 31, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi,

I am writing to support the Troy Mine and provide comment on their Revised Reclamation Plan Draft EIS.

G3 This project is incredibly important to the communities of Lincoln County and our state. The 190 plus jobs are the last industrial, wealth generating jobs in the County. These jobs and the $14,000,000 per year payroll they represent coupled with $20,000,000 per year spent on services â€“ one half of which are purchased in Montana â€“ are huge factors in the local economy. The $1.4 million paid annually on Montana Metal Mines license taxes and the $250,000 paid in property taxes benefits the local, county and state schools $1million paid annually on gross proceeds taxes benefits the State of Montana's bottom line.

None of this would matter if the mine were not environmentally sound. Thankfully, it is â€“ and I applaud the EIS's conclusion, specifically with water impacts, that backs this conclusion.

E1 However, I do have some issues with the EIS and the potential impact on the environmental footprint of the closure requirements. Specifically, I take issues with the need to bond for removal of the pipelines above ground and replace them with lines below ground when the mine is done. The above ground pipelines are not hurting anything. Digging to bury a new line will cause more impacts to the environment than leaving them in place. Further, every time the pipes need work done to them or replaced the impacts will be revisited. When we are doing all we can to disallow the potential of sediment into our streams, it seems inconsistent to require such ground disturbances being repeated in perpetuity.

Thank you for taking my comment.

Sincerely yours,

Sincerely,

Susan Farmer

2011-08-01 AntonioliT.pdf

Ted Antonioli
5907 Longview
Missoula, MT 59803

August 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and KNF:

I am writing in my capacity as President of the Missoula Chapter of the Montana Mining Association to comment on the proposed Troy mine reclamation provisions.

Continued mining of copper and silver in the Libby-Troy area depends on several factors, particularly metal prices, exploration success, and a reasonable regulatory environment. We do not want to see the mining industry suffer the fate of the region's forest products industry, irrationally destroyed in order to \\\"save\\\" the forest for rot, bugs, and fires... all in the name of enhancing the environment while in fact degrading it.

We are concerned that mining in the region is being subjected to burdensome and expensive requirements that achieve very little except to drain out the capital that might instead be used for purposes such as exploration to extend the life of the mines and develop new deposits. Certainly the over 25 year \\\"process\\\" of permitting the Rock Creek deposit is one of our nation's starkest examples of over-regulation and economic paralysis. It appears to us that the permitting process at Montanore has also slowed to a glacial pace, preventing these projects from receiving the benefit of record and near-record metal prices and providing a much-needed economic boost to a deeply depressed area.

E1 One example from the current permitting process for Troy... the information we have seen to date indicates to us that requiring Revett to remove a perfectly sound pipeline and to replace it with another one immediately upon decommissioning of the mine doesn't make sense.

We urge speedy approval of a revised reclamation plan for Troy in line with common sense, and expedited permits for the Rock Creek and Montanore mines as well.

Sincerely yours,
Ted Antonioli

2011-08-01 Hill B. pdf

Betti Hill
PO Box 4717
Helena, MT 59604
406-431-3920

August 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine.

I am a big believer in Montana utilizing our natural resources to benefit our country and our state. Mines such as the Troy Mine which have over 30 years of solid evidence of reliable work are places where we need to enlarge our state employment pool with these good paying jobs.

I love the environment but believe that we can have both a healthy environment while developing our resources. We need these jobs, and I hope you will carefully consider this request.

Thank you for your consideration of my comments.

Respectfully,

Sincerely,

Betti Hill

2011-08-01 KaryD.pdf

Doug Kary
415 W. Wicks Ln
Billings, MT 59105
406-698-1478

August 1, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

After 30 years of examination and collecing data, it appears from what I can tell that discharged water is

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged, that it is clean water. A water treatment facility should not be required unless there is documented \\\"need\\\".

One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon

E1 the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

I eagerly await your response!

Sincerely,

Sincerely,

Doug Kary

2011-08-01 Mangold S.pdf

From: Steve Mangold
To: DEQ Troy Mine; TroyMineReclamation@fs.fed.us
Subject: Attn: Troy Mine Revised Reclamation Plan
Date: Monday, August 01, 2011 6:48:27 AM

Concerning the mine in Troy, it is essential for many reasons to allow the mine to progress and succeed. Certain safeguards need to be targeted, but we also need to allow an essential activity that has been going on since the dawn of man- mining of the earth's minerals. The industry takes great efforts to care for the environment and animals, shown by their willingness to make huge investments toward these ends.

The regulators and obstructionist want resources and energy for their everyday lives to be available, but somehow want it produced with zero impact which is impossible- and the impact that the mining and oil recovery do have is exaggerated from all reality. Canada has a booming economy, even with their more socialist/ European mentality. They allow more mining, oil and timber harvesting than we do, so now if we see any prosperity in Lincoln County it is from our visiting friends to the North. It is crazy that our people have to find jobs in the North Dakota oilfields, or have poverty jobs here, while the tax base has been so strangled by well meaning but ill-informed environmentalists.

We can have the improved tax base for roads, services and schools and the jobs for our people to provide for their families, while providing the abundant minerals needed for our lives- or we can continue to strangle ourselves, letting other countries prosper while they provide our minerals, oil and timber.

We either sink or chose to swim- hopefully the majority who wish to swim will prevail in this matter.

Most sincerely,

STEVE MANGOLD
Eureka Consulting and Sales, LLC
Ph/Fax (406)889-5959
Cell (406)261-8700
Box 373, Eureka
Montana 59917
Email smangold@interbel.net

2011-08-02 Coleman J. pdf

Jeff Coleman
pobox25
Whitehall, MT 59759
406-533-9833

August 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please accept my following comments for the proposed reclamation plan revisions at the Troy mine. I fully support the mine and their desire to continue operating under the Company Proposed Action.

E7 K1 D1 With thirty years of documented analysis and several studies completed during the impoundments history showing no environmental impacts to water or wildlife this plan should be approved.

We as a society have very few examples where we actually extract mineral resources from deposits such as these that are so benign and have no long lasting negative impacts to the environment. I have seen firsthand the impoundment and the abundance of existing wildlife that cohabitates it. The fisheries have had zero negative impacts from this impoundment and the attenuation study done while the mine was dormant clearly illustrates what to expect when this operation is decommissioned.

G3 Between now and then, allowing this permit to move forward will allow for the mine to continue operating in a responsible manner. The contribution of millions of dollars every month into the local and state economy will continue and the 190 employees and their families will have continued job security.

I urge the agencies to approve this plan as soon as possible and thank you for allowing me to comment.

Sincerely,

Sincerely,

Jeff Coleman

2011-08-02 Cotten R. and K. pdf

From: Ronald and Kathleen Cotten
To: DEQ Troy Mine; TroyMineReclamation@fs.fed.us
Cc: bnboss@frontiernet.net; rwraab@frontiernet.net; ralusamp@frontiernet.net; "Timory"; kcandln@montanasky.net; Opper, Richard
Subject: Comments on Troy Mine EIS
Date: Tuesday, August 02, 2011 4:47:33 PM

To: Bobby Lacklen
Kootenai National Forest

Emily Corsi
Montana Dept. of Environmental Quality

We and our neighbors live just north of the Troy mine's tailings impoundment. This is immediately downstream of the tailings impoundment on Lake Creek and immediately downwind given the prevailing winds. Our proximity to the tailings impoundment gives us a keen interest in both the operation and reclamation of the Troy mine with respect to water and air quality issues as impacted by the mine. We have reviewed the proposed EIS and offer the following comments:

1. We support the MDEQ and Forest Service decision to require a full EIS process instead of the EA process that had been previously pursued. It has been our opinion all along that the EA process was inadequate to ensure that the eventual reclamation would restore the mine site to a state that would not create essentially permanent environmental problems for us and the members of our community.

C2

2. We believe that the final document should be thorough and capable of ensuring an appropriate state of reclamation even in the face of opposition by the mine's operators at the time of its implementation. This is not intended to disparage the current Troy Mine management. Over the last two years that they have managed the mine, they have resolved the most serious environmental issues that preceded their tenure and have proven themselves to be good neighbors. Rather, it is simply a recognition that management teams change from time to time, either at the behest of an internal board of directors or through merger or acquisition. These changes occur all the time in business and we believe it is prudent to assume that a reclamation that will occur some years from now may very well occur under a different management structure that may have different priorities that may not include environmental protection. The requirements of the EIS should be written with this possibility in mind and should be explicit and binding on whomever owns and operates the mine at the time of its closure.

3. We fully support the Agency-Mitigated Alternative (AMA) as the appropriate guideline for the final EIS. Having suffered chronic air pollution problems for several years under the previous Genesis management regime, we can assure you that the 1978 Reclamation Plan is a non-starter. The Proposed Action (PA) plan is deficient in a number of ways as exposed by the AMA. It is important to remember that once the reclamation is completed, any leverage to fix environmental problems that were ignored or overlooked in the reclamation plan will be lost. Indeed, the current operator may no longer even exist.

B4

4. One element that was not addressed in the AMA is the possibility of the tailings impoundment's storage capacity being exceeded prior to the cessation of the mining operation. We believe this is a real possibility given the new reserves that have been found at the mine and the limited expansion available at the tailings impoundment. We believe that the storage capacity of the impoundment will be fundamentally limited by the eventual degree to which the height of the retaining dikes can be raised, and this in turn will be limited by their structural integrity in the face of severe weather events, earthquakes, etc. In the event such a limitation becomes reality, mining could continue by shifting to a paste-and-backfill method of tailings storage within the existing mine cavity. If this situation does indeed occur, we believe the EIS should require the reclamation of the existing tailings impoundment to begin immediately rather than to wait until the mine eventually closes down. In addition we believe that the reclamation period, once begun, should not exceed 2 years.

C3

5. Air quality monitoring should be maintained throughout the reclamation period and thereafter until it is fully demonstrated that the revegetation effort has successfully resolved all air quality and blowing dust issues.

H1
H2
H3
C5

6. The AMA requires that the original topsoil, now stored on the west side of the tailings impoundment, be used to cover the tailings impoundment surface to a depth of 18" and to cover the disturbed areas at the mine itself to a depth of 12". This would restore a reasonable quality soil to these areas to support revegetation, but would require extensive disturbance to an area that is now fully revegetated and stable. The mine operator has proposed using what is essentially pit-run from an existing disturbed area located on the east side of the tailings impoundment instead of the stored topsoil. This would result in a poorer quality soil being used for the reclamation as compared to the stored topsoil, but would leave the revegetated west side of the impoundment that abuts Lake Creek intact. We believe the latter proposal should be considered in order to protect Lake Creek's water quality, but only if the substituted soil is fully amended with the appropriate organic matter to ensure its ability to support the long term robust revegetation that will be needed to prevent air quality issues with blowing dust. While we do believe that there is a role for chemical fertilizers in the revegetating process, it is not a substitute for sufficient organic material content within the soil.

E1
E2

7. With regard to the AMA proposal for the pipelines, we fully support its recommendations. At the public hearing in Troy there were a couple of comments supporting the continued use of the existing pipelines throughout the reclamation process. I would point out that these pipelines were installed in the 1970's and that it could take many years after reclamation for the mine water to improve enough to directly discharge into Stanley Creek. In 2009 there was a discharge of tailings slurry into the Lake Creek drainage that turned the water of Lake Creek into the consistency and color of skim milk. The cause? A break in the same pipeline that is being proposed for continued use under the PA plan. The reality is that all infrastructures, including pipelines, have a finite useful life. The existing pipelines are today over 30 years old. With the continued discovery of new reserves, the mine's life may be extended by many years. It is not inconceivable that these pipelines could be 40 or even 50 years old by the time reclamation at the mine is undertaken. Also to be considered is that the response time to any post-reclamation event with respect to a pipeline failure will almost certainly be extended because of the difficulties in detection, evaluation, and getting the required restoration assets on site, in what will then be a remote and perhaps unmanned location. Relying on the existing pipelines under these circumstances is simply imprudent. As far as the placement of a new pipeline, we support the AMA requirement for underground placement because it will be protected from the elements and from external damage from most causes. It is not a coincidence that virtually all pipelines of all types are installed underground. We also see leakage monitoring as a necessary tool to ensure early detection of pipeline failures and/or leaks.

E13
E12

8. The one issue of concern to us that was not addressed in any of the alternative approaches was the presence or absence of barrels of potentially toxic materials that were allegedly buried in the tailings impoundment by Asarco. While we became aware of this issue in 2009, others have had concerns dating back some years. Since 2009, the MDEQ has required the installation of additional monitoring wells and the implementation of a more robust water monitoring program on the theory that any potential leakage of toxic materials could be dealt with if and when it occurred. To date, there have been no indications of any contaminates. Our concern is that if Asarco did indeed illegally dispose of toxic materials by burying them in the tailings impoundment as alleged, how will a post-reclamation leak be detected, located and either removed or contained before the groundwater, and our community's wells, are contaminated? As it stands now, there is a mining company on site that can be engaged should the problems arise. However, after the mine is closed and there is no local organization on site, the detection and resolution of water contamination becomes much more problematic. We believe that this issue needs to be considered in the final EIS to ensure the long term integrity of Lake Creek and the quality of our community's well water long after the mine has ceased operations.

2011-08-02 Garwood G. pdf

Greg Garwood
2040 Garrison
Butte, MT 59701
406 723 8848

August 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

Thank you for your time.

Very truly yours,

Sincerely,

Greg Garwood

2011-08-02 HeikkinenD.pdf

Donna Heikkinen
P.O.Box 3293
Butte, MT 59702
406 494-5759

August 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I feel that with proper guidelines and bonding, that mining in Montana is a great avenue. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 Yes, mining has not always been a \\\"clean\\\" industry, but we must learn from past mistakes. By doing this we can avoid harming the environment, and also allow families to thrive. I strongly feel that our state can safely mine and log and still be environmentally sound. A mine can be reclaimed, and forests are a renewable resource.
Thanks for your time.

Respectfully

Sincerely,

Donna Heikkinen

2011-08-02 Inabnit W. pdf

William Inabnit
P.O. Box 223
Cameron, MT 59720
406-490-2059

August 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

To whom it may concern, I am a miner who works for Golden Sunlight Mine in Whitehall Montana and have been involved in mining for 14 years. I know first hand that mining in montana is a good thing both for the state and the local community. Good jobs are hard to come by and great jobs like mining offers are even harder to come by. Both are available when mining is allowed to happen. Please take the time to look at the positive impacts that mining can have before making your dedision. After thirty years of this impoundment E7 being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,
Bill Inabnit
Safety Technician

Golden Sunlight Mine, Barrick
Whitehall, Mt. 59759

Sincerely,

William Inabnit

2011-08-02 mihelichm.pdf

Mark Mihelich
2850 Nettie st.
Butte, MT 59701
4062872049

August 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Hello:

Thank you for allowing me to comment on the proposed revisions to the Troy reclamation plans. I believe that the DEQ's proposed alternative is the best action to take, though I think there needs to be some minor tweaks made before the final action is taken.

E7 The Troy Mine has a long record of water monitoring and the agency seems to also recognize this by not requiring post closure mechanical water treatment, which I fully support. I also understand that the agency wants the reclamation plan to mitigate as many impacts as they can upon decommissioning of the mine, but there seems to be some contradictions in the proposed action plan.

K1 H2 If we truly want to create wildlife habitat and soil stability at the same time, why are we removing the topsoil berm that is already providing awesome habitat for the western toad? I understand that your analysis showed that it may take a bit longer to achieve your desired ends, but how much longer? The trees and shrubs that are currently surrounding the site are growing just fine in the same soil that would be used instead of the topsoil. I understand that you would want to use the topsoil under other circumstances, but because the Western toad uses the berm I believe there should be a variance made to allow for the borrow to be used instead of the previously stripped topsoil to protect the toad's habitat.

E1 E2 Another glaring contradiction is with burying the pipeline that will need to be monitored for decades according to the EIS. If the existing pipeline that has been there for thirty years needs to be removed after another ten years of use, then are you anticipating removing the pipeline every 40 years or so by digging it back up and burying it again? It makes much more sense to require the Company to replace the pipeline if and when necessary, but leave it above ground next to the road for ease of monitoring and accessing the line for any necessary repair or replacement.

Thank you for considering my comments.

Respectfully,

Sincerely,

Mark Mihelich

2011-08-02 moodryJ.pdf

joe moodry
1843 Texas Ave.
butte, MT 59701
(406)565-9255

August 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Montana DEQ and Kootenai National Forest:

E7 Thank you for allowing me to comment on the Troy Mine Draft EIS. I believe that all of the past and current studies of the impoundment clearly indicate that it will not have a significant impact on ground or surface waters. The attenuation study that was done while the mine was closed and additional studies conducted recently support my conclusion. The rock characterization studies all show little to no potential for ARD or metal releases. These deposits are some of the most environmentally benign metal systems in the world.

After thirty years of this impoundment being in place with no significant impacts to water, it is clear that the decision of the agency will have solid, reliable data documenting the lack of impacts and substantial evidence to support its decision to permit the mine and its proposed reclamation plans.

G3 This operation is very important to the socio-economic wellbeing of Lincoln and Sanders counties. There are over 185 men and women working at this operation and over three million dollars a month of real wealth being distributed into Montana's economy through vendors, payroll, and taxes.

G1 The importance of this operation in two counties that represent the highest unemployment numbers in the state is without question. There will be no significant impacts to the environment by approving this mine's reclamation plans.

Respectfully,
Joe A Moodry

Sincerely,

joe moodry

2011-08-02 SantH.pdf

Harold Sant
765 hwy 359
Cardwell, MT 59721
406-287-2052

August 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

Thank you for your time.

Very truly yours,

Sincerely,

Harold Sant

2011-08-02 WindomB-and-R.pdf

Bob and Rita Windom
P O Box 830
Libby, MT 59923
293-6764

August 2, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

We have been associated with the Troy Mine since it opened. Bob was a subcontractor providing snacks and soft drinks for years. He had the opportunity to be in different areas of mine weekly. He is a keen observer. Based on his observations he has championed the mine in any opportunity that arose.

As a county commissioner, I also had some upfront tours and observations. We both agree that the Troy Mine has been operated in a manner friendly to the environment and to its employees and the communities. The mitigation proposd below seems totally unjustified and expensive.

E7 I would like to provide some comments on the revised reclamation plans for the Troy Mine. For the past three decades the water and rock studies have proven that this is one of the most environmentally benign mining operations in the country. The DEQ and the KNF have recognized this fact throughout the document, and I believe it has firm conclusive data to justify its decision. We have discussed the following comments and believe them to be sound.

B2 One thing that I did question while reading the document was the decommissioning plans for the building foundations. As I understand your preferred alternative, you are going to require the concrete foundations to be dug up, broken up, and deposited elsewhere. The justification was that it may create water quality issues if it was just backfilled on site, which seems the most common sense approach. I am failing to understand how digging it up and hauling it down to private property solves the issue of water quality. It might impact water quality up there, but not elsewhere? The logic doesn't work for me.

E1 One other thing that I read that seems illogical is the requirement for the pipeline to be buried. The existing pipeline is in good shape and runs right next to the road for easy access. Why would we bury it and then have to dig it up again if it ever needs replaced or repaired? This doesn't make much sense to me. It seems as though we are actually going

to be requiring unneeded disturbance in the future when the goal is to remove or mitigate what impacts we can.

Thank you for your time.

Very truly yours,

Sincerely,

Bob and Rita Windom

2011-08-03 Clark B. pdf

Bruce Clark
P.O. Box 479
Troy, MT 59935
406-295-5582 x226

August 3, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

My name is Bruce Clark. I have worked at the Troy Mine for over 31 years. I am currently the Mine Manager.

Please accept my following comments for the proposed reclamation plan revisions at the Troy mine. I fully support the mine and their desire to continue operating under the Company Proposed Action.

By virture of having worked at the Troy Mine for over 31 years, I believe Revett Minerals position on the Draft EIS is the correct way to go. I have personnally been involved with Tailings reclamation during the 12 year shutdown period, water transport through tailings / reclaim pipelines, and road maintenance. All of these actions have been very successful in protecting the Troy Mine environment.

Following is text from Revett Mineral's response to the Draft EIS that I fully endorse. Please incorporate it into the records.

Pipeline to Transport Mine Water at Closure

E-TMI 1

The DEIS concludes that the existing dual 8â€• urethane lined steel pipelines that carry tailing slurry during operations need to be replaced with a new buried line at closure. TMI disagrees that the lines need to be replaced and there is little rational in the DEIS to justify this suggested replacement. The main reasons TMI disagrees with the installation of a new buried line are:

1) The existing two surface tailing lines and the existing buried pipeline have more than enough capacity and useful life to transport the mine water to the tailing facility as verified in discussions with the pipeline manufacturer;
2) The installation of a new buried line at closure would create significant new ground disturbance that will require additional reclamation;

3) There are areas in the pipeline and road corridor that are impractical for burial due to proximity of live streams (Stanley Creek and Lake Creek); and
4) TMI is installing additional secondary containment for monitoring and leak detection near stream crossings, on the existing tailing lines, that will allow better monitoring and the surface lines will be easier to repair if necessary.

It is TMIâ€™s opinion, based on actual review and testing by the pipeline manufacturer, that these lines currently have significant safe and useful life and should continue to be used following closure. TMIâ€™s proposed Closure Operations Manual (see Appendix A) summarized in this section provides a reasonable engineering approach to minimizing risk of a mine water spill during post closure.

The DEIS does not document any particular flaw or problem with the two existing 8â€• lines, but indicates that they are â€œoldâ€• and that above ground pipelines would be â€œmore susceptible to vandalismâ€•. It is further indicated (with no documentation or explanation) that a leak from a buried pipeline would be less likely to cause sediment to reach surface water. The DEIS incorrectly implies that the current operations does not include secondary containment of the tailing pipelines and that there is no monitoring of possible pipeline leaks. The Closure Operations Manual addresses secondary containment and leak detection monitoring. TMI would like to note that the installation of a new buried line will include a number of stream crossings where the line will either have to be buried under the stream or attached to bridge structures creating new areas of both engineering and installation challenge.

E-TMI 1

TMI has substantiated that the existing above ground tailing lines will have many years of service left at closure. Based on actual testing conducted in 2004 with the pipeline manufacturer (Irathane), the urethane lining in the existing pipelines is in excellent shape. At the time of the testing each of the slurry lines had a total of sixteen million tons of slurry flow through them, yet the lining was like new. In discussions with the manufacturer, they believe that the lining would last indefinitely with the continuous flow of mine water.

Therefore, TMI considers the addition of a 10 to 18 inch diameter buried pipeline for transporting mine water to the tailing storage facility unnecessary. The life and capacity of the two existing two surface 8 inch pipelines and the existing 10 inch buried pipeline will be every bit as effective as the proposed HDPE pipe and there is no new disturbance required.

TMI believes excavation for burial of the proposed pipeline will cause undue environmental disturbance; increase risk of sedimentation to nearby streams; and not provide any more assurance against discharge to nearby streams nor protect against vandalism. Assuming that the pipe must be buried below the frost line, the 6.1 miles of pipeline will require disturbing a 25 ft width or a minimum additional disturbance of 18.5 acres.

The DEIS documents concern with the tailings lines plugging and an over pressure event occurring which may break the lines. This will not happen for the following reasons:
1)The tailing line design includes a rupture disk installed in each tailings line that will open at 586 psi in the event of a pressure surge with the discharge directed to a containment pond. These rupture disks will prevent a tailing line breakage from an over

E-TMI 1

pressure event from occurring; and
2)The tailings lines have been pressure tested at 1,110 psi. At closure, when running water in the line, the potential maximum pressure will be only 475 psi.

Soil Replacement and Amendment

TMI disagrees with the agencies recommended use of the topsoil located below the toe ponds because:

1. An adequate and proven source of topsoil / growth medium exists on the east side of the tailing facility;
2. The topsoil area below the toe ponds has been successfully reclaimed with over 30 years of re-vegetation that would be re-disturbed;
3.The control of sedimentation to Lake Creek during reclamation activities and topsoil excavation will be a challenge; and
4.The area around the toe ponds is providing breeding habitat for the western toad which has been listed as a species of a concern.

The agency alternative in the DEIS indicates that that soil salvaged in the tailing pond area be used for reclamation rather than borrow soil. TMI is concerned that use of the toe pond salvaged soil will increase long term risk of sediment impacts to Lake Creek, will impact documented western toad habitat and will result in the same reclamation success outcome as using the borrow soil (return of similar forest vegetation to that before the mine). The existing topsoil piles are fully re-vegetated with a thick growth of grass, alders, brush and coniferous trees. The potential impacts to neighbors from dust during soil replacement is higher with the fine grained soils than with the borrow soil. TMI requests the agencies to reconsider their decision to require use of the salvaged soil.

H-TMI 1

TMI provides Appendix B (Westech, 2011), a report on borrow soil availability and suitability that supports the use of borrow soil for reclamation at the TMI. The following are some of the specific areas in the DEIS that address soil use and amendment issues that should be revisited in preparation of the FEIS. According to the Westech Report (Appendix B), the tailings embankment face supports a young forest of planted, healthy ponderosa pine, white pine and lodge pole pine at a stocking rate suitable for proposed post-mining land uses. Natural reinvasion of trees is occurring. The understory is primarily herbaceous, dominated by hard fescue. Cover of trees, herbaceous species, litter, lichens, moss and rock is adequate to provide a stable surface. The presence of existing forest on soils with high coarse fragments and the analysis in the DEIS â€“ [(Section 3.16.2.9, Resource Impact Summary (page 3-149)] demonstrate that borrow area material will support the proposed post-mining land uses of forest and wildlife habitat consistent with the MMRA.

The requirements for use of organic fertilizer, organic matter addition to soil, mulch and placement of coarse woody debris on reclaimed sites is by the DEISâ€™s own admission not necessary to achieve reclamation goals. TMI recognizes its responsibility to successfully reclaim the land disturbed by the mine, but doesnâ€™t agree that use of unnecessary amendments are required; if it takes a few years longer to achieve the vegetation density to meet bond release criteria that is TMIâ€™s option. At the 19th Annual Mine Design, Operation and Closure Conference, May 2011, Mr. Rich Prodgers, Bighorn Environmental, provided a presentation; â€œEffectiveness of Two Compost Products and One Mycorrhizal Inoculum in

Promoting Nutrient Cycling in Cover Soils Originating as Deep Borrowâ€• (see Appendix C). According to Mr. Prodgersâ€™ field work, analyses and presentation, he was not able to conclude from vascular plant performance or microbiological analysis that compost confers a benefit. Further he presented information that composts role in establishing nutrient cycling was far less than expected.

TMI understands that the constructed toe ponds provide breeding habitat for the western toad that would not be available without the toe ponds. The toe ponds and toad habitat at the tailing impoundment are on private land and will remain in place at closure. Evidence provided in an attached report on western toad occurrence provided with this letter from Patrick Farmer, 2011 (Appendix D) indicates that the salvage soil stockpile is used by toads during the breeding season and may be important toad habitat during other seasons. This is another reason to reevaluate the removal of the soil stockpiles when a reasonable alternative exists.

ES14 â€“ summarizes agency alternative for use of salvage soil and organic addition; no justification provided.

ES17 â€“ The DEIS states: â€œUnder the Agency-Mitigated Alternative,
No additional measures would be required to mitigate geochemical impacts to reclamation success. The use of the rocky glacial and the lacustrine and volcanic ash-derived soils as growth media would minimize root contact with mined materials. This would effectively minimize the potential effects of plant uptake of metals from the development rock and tailings.â€•

H-TMI 1 This implies that the tailing has a deleterious or toxic effect on plant growth; there is no evidence known to TMI or provided in the DEIS that toxicity exists and this must be corrected in the FEIS.

ES18 â€“ The DEIS indicates that under the agency alternative chemical fertilizer would not be used in reclamation. No justification, reason or authority for this decision is provided here or elsewhere in the document.

ES19 â€“ The summary statement that the TMI proposed action would not achieve comparable utility in not supported here or elsewhere in the document and in fact is contradicted elsewhere in the document. TMI strongly disagrees that this standard cannot be met with borrow soil and further that the agencies have presented any substantive analysis documenting this conclusion. According to the Westech Report, 2011, the tailings embankment face supports a young forest of planted, healthy ponderosa pine, white bark pine and lodge pole pine at a stocking rate suitable for proposed post-mining land uses. Natural reinvasion of trees is occurring. The understory is primarily herbaceous dominated by hard fescue. Diversity is low with few species present. Cover of trees, herbaceous species, litter, lichens, moss and rock is adequate to provide a stable surface. Previous re-vegetation trials on Cell 2; the presence of existing forest on soils with high coarse fragments; and, the analysis of the DEIS demonstrate that borrow area material will support the proposed post-mining land uses of forest and wildlife habitat consistent with the MMRA.

2-54: Soil amendments listed for the agency alternative include that all disturbed ground at mill site will be covered with mulch and 25 tons/acre wood debris. Nowhere in the document provides the justification, authority or even describes the potential benefits of this treatment.

3-42: TMI is not aware of any documentation indicating â€œplant uptake of metalsâ€• has caused any problem at the tailing impoundment. The use of the borrow soils as compared to stockpiled topsoil will accomplish the same objective; therefore, this argument needs to be revised in the FEIS.

3-115: TMI is not aware of any data or evidence indicating metals phytotoxicity from the tailing exists nor was any data or evidence referenced in the DEIS. If such documentation exists TMI would like to have a chance to discuss this issue with the agencies prior to completion of the FEIS.

3-119, 2nd paragraph: â€œHowever, using a glacial outwash material instead would result in gradual, but slower vegetative recovery.â€•

The DEIS states that borrow soils would result in successful but slower vegetative recovery and thus meet the â€œcomparable utilityâ€• requirement. TMI agrees with this statement and argues that the long history of reclamation pilot tests supports it. The speed of re-vegetation is not a requirement of the Metal Mine Reclamation Act.
3-119, 5th paragraph: â€œThe organic matter would increase infiltration, fertility, and the water-holding capacity of the rocky glacial materials, all of which would speed up soil development on the reclaimed areas.â€•

H-TMI 1

This only establishes that the organic matter addition would speed up re-vegetation, not that it is necessary to meet the reclamation requirements.

3-119, 6th paragraph: â€œTwenty-five tons/acre of coarse woody debris (larger than three inches in diameter) would be scattered across the reclaimed areas at the mine portals and mill. All disturbed ground would be covered with an agency-approved mulch.â€•

There is no discussion of the justification, benefits, rational or authority for requiring the addition of wood debris or mulch. More importantly, there is no discussion why this requirement in the Agency-Mitigated Alternative is more effective than the Proposed Action for achieving reclamation requirements.

3-120, 3rd paragraph: â€œThese materials would be used because they would produce better soil quality and a more productive plant growth medium due to their larger water-holding capacity. The material proposed under this alternative would eventually produce a quality soil with a more productive forested plant community, even with the presence of noxious weeds.â€•

This documents that the main benefit of using the stockpiled soils is increased forest productivity. Since the uses of the alternative borrow soils can achieve the DEQâ€™s requirements for stability and utility on these private lands, the requirement to use the stockpiled soil is not warranted.

3-121: â€œAll three alternatives would meet these guidelines on NFSL. However, the Agency-Mitigated Alternative would restore soil function in a shorter period of time.â€•

The DEIS documents the agencies are in agreement with TMIâ€™s Proposed Action which achieves Forest Service requirements. Therefore, there is no need for unnecessary activities just to shorten the time period.

3-121, last paragraph: â€œThe Proposed Action would not produce comparable utility on the reclaimed tailings impoundment.â€•

H-TMI1 The statement is not justified and apparently relies on an interpretation of the MMRA â€œcomparable utilityâ€• requirement that is not documented in any agency guidance but seems to be the â€œmore is betterâ€• philosophy. The â€œcomparable utilityâ€• wording is clearly meant to indicate a level of sustainable re-vegetation that achieves an acceptable level of cover and species diversity. There is no standard to support a minimum level of productivity. On page 3-146 (3rd paragraph) the DEIS indicates the Proposed Action achieves the â€œcomparable utility standardâ€•. This statement must be corrected in the FEIS.

Road Reclamation

I-TMI1 The Agency-Mitigated Alternative road reclamation plan includes removal of several spur roads that have been passively decommissioned. TMI views reverting road 4626 to a gravel surface will cause undue environmental disturbance and increase risk of sedimentation to nearby streams. TMI performs annual maintenance on road 4626 and believes the surface will perform for decades after closure with minimal maintenance and cause no sedimentation risk to nearby streams. TMI believes roads 4626G, 4624B and most of 4624 to be passively decommissioned as of this date, and by closure of the Troy Mine, road 4624 will be passively reclaimed. TMI agrees that the portion of road 4551 on private land should be decommissioned â€“ converted to a trail; however, the portion of the road on national forest is already passively decommissioned and is little more than a trail. TMI believes that disturbing this road prism will cause undue environmental disturbance and increase risk of sedimentation to nearby streams. Additionally, TMI believes road 4628A will be passively decommissioned at mine closure and disturbing the steep, narrow, stable road prism in this area will cause undue environmental disturbance; increase risk of sedimentation to nearby streams; and, ultimately the trail will become unstable and unusable.

ES18 â€“ â€œAny additional sediment from untreated roads and stream erosion across the mill site would add to the already elevated sediment load that currently exists in Stanley Creek and would adversely impact beneficial uses for an extended period of time.â€•

This statement implies that Stanley Creek is impaired for sediment, which is not the case, and the claim that beneficial uses would be impacted is not substantiated. In early June 2011 Stanley Creek has been observed flowing at high flows while showing no visible sign of turbidity. Each year TMI sends the final report for the Comprehensive Water Quality Monitoring Program for streams adjacent to the TMI. To date, we have submitted reports for 25 years. According to Mr. Joe Volosin â€“ Parametrix Inc., for 24 years, the benthic macroinvertebrate populations and water quality of the stream systems near the Troy Mine have been monitored. Samples have been collected at locations above and below mining operations in Fairway-Stanley Creek Systems and in the Lake Creek System. The benthic macroinvertebrate and water quality monitoring over the past 24 years have not identified any pollution impacts or degradation of Fairway-Stanley Creek and Lake Creeks due to TMI Facilities.

Over all the years of monitoring, the numbers of clinger taxa in Stanley Creek have been similar to Fairway Creek and similar between Lake Creek Sites. This metric suggests that for both Fairway-Stanley and Lake Creek systems, little sedimentation effects have been

noted in any of the streams evaluated. TMI has included the Comprehensive Water Quality Monitoring Programs for Streams adjacent to Troy Mine: Spring 1986 through Fall 2009, Year 25 in Appendix E to this letter.

3-22; 2nd paragraph: â€œUnder the Proposed Action, unneeded roads that pose a resource risk would not be treated, and restoration work on needed roads would not be implemented.â€•

The definition is not clear as to â€œunneededâ€• and â€œneededâ€• roads.

I-TMI 1 3-23: â€œThe Agency-Mitigated Alternative would reduce sediment loading both by implementing reclamation actions and by treating mining road-related sediment sources.â€•

The statement implies that the Agency-Mitigated Alternative reduces road related sediment more than the companyâ€™s proposal. There is no analysis or discussion of how removing the asphalt surface from the road would reduce sediment more than the Proposed Action. Troy Mine was originally required to install asphalt to mitigate for sediment and it is used elsewhere in the KNF which indicates asphalt road cover is effective for sediment reduction.

3-120: â€œMany roads used for drilling decades ago have revegetated and pose a low erosion risk to the watershed.â€•

The DEIS supports TMIâ€™s argument that natural re-vegetation is an appropriate solution for some of the older roads.

General Comments

A-TMI 1 ES3 â€“ Discussion of â€œpatentedâ€• land may be confusing, may be better to just use private land and NFSL.

B-TMI 2 ES6/ES7 â€“ The No Action description of ground water monitoring is inaccurate and misleading by implying there are only two ground water monitor wells. Currently TMI samples 15 monitoring wells, two of which are at the Libby Load-out Facility. TMI also samples the Service Adit ditch, Service Adit pipe and the EP-1 pump-back station.

The surface water program includes 16 surface water locations for a total of 34 sample locations. Lake Creek 1, 2 and 4; Stanley Creek - 2 and Fairway Creek â€“ 1 are the bio-monitoring (macroinvertebrate) sampling locations. As a point of clarification Lake Creek 1 and 2, date back to 1979.

E-TMI 2 ES10 â€“ â€œThe surface water quality monitoring sites that would be sampled are the same sites as those identified under the No Action Alternative.â€•

TMI adds the following points for clarification: As of 2005/2006, the TMI surface water quality monitoring includes 16 locations as follows:
LC-1, LC-2, LC-4
SC-2, SC-15, SC-17A
FC-1
Emma Gulch,
Weasel Lake, Weasel Gulch
Ross Creek 1 and 2

E-TMI2 Toe Ponds: 4, 3, 2
Decant Pond

A-TMI2 1-11: â€œBased on the analyses in this EIS, the Deciding Officers only determine whether the Proposed Action is in compliance with respective state and federal laws.â€•

The statement does not seem to be correct. The Deciding Officers prepare a Record of Decision (Rod) that determines what if any stipulations may be required to mitigate any impacts. The further discussion that indicates the Rod can only select from one of the alternatives is also incorrect. The Rod may select or modify any alternative including the preferred alternative to address a variety of issues.

B-TMI3 2-25: â€œAnnual aerial inspections of the mine shadow area would be conducted by Troy Mine, Inc. with agency participation. Surveys would be conducted until bond release, and the subsidence portion of the reclamation bond would be held for a minimum of twenty years after the mine has been decommissioned and the adits have been plugged.â€•

The requirement for annual aerial inspections for subsidence is not necessarily an accurate method for determining subsidence based on actual site experience. Surface road erosion could appear to be a subsidence event when viewed from the air. Other methods of field inspection should be considered. Twenty years of subsidence inspection before bond release is excessive.

B-TMI4 2-36: This is the No Action and Proposed Action water monitoring plan, which is the one proposed in the Appendix F of the Revised Reclamation Plan with some additions. TMI adds the following Point of clarification: Table 2-2 is the one we proposed in the Revised Reclamation Plan during March 2006. As of 2005, TMI takes samples at 13 monitoring well sites â€“ (two of which are at the Libby Loadout Facility). We also sample the mineâ€™s service adit ditch, service adit pipe and the Enviro-pump station and these sites are in the monitoring program. During the summer of 2010, two additional monitoring wells were drilled on the north end of the tailing facility, bringing the total to 15 monitoring wells.

The surface water program includes 16 surface water locations. In all we sample 34 locations including the monitoring wells, surface locations, plus the adit ditch, adit pipe and the spring at the Enviro-pump station.

Lake Creek 1, 2 and 4; Stanley Creek - 2 and Fairway Creek â€“ 1 are the bio-monitoring (macroinvertebrate) sampling locations. As a point of clarification Lake Creek 1 and 2, date back to 1979.

B-TMI5 2-57: â€œIf needed, the domestic water well located southeast of the tailings impoundment would be used for irrigation during the first three growing seasons; after which time, the well would be plugged and abandoned as required by ARM 36.21.810.â€•

The company objects to abandoning the well at the industrial site and abandoning the irrigation well at the decant pond area, because these private wells will have future uses.

B-TMI6 2- 59: 6th bullet; â€œThe East Impoundment, North East Impoundment, and Cell 3 borrow areas would be planted with lower elevation forest type vegetation.â€•

The references to an East impoundment and NE impoundment should be East Borrow and

North East Borrow.

C-TMI1

3-7: â€œThe Libby loadout facility is not addressed in the No Action Alternative.â€•

This is not correct. The Libby Load-out is currently permitted, bonded and has a reclamation plan. TMI submitted a â€œMinor Revisionâ€• to our Operating Permit for the New Libby Load-out facility on February 7, 2011. We received Approval for the Minor Revision from the MT DEQ on February 16, 2011. TMI started using the new load-out during March 2011.

A-TMI3

3-26: â€œrequiring lands disturbed by miningâ€¦be reclaimed to comparable stability and utility.â€•

30CFR 228.8(g) is not the USFSâ€™s responsibility in this case to interpret DEQâ€™s regulations. In fact 228.8(h) indicates that â€œcertification or approvalâ€• by state agencies can be taken as acceptance of compliance with parallel regulations. The State and Federal responsibilities and authorities should be accurately described and kept separate from each other.

E-TMI3

3-47 1st paragraph: â€œalong an approximately 200 foot length of a tributary of Ross Creek.â€•

The FEIS should note the tributary is ephemeral.

E-TMI4

3-86 1st paragraph: â€œIn Lake Creek, non-mine sediment sources are somewhat more substantial, but would still be substantially less than the sediment generated by the reclamation.â€•

The statement is not reasonable. The Proposed Action will not produce sediment to Lake Creek or Stanley-Fairway Creek because the topsoil stockpiles would be left in the current reclaimed condition and FR4628 paved surface would not be removed and replaced with a gravel surface.

Over all the years of monitoring, the numbers of clinger taxa in Stanley Creek have been similar to Fairway Creek and similar between Lake Creek Sites. This metric demonstrates that for both Fairway-Stanley and Lake Creek systems, little sedimentation effects have been noted in any of the streams evaluated. TMI has included the Comprehensive Water Quality Monitoring Programs for Streams adjacent to TMI: Spring 1986 through fall 2009, Year 25 in the Appendix E to this letter.

E-TMI5

3-86, last paragraph: TMI believes the Proposed Action concrete closure/water capture structures in the service and conveyor adits would not have any more potential to â€œseepâ€• resulting â€œin water quality impactsâ€• than the agencies concrete water capture and diversion structure. No design was included in the DEIS.

E-TMI6

3-90, 1st paragraph: â€œBecause nitrate concentrations would decrease after blasting ceases, closure and reclamation of the mine would reduce nutrient loading to surface water under all alternatives.â€•

The analysis and conclusions provided elsewhere in the DEIS indicate there has been no nutrient impact to Stanley or Lake Creeks from the mine. The implication that the mine has caused impairment to Stanley of Lake Creeks or that mine closure will somehow â€œreduce nutrient loadingâ€• to these creeks is not accurate.

3-114: â€œMoreover, the water-holding capacity of the borrow materials is low and varies with the rock content.â€•

H-TMI 2

The DEIS is correct that water holding capacity varies with rock content; however, the borrow materials proposed for growth media is composed of organics, clay, silt, sand and gravel. Test plots on Cell 2, embankment slopes and Cell 4 demonstrate the mixed borrow material has adequate water retention for growing grasses, shrubs and trees.

Finally in Appendix F., TMI has included photographs of the tailings facility, that shows the excellent growth on borrow material, photographs of the secondary containment warning system installation, photographs of the topsoil stock pile area and the grass growth on cell #4 â€“ borrow material growth media.

I urge the agencies to approve this plan as soon as possible and thank you for allowing me to comment.

Sincerely,

Bruce Clark
Mine Manager

Sincerely,

Bruce Clark

2011-08-03 Coldwell D. pdf

Darren Coldwell
P.O. Box 336
Troy, MT 59935
406-295-4599

August 3, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear MDEQ and KNF:

I would like to provide some comments regarding the Troy reclamation revision that is open for public comment.

E7 It seems that the agency has done a very thorough examination of all the data that has been collected over the last 30 years and has made an accurate assessment of the water being discharged. From what I have seen, there is simply going to be clean water flowing out of the adit down to the impoundment, and requiring a water treatment facility will not be required.

E1 One thing that really makes me scratch my head though has to do with the pipeline analysis. Is the existing pipeline in a condition that requires replacement immediately upon the mine being decommissioned? I would suggest leaving the existing pipeline infrastructure in place until it needs replacement, and I can't see the logic in burying it when it does get replaced. Wouldn't it be easier to detect leaks and work on it if it was above ground? Aren't we going to be disturbing much more ground by doing it this way? This just doesn't make a whole lot of sense to me.

Thank you for accepting my comments. I eagerly await your response!

Sincerely,

Sincerely,

Darren Coldwell

2011-08-03 Erickson L. pdf

From: Larry Erickson
To: TroyMineReclamation@fs.fed.us
Cc: DEQ Troy Mine
Date: Wednesday, August 03, 2011 5:36:26 PM

I am submitting the following comments on the Draft EIS released by the Forest Service and Montana DEQ and noticed in the Federal Register on May 20, 2011 regarding the TMI revised reclamation plan. There are four primary issues of concern and these are as follows:

1.The DEIS concludes that the existing dual 8" urethane lined steel pipelines that carry tailing slurry during operations need to be replaced with a new buried line at closure. I disagree that the lines need to be replaced and there is little rational in the DEIS to justify this suggested replacement. The main reasons I disagree with the installation of a new buried line are:

a) The existing two surface tailing lines and the existing buried pipeline have more than enough capacity and useful life to transport the mine water to the tailing facility as verified in discussions with the pipeline manufacturer;

E1

b) The installation of a new buried line at closure would create significant new ground disturbance that will require additional reclamation;

c) There are areas in the pipeline and road corridor that are impractical for burial due to proximity of live streams (Stanley Creek and Lake Creek); and

d) TMI is installing additional secondary containment for monitoring and leak detection near stream crossings, on the existing tailing lines, that will allow better monitoring and the surface lines will be easier to repair if necessary.

2. I disagree with the agencies recommended use of the topsoil located below the toe ponds because:

H2

a) An adequate and proven source of topsoil / growth medium exists on the east side of the tailing facility;

H1

b) The topsoil area below the toe ponds has been successfully reclaimed with over 30 years of re-vegetation that would be re-disturbed;

c) The control of sedimentation to Lake Creek during reclamation activities and topsoil excavation will be a challenge; and

K1

d) The area around the toe ponds is providing breeding habitat for the western toad which has been listed as a species of a concern.

3. I disagree that burial of concrete foundations and steel at the mill site pose any risk to water quality. On-site burial of demolition waste is an accepted practice during mill site reclamation. The unnecessary handling and haulage of inert materials to an offsite disposal area would increase risk to air and water quality. TMI's Proposed Action is as follows:

B1

a) Equipment from the mill, shops, office and associated facilities will be salvaged or disposed of offsite. Buildings will be removed and salvaged or demolished. The mill site materials which will be buried on site are primarily concrete, but also may include some metal, glass, plastic and wood. All of these materials will be buried on site with a minimum of three feet of cover material.

4.The Agency-Mitigated Alternative road reclamation plan includes removal of several spur roads that have been passively decommissioned. TMI views reverting road 4626 to a gravel surface will cause undue environmental disturbance and increase risk of

I1

sedimentation to nearby streams. TMI performs annual maintenance on road 4626 and believes the surface will perform for decades after closure with minimal maintenance and cause no sedimentation risk to nearby streams. TMI believes roads 4626G, 4624B and most of 4624 to be passively decommissioned as of this date, and by closure of the Troy Mine, road 4624 will be passively reclaimed. TMI agrees that the portion of road 4551 on private land should be decommissioned – converted to a trail; however, the portion of the road on national forest is already passively decommissioned and is little more than a trail. TMI believes that disturbing this road prism will cause undue environmental disturbance and increase risk of sedimentation to nearby streams. Additionally, TMI believes road 4628A will be passively decommissioned at mine closure and disturbing the steep, narrow, stable road prism in this area will cause undue environmental disturbance; increase risk of sedimentation to nearby streams; and, ultimately the trail will become unstable and unusable.

I4

Thank you for your consideration.

Regards,

L.A. Erickson, PE/PG
ericksonatwork@yahoo.com
(406)827-3391

2011-08-03 FeebackD.pdf

July 29, 2011

Comments on the Troy Mine Revised Reclamation Plan DEIS

FROM: Derek L. Feeback
P.O. Box 1282
Libby MT 59923

TO: Emily Corsi
Project Coordinator
MT DEQ
P.O. Box 200901
Helena, MT 59620-0901
(406) 444 - 2813

Bobbie Lacklen
Project Coordinator
Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
(406) 283 - 7681

Dear Ms. Corsi and Ms. Lacklen,

E7 After viewing the Draft Environmental Impact Statement for the Troy Mine Revised Reclamation Plan I commend the agencies recognition of over 30 years of water monitoring at the Troy Mine by not pursuing treatment of the verified clean water associated with Revett hosted copper and silver deposits. However, I am concerned in particular with three of the Agency-Mitigated Alternatives for decommissioning the mine: (1) removing and replacing existing tailings pipelines, (2) disturbing the timberland and wildlife habitat on the soil stockpile west of the tailings impoundment and (3) ripping up the asphalt access road to replace it with a gravel road.

E1 First, the two existing tailings pipelines are more than sufficient for transporting the mine water to the tailings impoundment after closure. The existing lines are designed to transport silica-rich slurries which are much more abrasive than the mine water. In addition, the ongoing installation of protective secondary containment structures with leak detection systems on the existing tailings pipelines near the intersections with Stanley Creek and Camp Creek will further insure the tailings slurry/mine water will not enter the creeks in the event of a pipeline leak. The existing pipeline routes are in timberland, grassland and wildlife habitat. Removal of these lines to replace with the agencies proposed buried pipeline would unnecessarily disturb this land with little or no benefit to the local ecosystems.

E4

H1 Second, after 30 years the topsoil stockpile is also now timberland and wildlife habitat at or near the Lake Creek riparian zone. I do not believe that disturbing this ground near Lake Creek for a topsoil layer on the tailings impoundment would benefit the local ecosystems or the water quality of Lake Creek. Asarco reclaimed Cell 2 with material from the borrow pit, ground that is already disturbed, in the 1990's. When the mine restarted in 2005 that ground hosted grasses, shrubs and conifers; elk, deer, moose and birds frequented the area. With this proven reclamation practice there is no clear reason to disturb more ground, especially at or near the Lake Creek drainage.

I1 And third, an asphalt road reduces airborne particulate and reduces erosion of the sediments which could potentially enter the watersheds. The Ross Creek Road is paved for that very reason. It really makes no sense to remove the existing asphalt Access Road to the Troy Mine and replace it with gravel.

These agency mitigated alternatives not only unnecessarily disturb timberland and wildlife habitat and potentially increase the sediments in the watersheds, these alternatives are expensive. I ask you seriously reconsider these recommendations.

Sincerely,

Derek L. Feeback

2011-08-03 KnodleG.pdf

Glenn Knodle
184 Elk Meadow Lane
Heron, MT 59844
406 847 0827

August 3, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

A Joyful day to you Ms. Lacklen and Ms. Corsi:

E7 After viewing the Draft Environmental Impact Statement for the Troy Mine Revised Reclamation Plan I commend the agencies recognition of over 30 years of water monitoring at the Troy Mine by not pursuing treatment of the verified clean water associated with Revett hosted copper and silver deposits. However, I am concerned in particular with three of the Agency-Mitigated Alternatives for decommissioning the mine: (1) removing and replacing existing tailings pipelines, (2) disturbing the timberland and wildlife habitat on the soil stockpile west of the tailings impoundment and (3) ripping up the asphalt access road to replace it with a gravel road.

E1 E4 First, the two existing tailings pipelines are more than sufficient for transporting the mine water to the tailings impoundment after closure. The existing lines are designed to transport silica-rich slurries which are much more abrasive than the mine water. In addition, the ongoing installation of protective secondary containment structures with leak detection systems on the existing tailings pipelines near the intersections with Stanley Creek and Camp Creek will further insure the tailings slurry/mine water will not enter the creeks in the event of a pipeline leak. The existing pipeline routes are in timberland, grassland and wildlife habitat. Removal of these lines to replace with the agencies proposed buried pipeline would unnecessarily disturb this land with little or no benefit to the local ecosystems.

H1 Second, after 30 years the topsoil stockpile is also now timberland and wildlife habitat at or near the Lake Creek riparian zone. I do not believe that disturbing this ground near Lake Creek for a topsoil layer on the tailings impoundment would benefit the local ecosystems or the water quality of Lake Creek. Asarco reclaimed Cell 2 with material from the borrow pit, ground that is already disturbed, in the 1990's. When the mine restarted in 2005 that ground hosted grasses, shrubs and conifers; elk, deer, moose and birds frequented the area. With this proven reclamation practice there is no clear reason to disturb more ground, especially at or near the Lake Creek drainage.

I1 And third, an asphalt road reduces airborne particulate and reduces erosion of the sediments which could potentially enter the watersheds. The Ross Creek Road is paved for that very reason. It really makes no sense to remove the existing asphalt Access Road to the Troy Mine and replace it with gravel.

These agency mitigated alternatives not only unnecessarily disturb timberland and wildlife habitat and potentially increase the sediments in the watersheds, these alternatives are expensive. I ask you seriously reconsider these recommendations

Sincerely,

Sincerely,

Glenn Knodle

2011-08-03 OyerN.pdf

Nancy Oyer
527 Edison Street
Butte, MT 59701
4064908989

August 3, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Corsi and Ms. Lacklen:

Thank you for the opportunity to comment on the proposed revisions to the Troy reclamation plans. I would like to give my support for the preferred alternative as selected by the agencies, but would like to see some modifications to it.

I1 I don't understand why you would be taking the asphalt off of the road and returning the road surface to dirt. Wouldn't this create more BMP work to ensure that TMDLs are as low as possible? The current road needs some repair, but the costs of those repairs would be virtually insignificant compared to the long term work and maintenance you would be avoiding hy doing so. I would imagine as this is a Forest Service road that it will also have
I2 a gate on it not far from the tailings impoundment, which would allow the asphalt to have a very good life span for continued access for monitoring of the pipelines carrying water from the adit.

E2 This brings me to my next issue with the preferred alternative. I don't understand why you want to require the Company to bury the pipeline underground when it could be monitored and accessed easily if it was left above ground and next to the road. Putting strict monitoring requirements on the existing line until it truly needs replaced and making them bond to replace it with an above ground line seems like the most common sense approach that will have the least impact to the watershed long term.

Please consider my suggestions before making your final decision.

Sincerely,

Sincerely,

Nancy Oyer

2011-08-03 Rantala G. pdf

Grace Rantala
98 Ave. A
Libby, MT 59923
406 291 4211

August 3, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Dear Ms. Lacklen and Ms. Corsi:

Please consider my comment on the Troy Mine Revised Reclamation Plan Draft EIS.

G3

The northwestern area of Montana has been in a deep recession for a decade longer than the rest of our nation. Much of this is because of the systematic dismantling of the forestry management system of the United States Forest Service. The resultant collapse of the local economies of the area has been catastrophic. Over 3500 industrial, family wage jobs have been lost in the logging and milling businesses of Lincoln and Sanders Counties. The social ills such as alcoholism, drug addictions, family destructive behaviors, suicides, domestic abuse that follow these types of economic losses are well documented and were tragically predicted.

For the last several years, there has been a growing hope that mineral activity could replace some of the lost jobs and help to lower the unemployment rates of 20% that is found in these two counties. That hope will not be met with reality unless mines like the Troy Mine can stay in business. The economic benefit of nearly 200 jobs that average over $55,000 per year - not counting the benefits packages that includes health insurance, retirement plans and stock options â€“ cannot be overstated. The impact the Troy Mine has with $14 million in payroll, $10 million in local purchases of goods and services, $250,000 in property taxes, $1 million in gross proceeds taxes, $1.4 million in metal mines taxes cannot be overstated.

With this economic need as a backdrop to the discussion of the future of the mine, I would like to offer my support for the agency's preferred alternative â€“ with some suggestions for necessary changes.

H2

First, I do not think it is in the best interest of the environment to remove the topsoil from the toe of the impoundment area. Although it is true that this soil was once topsoil on the site, it has now been in place of over 30 years and it seems unnecessary and possibly even foolish to disturb the area so close to the water courses that have successfully protected

H2 during mine operation. Surely, in order to grow the trees and other vegetation that is native to the area, the soil from area borrow pits can be utilized with success and without the potential impacts associated with gross disturbance of areas near streams that have already healed up.

Thank you for accepting and considering my comment.

Sincerely,

Sincerely,

Grace Rantala

2011-08-03 Shearer J.pdf

Jennifer Shearer
21200 E. Country Vista Dr.
Liberty Lake, WA 99019
509 921 2294

August 3, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

K1

From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

H1

H2

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

Thank you for your consideration of my comments.

Respectfully,

Sincerely,

Jennifer Shearer

2011-08-03 Zwang m.pdf

Margeaux Zwang
254 Manor Dr.
Libby, MT 59923
406 334 0003

August 3, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

To Whom It May Concern:

Thank you for accepting my comments on the revised reclamation plans for the Troy mine. In the thirty years this impoundment has been in place, there has been a great amount of solid reliable data to support your preferred alternative, and I would like to say thank you for your acknowledging it.

K1 I would also like to comment on the reclamation using the topsoil that is currently providing habitat for the western toad. Many people have also acknowledged that careful soil management and wildlife can coexist and that this is something that should be applauded, not destroyed.

H1 From what I understand, it isn't going to cost any more to use the borrow or the topsoil that has been set aside, but it may take a bit longer for the borrow to produce the same
H2 reclamation goals if used. I would submit to you that saving habitat that is currently being created and allowing a little longer to create more is a win, win.

I believe that whenever we can showcase an active mining operation creating habitat to any species that is struggling we should. If it isn't going to cost any more either way, and our goal is to reclaim the ground to provide erosion controls and wildlife habitat, we should use the borrow material instead.

Thank you for your consideration of my comments.

Respectfully,

Sincerely,

Margeaux Zwang

2011-08-04 Allen D_WETA.pdf

WETA

Western Environmental Trade Association
2301 Colonial Drive, Suite 2A, Helena, MT 59601
406-443-5541

August 4, 2011

Emily Corsi
Project Coordinator
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Submitted via Email: DEQTroyMine@mt.gov; copy@miningmontana.com

RE: Troy Mine Revised Reclamation Plan DEIS

Dear Ms. Corsi:

The Western Environmental Trade Association would like to go on record in support of the Troy Mine Revised Reclamation Plan.

WETA, organized in 1976, is a coalition of representatives of agriculture, labor, business, commercial industry, the scientific community, recreation, transportation and twenty-one other trade associations, with an interest in promoting the economic well being of the people of Montana while protecting the state's environment. These member associations, companies and other organizations collectively employ or represent thousands of Montanans.

The Troy Mine has put forth its proposed action to reclaim lands disturbed by mining activities and has established reclamation goals and actions that are in full compliance with Montana's Metal Mine Reclamation Act and all federal requirements.

In reviewing the DEIS for the Troy Mine Revised Reclamation Plan, it is apparent that there are some very positive things about the Troy Mine and its operation, not the least of which is the conclusion of the extensive environmental studies that demonstrate there will not be significant impacts to surface or ground water. Water quality is always of primary concern and clearly, as demonstrated by the agencies' various studies, there is no concern about ARD issues or the water quality of the impoundment. The Troy Mine has operated, with some down periods, for over 30 years with no significant impacts to water. We applaud the Troy Mine and its operators and employees, as well as the agencies involved, for the extensive look at the water quality issue and its positive results.

E7

The USFS and the MDEQ have expanded upon the proposed reclamation actions and have included additional mitigation measures in its preferred alternative. We question some of the

proposed mitigation measures preferred by the agencies because in our read of the document and its many components, it appears as though the proposed actions by the Company are indeed adequate. If the proposed actions by the Company for final reclamation meet all the requirements of the law and will result in desired and required reclamation goals, then the agencies should be accepting of those plans and actions.

G2

Many of those who have proposed natural resource projects in Montana have become increasingly frustrated in past years with additional requirements beyond what is required by law that increase costs, produce delays in permitting, and do not result in better operations or reclamation.

Please understand that WETA and its membership have always stood for responsible development, full compliance with Montana and federal laws, and proper financial assurance to protect Montana taxpayers. We do however, respectfully request that the agencies revisit the mitigation measures chosen by the agencies in its preferred alternative, and make certain that the mitigation measures really are necessary to comply with the law and produce proper reclamation.

I appreciate your good work and the time and attention to revisit some of the areas of concern to WETA. As always, I will be happy to answer any questions you may have. I look forward to reviewing the agencies' final EIS and Record of Decision and urge you to move forward in determining a final reclamation plan that meets all requirements while not going beyond the requirements when it is not necessary to produce proper reclamation and environmental stewardship.

Sincerely yours,

Don Allen, Executive Director
Western Environmental Trade Association
2301 Colonial Drive, Suite 2A
Helena, MT 59601
Phone: 406-443-5541
Email: allen@allen-associatesmt.com

2011-08-04 FerrellD.pdf

From: Doug Ferrell
To: DEQ Troy Mine
Subject: Comment On Troy Reclamation EIS
Date: Thursday, August 04, 2011 10:01:32 AM

Bobbie Lacklen, USFS
Emily Corsi, MDEQ

I would like to submit a personal comment on the EIS for the Troy Mine Reclamation.

I have reviewed the EIS, attended a pubic meeting on this issue, and I am familiar with the operation of the mine as well as the surrounding area. I have personally been actively involved for many years working to protect and promote conservation values in the area of the Kootenai National Forest. I have been associated with a number of conservation groups over the years. I currently serve as a board member and officer of both the Montana Wilderness Association and the Friends of Scotchman Peaks for Wilderness. The following comment represents my own personal opinions and does not necessarily represent the position of these groups.

I would first like to acknowledge the good work and good stewardship practiced by the present operators of the Troy Mine. They have earned the respect of our community.

I find both reclamation plans in the EIS to be well thought out, and to be a great improvement over the status quo.

I would like to specifically comment on a few points where decisions are needed to balance conservation values with practical considerations. As a life long conservationist, I hope we will not be afraid to apply common sense to these kinds of questions.

E1 I recommend the tailings pipeline be left above ground. The pipeline is not an eyesore, nor is it a significant barrier to wildlife movements. Leaving the pipeline above ground will minimize disturbance and provide access for monitoring and repair as needed.

B1 I do not see a need to remove non-hazardous construction materials away from the site. This seems to be a waste of energy and more disruptive than the option of burying these materials in the mine or elsewhere on the site.

I1 I also do not favor disturbing existing road surfaces. I favor leaving existing asphalt surfaces in place. Again this approach will minimize disturbance, erosion, cost, and energy expenditure during the reclamation process.

Thank you for the opportunity to comment.

Doug Ferrell

21 Riverfront Drive
Trout Creek, MT 59874
406-827-4341

2011-08-04 Scherzer E. pdf
(page 1)

From:	Ernest
To:	TroyMineReclamation@fs.fed.us; DEQ Troy Mine
Subject:	TROY EIS
Date:	Thursday, August 04, 2011 9:08:43 PM
Attachments:	TROY EIS.doc

Attached is my input into the Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

Ernest Scherzer
33 Lone Wolf Ln.
Trout Creek MT 59874

2011-08-04 ScherzerE.pdf
(page 2)

Bobbie Lacklen
Kootenai National Forest
31374 U.S. 2
Libby, MT 59923-3022

Emily Corsi
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

It is my opinion that the proposed EIS has five areas which need to be addressed and revised.

I1 1. The present paved mine road should be left intact. Removal of it and burying it or hauling it away would only make a marked increase in siltation. Removal of a perfectly good road and replacing it with a gravel road would be a waste of taxpayers' money.

H1 H2 H3 2. Re-vegetation of the tailings pond and its surrounding areas should follow a simple rule of "do no harm". The removal of soil at the bottom and in the area of the toe ponds is silly. That area is reclaimed and doing well. Leave it. Additional soil for covering the rest can be obtained from the area slightly above and behind the backside of the tailings site. That soil would need to have a significant amount of organic matter added to it. BUT there are years to do that. Revett should begin a large composting site whereby they could create most of the organ matter they would need to add to the soil found in the back.

E13 3. The unresolved of the buried barrels and their contents needs to be solved and should have been done long ago by DEQ. There is no doubt that barrels are buried. In sworn testimony that fact was even admitted by the previous owners. The barrels [or, at least one] need to be removed or tapped with a drill to determine the contents. The circumstances surrounding the barrels are highly suspect - buried in the dead of the night; no record kept of them; denied several times and finally admitted under oath.

E12 4. The issue of buried barrels also reinforces the need for an additional requirement in the EIS. A Toxic Inventory Log - going back as far as possible - should be made available to the public and presented to DEQ. If I am right, federal law requires such a law and allows no exceptions for burial of materials in barrels in a tailings pond with a

record of what is in the barrels, how many, when, etc. I bet the law would even mean that the mine owners could bury lemonade in barrels, but would need to document it. How can DEQ have overlooked this federal mandate for so many years regarding the admitted buried barrels?

B1 5. Hauling the buildings to another site after they are removed or digging a pit on site and burying them should not be done. The materials from their destruction should be placed in the mine; in the safest location possible. It would save time and cost.

E1 E2 6. Lastly, it should not be required that the two above ground pipelines be removed and a new pipeline placed underground. That would mean additional digging and siltation. The lines should be left and fitted with special sensors to warn of any leak and also a system of alerting proper authorities [without delay] of any leak or other danger.

Thank you,
Ernest Scherzer
33 Lone Wolf Ln.
Trout Creek MT 59874

2011-08-04 Skinner D. pdf

From: Dave Skinner
To: DEQ Troy Mine; TroyMineReclamation@fs.fed.us
Subject: Attn: Troy Mine Revised Reclamation Plan
Date: Thursday, August 04, 2011 2:01:26 PM

Dear Kootenai National Forest and Montana DEQ:

Regarding the revised reclamation plan for the Troy mine, in general it is all right, however, I have issues with the agency recommendations on the water pipelines and impoundment.

With the entire point being to minimize disturbance et cetera, I find the recommendation for a new, underground water line rather illogical. In-place infrastructure that is sound should be left in place. Sometimes, obsolete
E1 infrastructure should also be left to, um, die quietly.

E2 Access for purposes of vandalism is a spurious concern. For one thing, eco-whack-jobs are not usually very tech-savvy, and they are also lefties which means they hate guns -- so shooting the pipe is out of the question from that quarter. Access for maintenance and monitoring is the flip side...repair and detection should be made easy, not difficult.

If at some point in the distant future the existing lines can no longer work, THEN a new replacement line, not necessarily buried, should be planned for. But for now, make use of what is there and obviously still works-- that's conservation.

H1 Given that the stockpiled dirt is toad habitat these days, perhaps it should be left in place. Amended borrow materials with organic supplementation (which isn't that much in this environment anyway) along with chemical agents should work fine.

H3 As for the call for mycorrhizal fungi, that's pushing it. Although the fungus has a role in forest generation over time, this is not a sterile planet. The fungus will get there and take over soon enough. Why are the agencies requiring organic versus chemical fertilizer for reclamation in general?

Finally, the requirement to render pristine the footings and other concrete whatnot sounds like overkill. There is a mine here and you'll never be able to fool future
B1 archaeologists. And the animals won't care even if they were smart enough to understand, which they ain't. In fact, maybe the cement should be retained in broken fashion for a Forest Service road-repair stockpile -- USFS is not going to be a do-nothing agency forever, ya know. At least we HOPE not.

I look forward to seeing the final reclamation plan include some further modifications to address some of the areas I have outlined above.

Respectfully,
Dave Skinner
Hydra Project
Box 1486
Whitefish, MT 59937
406 756 0047 vm no fax

2011-08-05 Banks M.pdf

From: Mike Banks
To: TroyMineReclamation@fs.fed.us
Subject: DEIS - Troy Mine Revised Reclamation Plan
Date: 08/05/2011 04:20 PM

Comments from Mike Banks

888 Big Timberlane
Troy, MT 59935
Cell 678-617-3958

E1

The managing of residual outflows from the mine site, whether they travel via the Stanley Creek watershed down to Lake Creek or by the rather outdated, decaying roadside pipeline will become a future environmental issue, if one practices any reasonable theory of probability. Past problems, leaks, spillage and cave-ins support that present infrastructure does not prevent a failure, and certainly no one would expect the situation to be "better" after the operation is discontinued. As closing of the mine is imminent, we need to step-up protection and preservation of the forgotten natural resources, the riparian element including the fishery and the wildlife and their habitat.

Just as important as it is to finally decide on this new reclamation plan, after a dozen-plus years, should be the diligence and forethought to get it correct or as right as it can be. Many people around the world are already paying dearly for the availability of clean water, perhaps we could consider this into the resolve of this matter.

The very best thing is to do whatever provides the most benefit for the longest period of time, which would mean that as far as this person is concerned or considered, the very best alternative is the Agency-Mitigated Alternative.

2011-08-05 Glader P_Hecla.pdf

Hecla

Transmittal Via Electronic Mail and Facsimile

August 5, 2011

Bobbie Lacklen, Project Coordinator
Kootenai National Forest
31374 US 2
Libby, MT 59923-3022

Emily Corsi, Project Coordinator
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620—0901

RE: Comments on Troy Mine Reclamation Plan DEIS

Dear Ms. Lacklen and Ms. Corsi:

Hecla appreciates the opportunity to comment on the subject DEIS for the Troy Mine as follows:

B1
B2

1. Support for Troy Mine's reclamation plan regarding the handling of demolition debris. There appears to be no condition in the Montana Solid Waste Management Act ("Act") that would prohibit the on-site disposal of inert demolition materials. In fact, the Act appears to defer such aspects of mining operations to both statutory and regulatory mechanisms specific to the permitting and approval procedures applicable to the mining industry. Further, it appears to be contrary to the concept of net environmental benefit to expend the energy necessary to break up, excavate, load, haul, dump, and cover such inert materials in a landfill many miles away. Costly off-site landfill capacity should not be consumed by such inert materials. Burial of such materials on-site could not impact state water resources any more than natural and man-made wood materials, concrete abutments for both bridges and culverts, and metal culverts. All such materials/structures are located in virtually countless locations statewide, and are continually exposed to both water flows and direct meteoric contact, whereas burial on-site of these same types of materials would eliminate surface water exposure. The totality of environmental considerations clearly leads to the conclusion that on-site burial of inert materials is the

6500 N. Mineral Drive, Suite 200 • Coeur d'Alene, Idaho 83815-9408
(208) 769-4100 • FAX (208) 769-7612 • www.hecla-mining.com

prudent approach.

H1
H2
J2
H3

2. Support for Troy Mine's reclamation plan provisions for soil replacement and amendment. Destruction of the functional habitat that has established in the topsoil stockpile areas, which must be re-reclaimed if these areas are destroyed, makes no sense when the Proposed Action will establish appropriate vegetation with the use of borrow materials. It appears the overriding consideration of the Agency Mitigated Alternative is primarily the rate of growth, which is not dictated by applicable law or regulation. The bond must be maintained until appropriate vegetation is established, thus a moot point from an overall timing standpoint. The presence of certain weeds in the borrow source areas could be mitigated in advance with appropriate week control. Further, the aggressive use of organic materials as proposed in the Agency Mitigated Alternative could result in the generation of organic acids not representative of the surrounding undisturbed areas. Test plots utilizing the borrow area source materials have already demonstrated that the Proposed Action will meet reclamation expectations regarding the establishment of native species on the disturbed areas.

E1

3. Support for the Troy Mine's reclamation plan provisions concerning pipelines. There appears to be no engineering support for the Agency Mitigated Alternative, which indicates the existing pipelines would not support the use timelines considered for the completion of reclamation activities. An engineering report, to establish the integrity of the existing pipelines relative to the applicable reclamation timelines, could be easily secured to determine whether or not the existing pipelines are "too old" for the intended period of use. If shown that the pipelines are structurally sound, the Proposed Action would certainly be preferable to the Agency Mitigated Alternative actions of both new disturbances associated with construction and burial of a new pipeline, with resultant decommissioning of functional in-place pipelines that are appropriate for the Proposed Action use.

We appreciate the agencies' consideration of these comments.

Best Regards,

Dave Halland
for

Paul L. Glader
Manager – Environmental Services

2011-08-05 Hernandez C. pdf

Paul Bradford / Forest Supervisor
Kootenai National Forest
1101 Hwy 2 West
Libby, MT 59923

August 5, 2011

Dear Paul,

Greetings! Please consider this as my official comment on the Troy Mine Reclamation Plan DEIS. First of all it has been the regulatory delinquency of both the Kootenai National Forest and the MT Dept. of Environmental Quality that the Troy Mine has operated without an adequate Reclamation Plan for over the last decade. The only reason this mine is undergoing a Reclamation Plan EIS is because the public through the Cabinet Resource Group (CRG) has held the agencies feet to the legal fire. That said, the document that has been produced is too long, redundant and intentionally ignores issues of such importance that it will probably the courts that have the final say as to it's adequacy. That is not to say that all of the issues and ideas addressed are without merit or some vision.

E13 The primary issue that both regulatory agencies fail to address and actually dismiss regards the buried barrels. Asarco admits that it buried barrels within the tailings impoundment after having denied such a contention for over a year. CRG has provided the regulatory agencies with sufficient data and documentation that demonstrates Asarco used voluminous amounts of hazardous wastes at the mine and failed to produce any documentation of its appropriate disposal. CRG funded the use of advanced technology to locate areas where such barrels of waste may have been disposed of within the tailings impoundment. But the regulatory agencies are afraid to initiate the required due diligence to determine the quantity and content of buried barrels. Shame on the regulatory agencies and the people that direct them.

Without direct knowledge of the contents of the buried barrels it is impossible for the regulatory agencies to determine much less design an adequate reclamation plan that protects the public health or the physical environment. But what the heck, this won't be the first time such issues have been swept under the rug or fallen through the cracks. We only have to look at Libby and the W.R Grace example. Or perhaps the Zortman-Landusky and Beal Mines might be a wake up call? Either way, unless and until the regulatory agencies get off their collective duffs and do what is best for the public interest and not the private interest, the tragedies and costs that have engulfed society from the previous examples is only waiting to be repeated again at

Troy. Do your job people or move aside for folks that will do it for you. Thank you and good luck with the next write of this Reclamation Plan.

Sincerely,

Cesar Hernandez, 36704 Fulkerson Lane, Polson, MT 59860

2011-08-05 HoughP_FSPW.pdf
(page 1)

From:	Philip Hough
To:	troyminereclamation@fs.fed.us; DEQ Troy Mine
Subject:	Friends of Scotchman Peaks Wilderness Comments on Troy Mine Revised Reclamation Plan, Draft EIS
Date:	Friday, August 05, 2011 3:46:58 PM
Attachments:	FSPWCommentsReTroyMineReclamationPlanAug5-2011.docx

Dear Ms. Corsi and Ms. Lacklen,

Please see the Friends of Scotchman Peaks Wilderness comments on Troy Mine Revised Reclamation Plan, Draft EIS (embedded below, as well as attached.)

Phil

Phil Hough
Executive Director
Friends of Scotchman Peaks Wilderness
Home (208) 255-2780
Cell (208) 946-9127

Check out our Website: http://www.ScotchmanPeaks.org
Follow us on Facebook: http://www.Facebook.com/ScotchmanPeaks

COMMENTS:

August 5th, 2011

Emily Corsi
Montana Department of Environmental Quality
PO Box 200901
Helena, MT 59620-0901

Bobbie Lacklen
Kootenai National Forest
31374 U.S. Highway 2
Libby, MT 59923-3022

Via email: DEQTroyMine@mt.gov
TroyMineReclamation@fs.fed.us

Re: Troy Mine Revised Reclamation Plan, Draft EIS

Dear Ms. Corsi and Ms. Lacklen,

The Scotchman Peaks Roadless area, a part of the West Cabinet Mountains, spans the Idaho/Montana border, adjacent to the Troy Mine. We are, literally, very close neighbors. Yet, the Scotchmans remain one of the last, and largest, wild areas in our region.

The **Friends of Scotchman Peaks Wilderness** conducts education, outreach and stewardship activities to preserve the rugged, scenic and biologically diverse 88,000 acre Scotchman Peaks Roadless Area. We believe the Scotchman Peaks deserve congressional designation as Wilderness for the benefit and enjoyment of current and future generations. As we work towards the designation of the Scotchman Peaks as Wilderness we also strive to assure that this special place continues to retain its Wilderness quality and characteristics. The present operation of the Troy mine has been conducted in such a way that the Wilderness quality of the Scotchmans has been preserved. A strong reclamation plan will help assure that these Wilderness qualities will be retained after the mining operations have ended.

We appreciate the time and effort that the Kootenai National Forest, Montana Department of

Environmental Quality and the Troy Mine Company have put into preparing the alternatives explored by the draft EIS for the Troy Mine Revised Reclamation Plan. Both of the alternatives explored are very good improvements over the existing reclamation plan. We appreciate the thoroughness of the mine company's proposal and their willingness to tackle important issues; and we appreciate many of the improvements which DEQ has incorporated into the preferred alternative.

In general, we like many aspects of the "preferred alternative" and believe that it addresses some of the critical issues. We believe that the proposal of the mine operators as well as the additional mitigation measures suggested by the US Forest Service, when combined in some meaningful measure, and when improved upon further, should be able to produce a strong reclamation plan.

J2
J4

Because wildlife roams and does not recognize land ownership boundaries, we are very interested in seeing the strongest possible protections for the quality and security of wildlife habitat. We would encourage the use of native plants in re-vegetation projects and encourage every effort at the control of weeds and other invasive species. Steps to assure that the threats to surface habitat from of subsidence is reduced or eliminated, is also important.

I1

We agree with the decommissioning those mine related roads which would no longer be needed. However for those roads that are necessary for the long-term monitoring and maintenance, the environmental impact from an asphalt road may be less than ripping up the asphalt and maintaining the road to a different standard. Some common sense should prevail in determining what is reasonable to achieve the balance between returning the mine site to a "natural state" and maintaining the structures need for long term monitoring and hydrological management of the site.

E1
E2

The merits of burying pipeline for aesthetics or to keep it from being vandalized may be outweighed by the merit of having access to the pipeline for maintenance and repairs.

A3
B1

Overall, the current mine operation has been conducted with a minimal "footprint" which has not disrupted the Wilderness Character of the nearby Scotchman Peaks proposed wilderness. While the further reduction of that footprint, once the mining operation has ceased, is a desirable goal, we would expect that the long-term monitoring and maintenance needed to assure water quality would have some "minimal footprint" and that reason, prudence and common sense would help guide the decisions on just how much reduction in that footprint is feasible. Filling in the mine with non-hazardous on-site materials, rather than hauling them away may be one such example.

Please keep us updated on the projects status and include us on the distribution for the Final DEIS.

Sincerely,

Phil Hough

Philip Hough
Executive Director
Friends of Scotchman Peaks Wilderness

2011-08-05 Hough P - FSPW.pdf
(page 3)

Friends of Scotchman Peaks Wilderness

www.ScotchmanPeaks.org

FSPW
PO Box 2061
Sandpoint, ID 83864

Board and Staff

Phil Hough
Chairman,
Exec Director
(208) 946-9127

Doug Ferrell
Vice-Chair
Montana Director
(406) 827-4341

Carol Jenkins
Vice-Chair
Idaho Director
(208) 265-9204

Sarah Lundstrum
Secretary
(406) 755-6304

Jacob Styer
Treasurer
(208)-265-7206

Neil Wimberley
East Bonner County Director
(208) 264-5379

Bill Martin
Board Member
(406) 295-5258

Will Valentine
Board member
(208) 255-1114

Sandy Compton
Program Coordinator
(208)-290-1281

Molly Kieran
Lincoln County Coordinator
(406) 293-2934

August 5th, 2011

Emily Corsi
Montana Department of Environmental Quality
PO Box 200901
Helena, MT 59620-0901

Bobbie Lacklen
Kootenai National Forest
31374 U.S. Highway 2
Libby, MT 59923-3022

Via email: DEQTroyMine@mt.gov
TroyMineReclamation@fs.fed.us

Re: Troy Mine Revised Reclamation Plan, Draft EIS

Dear Ms. Corsi and Ms. Lacklen,

The Scotchman Peaks Roadless area, a part of the West Cabinet Mountains, spans the Idaho/Montana border, adjacent to the Troy Mine. We are, literally, very close neighbors. Yet, the Scotchmans remain one of the last, and largest, wild areas in our region.

The **Friends of Scotchman Peaks Wilderness** conducts education, outreach and stewardship activities to preserve the rugged, scenic and biologically diverse 88,000 acre Scotchman Peaks Roadless Area. We believe the Scotchman Peaks deserve congressional designation as Wilderness for the benefit and enjoyment of current and future generations. As we work towards the designation of the Scotchman Peaks as Wilderness we also strive to assure that this special place continues to retain its Wilderness quality and characteristics. The present operation of the Troy mine has been conducted in such a way that the Wilderness quality of the Scotchmans has been preserved. A strong reclamation plan will help assure that these Wilderness qualities will be retained after the mining operations have ended.

We appreciate the time and effort that the Kootenai National Forest, Montana Department of Environmental Quality and the Troy Mine Company have put into preparing the alternatives explored by the draft EIS for the Troy Mine Revised Reclamation Plan. Both of the alternatives explored are very good improvements over the existing reclamation plan. We appreciate the thoroughness of the mine company's proposal and their willingness to tackle important issues; and we appreciate many of the improvements which DEQ has incorporated into the preferred alternative.

2011-08-05 Hough P- FSPW.pdf
(page 4)

In general, we like many aspects of the "preferred alternative" and believe that it addresses some of the critical issues. We believe that the proposal of the mine operators as well as the additional mitigation measures suggested by the US Forest Service, when combined in some meaningful measure, and when improved upon further, should be able to produce a strong reclamation plan.

J2
J4

Because wildlife roams and does not recognize land ownership boundaries, we are very interested in seeing the strongest possible protections for the quality and security of wildlife habitat. We would encourage the use of native plants in re-vegetation projects and encourage every effort at the control of weeds and other invasive species. Steps to assure that the threats to surface habitat from of subsidence is reduced or eliminated, is also important.

I1

We agree with the decommissioning those mine related roads which would no longer be needed. However for those roads that are necessary for the long-term monitoring and maintenance, the environmental impact from an asphalt road may be less than ripping up the asphalt and maintaining the road to a different standard. Some common sense should prevail in determining what is reasonable to achieve the balance between returning the mine site to a "natural state" and maintaining the structures need for long term monitoring and hydrological management of the site.

E1
E2

The merits of burying pipeline for aesthetics or to keep it from being vandalized may be outweighed by the merit of having access to the pipeline for maintenance and repairs.

A3
B1

Overall, the current mine operation has been conducted with a minimal "footprint" which has not disrupted the Wilderness Character of the nearby Scotchman Peaks proposed wilderness. While the further reduction of that footprint, once the mining operation has ceased, is a desirable goal, we would expect that the long-term monitoring and maintenance needed to assure water quality would have some "minimal footprint" and that reason, prudence and common sense would help guide the decisions on just how much reduction in that footprint is feasible. Filling in the mine with non-hazardous on-site materials, rather than hauling them away may be one such example.

Please keep us updated on the projects status and include us on the distribution for the Final DEIS.

Sincerely,

Phil Hough

Philip Hough
Executive Director
Friends of Scotchman Peaks Wilderness

2011-08-05 Springer Rand Sh. pdf

Robert & Sara Lou Springer
440 Elk Creek Road
Heron, M 59844
August 3, 2011

Paul Bradford, Forest Supervisor
Kootenai National Forest
31374 US
Libby, MT 59923-

~~RE: Troy Mine Tailings Impoundment EIS~~

Over the years of the Troy Mine operation, we have noticed that unexpected events have occurred; creation of toe ponds, roof collapses to name a few. So we realize that it is difficult to plan for the unknown hazards of the tailings impoundment, however ISN'T THAT YOUR JOB?

E13 | Your agency must demand that the buried barrels be dug up and tested. If toxic material are present —and we believe most likely there is—mitigation must begin.

45 | We must have a big enough bond to protect Montana Taxpayers from the Zortman/Landusky screw-up.

Please do your job of protecting National Forest Resources.

Thank you,
Sincerely,

Robert Springer
Sara Lou Springer

AUG 05 2011
KH
RECEIVED

2011-08-18 .Nhpkki.pdf
(page 1)

From: nhpkki@zwlokk.com
To: troymine@miningmontana.com
Subject: Troy Mine Revised Reclamation Plan
Date: 08/18/2011 06:00 AM
Attachments: jlqnvfvgbc http://bxvfajlbyolt.com/ comments.pdf

---

Hello,
Attached is a letter stating my views on the Troy Mine Revised Reclamation Plan . Thank you for allowing me to submit my comments.

Sincerely,
jlqnvfvgbc http://bxvfajlbyolt.com/

2011-08-18 NhpKKi.pdf
(page 2)

jlqnvfvgbc http://bxvfajlbyolt.com/
jlqnvfvgbc
New York, NY 99822
45544416286

August 18, 2011

Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Attention: Emily Corsi - Project Coordinator

Kootenai National Forest
31374 US 2
Libby, MT 59923-3022
Attention: Bobbie Lacklen - Project Coordinator

RE: Troy Mine Revised Reclamation Plan Draft Environmental Impact Statement

QPCeG5 wjvhykrlsnfm, [url=http://uaguyilnsaav.com/]uaguyilnsaav[/url], [link=http://diyetapkrpru.com/]diyetapkrpru[/link], http://mtcxeqbbgavp.com/

Sincerely,

jlqnvfvgbc http://bxvfajlbyolt.com/

2011-08-25 HindsC pdf

From: colleen hinds
To: deqtroymine@mt.gov; troyminereclamation@fs.fed.us
Subject: Comment on the Environmental Impact Study for the Troy Mine Tailings Impoundment Reclamation Plan
Date: 08/25/2011 10:54 AM

August 24, 2011
Pual Bradford, Forest Supervisor /Richard Opper, Director,DEQ

Dear Sirs:

My comments are late, but then the Plan is a bit off target also. My comments run along the smae line as CRG suggestions: 1) on the top soil reclamation create a large scale composting site with organic material and move small amounts at a time. 2) leave the present paved road to the mine intactas removing the paving would be costly and the public enjoys the less dust on atrip to the Spar Lake areas. heavily gate off the fork to the mine. 3) Does the idea of filling the old mine adit with Revett's old buildings sound like a fitting end??4) Make available a Toxic Release Inventory Log for as far back as possible to know how much and what kinds of pollutants were left behind. 5) An investigation into the buried barrels in the tailings pond ,also to know what pollutantsthe public is left to deal with.

H3
I1
I2
B1
E12
E13

Thank-you sirs for your attention and co-operation in this Reclamation Plan. (Family health issues hindered me from earlier discourse.)

Colleen Hinds
10 Picadilly Lane
Heron, Montana 59844

Transcript of Verbal Comments

UNITED STATES DEPARTMENT OF AGRICULTURE

KOOTENAI NATIONAL FOREST

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

PUBLIC HEARING RE DRAFT EIS NO. 20110149

TROY MINE REVISED RECLAMATION PLAN

Troy High School Auditorium

116 East Missoula Avenue, Troy, Montana

Wednesday, June 8, 2011 - 7:00 P.M.

Reported By: Bambi A. Goodman, CSR, RPR, CRR

I N D E X

	PAGE
Opening Statement by Ms. Corsi	3
Opening Statement by Ms. Lacklen	4
Procedural Statement by Ms. Corsi	5
PUBLIC COMMENT SPEAKERS:	
Max Schrader - Private Citizen	7
Chas Vincent - As Private Citizen	8 & 15
Steve Lloyd - Troy Mine Mill Manager	13
Bruce Vincent - Private Citizen	16
Close of hearing by Ms. Corsi	20

--o0o--

P R O C E E D I N G S

MS. CORSI: Thank you for coming tonight. My name's Emily Corsi. I'm with the Montana Department of Environmental Quality. I'm the project coordinator for this Environmental Impact Statement.

I'd like to introduce a few people before we get started tonight. Warren McCullough, also with DEQ. He's the head of our Environmental Management Bureau. Herb Rolfes is standing in the back corner. He's also with DEQ, and he's the head of the Hard Rock Mining Program. And he has various members of his staff here today. Hopefully you got a chance to meet all of them.

From the Forest Service, Bobbie Lacklen is my counterpart. She's the project coordinator. And then Linda Ellett-Fee is the district ranger from the Three Rivers Ranger District. And she's standing in the back corner. And then there are various members from the US Forest Service who are here tonight as well. And hopefully you got a chance to meet them.

And also, I'd like to introduce our contractors that helped put this together and put our displays together tonight. We have Kate Stenberg and Darrel Stordahl. There he is in the back. So hopefully you had a chance to meet everyone.

And now, Bobbie wants to give you a brief

overview of the EIS, and then we'll get started.

MS. LACKLEN: Well, I'm not going to give an overview of the EIS, but I do have a couple of things to say. I just want to thank you all for coming to the open house and public hearing tonight.

The purpose of tonight's meeting is to provide a forum for the public to review key aspects of the revised reclamation plan for the Troy Mine; ask questions during the open house portion of the meeting and provide an opportunity to give oral comments on the document.

The formal hearing portion of tonight's meeting is a requirement of the DEQ. It's not a forestry requirement. Hopefully everybody had a chance to meet with the agency personnel and ask questions about the project or components of the draft EIS. Specialists will be available for a short time after the hearing, if you guys have any more questions.

You can also find out project information on the DEQ and the KNF websites. DEQ is the Department of Environmental Quality, and KNF is Kootenai National Forest. The websites are listed on handouts and also on the exhibit board back there.

If you still have questions after tonight's meeting, you can also contact Emily or myself. Our business cards are on the table for contact information.

1 The Kootenai National Forest and the DEQ are
2 both joint lead agencies for this environmental review
3 process. Both agencies are responding to the Troy Mine's
4 request to approve the revised reclamation plan. The
5 Forest Service is evaluating all the reclamation plan
6 components, although the Forest Service's jurisdiction
7 applies only to the National Forest Service lands. The
8 Draft EIS analyzes three alternatives. I think most of
9 you guys understand the alternatives by now. We have the
10 no action alternative, which was the previously approved
11 1978 reclamation plan for the Troy Mine; and then the
12 proposed action, which is the revised reclamation plan
13 that was submitted to the agency by the mine in 2006.
14 And then the third alternative that we're evaluating is
15 the agency-mitigated alternative, which is the agency's
16 preferred alternative. So we welcome your comments on
17 the Draft EIS. Your comments will be invaluable to the
18 agencies as they prepare the final EIS and a record of
19 decision.
20 Now, Emily will discuss the specifics of the
21 public hearing.
22 MS. CORSI: All right. So both agencies
23 began accepting public comments on the Draft EIS on
24 May 20th. And you have until July 5th to send us your
25 comments. Tonight you have the opportunity to submit

1 oral comments by coming here to the microphone, or you
2 can also submit written comments. There are sheets here
3 on the table. And you can either put it in the box or
4 mail it to us later.
5 If you give oral testimony tonight, it will be
6 recorded verbatim. And we have our court reporter here.
7 She's catching everything we say. It will become the
8 basis of an official transcript and record of this
9 hearing. Just so you know, anything that you say or
10 submit will become part of the administrative record for
11 this project and will be available for public review.
12 And ultimately, your comments will be used in the
13 preparation of the final EIS.
14 All parties have the opportunity to express
15 their views on the proposed actions freely, fully and
16 publicly. In order to conduct a fair hearing tonight,
17 it's essential that you complete a card, and Kate has
18 them there for you. We need to make sure we get your
19 name spelled correctly for the record. So if you do plan
20 to comment tonight, please make sure you do fill one of
21 these out.
22 So the way this is going to work is, if you
23 signed up to provide comment, I'll call your name and you
24 can come up to the podium. Each speaker will have five
25 minutes to give testimony. When you come up, please

1 state your name. Please spell it for the court reporter.
2 If you're affiliated with a group or organization, please
3 state that as well. Also, if any of you have a prepared
4 written statement, like I do, please give it to the court
5 reporter. It will help with the transcript.
6 So just quick kind of rules of the hearing.
7 Please don't engage in a debate with other audience
8 members. Remember that the tape recorder is running and
9 there are small children in the room, so try to keep your
10 comments PG. As you come up to speak, Bobbie's going to
11 be our timekeeper. She'll provide a sign that tells you
12 when you can start. She'll give you a one-minute
13 warning, and she'll give you your five-minute stop. No
14 portion of your unused time can be allocated to other
15 presenters. Everyone gets five minutes; no exceptions.
16 And if there's extra time at the end of the hearing,
17 please feel free to ask additional questions with our
18 specialists.
19 With that, we're going to open it up for public
20 testimony. And someone has my list of speakers. No one
21 else has signed up? If you change your mind throughout
22 the hearing, you can always get a card from Kate and she
23 can get it to me.
24 And our first speaker tonight is Max Schrader.
25 MR. MAX SCHRADER: Max Schrader, M-a-x

S-c-h-r-a-d-e-r.

One thing I'd like to tell the people about here is, on the reclamation, I was part of some of the recovering of the tailing ponds back in 1999. We tried to use a test block with the topsoils that was stacked at the toe pond, plus we used the pit run. And nowhere did we see any sign of better growth with the soils -- the record topsoil. So I think in the EIS, it should be pointed out that the pit run material at the Troy tailings pond area could be used to cover that when the mine is done; thank you.

H2

MS. CORSI: Thank you for your comment, Mr. Schrader.

The next speaker is Senator Chas Vincent.

MR. CHAS VINCENT: You said PG. Is that PG-13 or is it just PG?

For the record, Chas Vincent. Tonight I'm just going to be speaking as a resident of Lincoln County. I will be submitting my formal comments as an elected representative for Lincoln County at a later date.

I wanted to start by saying -- giving some thanks to the agencies that have conducted the EIS. I think, after thirty years of monitoring the waters and the waterways around the Troy Mine and the project when it was operating and when it wasn't operating, I believe

E7

E7

1 that your decision to not require further water treatment
2 is a very good one. It is based in very sound science.
3 And I wanted to give you guys some applause in
4 recognizing those factors.
5 I do have a couple of questions, though, after
6 reading through the EIS. And I guess I'm hoping that
7 maybe later on we could get some answers to it, if we
8 have time. But certainly as you guys move forward, I
9 want to give my support for the agency's mitigated
10 alternative, with some consideration of some of the
11 company's proposed actions that I think, integrated or
12 rolled into that preferred alternative, would have the
13 best outcome and the least environmental impact.
14 I'd start with the pipeline. I don't
15 understand how leaving the current existing pipeline in
16 place, until it needs to be replaced, is a wise decision,
17 nor is burying the entire pipeline a wise decision.
18 There is a lot of information. There was a study done in
19 2004 that was after carrying twelve years of slurry
20 through the pipe, eighteen years of pretty much just
21 water, the liner inside the pipes were hardly showing any
22 sort of wear. And I believe, you know, of course the
23 mine's been operating for a couple of years, and you may
24 need to look at it again. But the existing
25 infrastructure is in very good shape. And I think that

E1

1 it should be used as long as is practically possible.
2 But if it is going to be replaced, it ought to
3 be replaced above ground. In the EIS it states that the
4 reasons for burying the entire pipeline had to do with
5 vandalism and perhaps maybe someone might suggest that it
6 would be -- the aesthetic values that would be associated
7 with leaving it above ground. And I would submit to you
8 that there has been no vandalism, for one. And two, if
9 you're going to be digging up or burying this pipeline,
10 and if it is, in fact, going to be need to be replaced
11 after forty-five years of use, then it is going to be
12 requiring quite a bit of disturbance over the next
13 hundred years or however long that additive is going to
14 be discharging water. So my recommendation would be use
15 the existing pipelines as long as possible. If it needs
16 to be replaced, to replace it and leave it above ground.
17 You know, you get a slough on the hillside, and how much
18 of that pipeline you're going to be digging up. And as
19 far as the aesthetics, I would argue that digging up that
20 entire pipeline every forty-five years would provide more
21 harm to somebody's experience, though I would not be one
22 of those people that would be sharing that experience. I
23 think the pipeline next to the road is a good idea and a
24 good place for it.
25 On the to road itself, one of the

E1
E2

I1

recommendations is to completely remove the entire cover, the asphalt, and return it back to dirt. And I'm just not quite understanding that desire. The State has spent a great deal of time, a great deal of time just in the last several months, talking about total daily maximum loads and impacts to watersheds in our current waterway. An effective way to deal with those BMP issues is to cap it with something like asphalt. And I'm not sure exactly what the driving factor is for that, but I would suggest that at the end of the mine's life, which hopefully will be another fifteen years from now, that fixing that asphalt and leaving it for BMP issues, moving forward, would be a wise decision and will have a better net impact.

One comment was made before I got up here alluded to the topsoil, and I would -- one other thing I would add to that is just that the -- I understand that you guys are in position on the topsoil; you're statutorily required if you can save it, you shall use it. And I understand that -- that situation. But I also understand the purpose of a reclamation plan is to mitigate impacts. And you're trying to create habitat in places that maybe there wasn't, upon decommissioning.

H1

These toe ponds, this topsoil that -- is providing a great deal of good habitat for -- I have one

H1
K1
H2

minute left -- for quite a few species of terrestrial and aquatic life. But the sensitive species of the western toad, which I understand has ten different breeding places in Lincoln County, three of them are at that impoundment. I think leaving that topsoil alone and using some of that borrowed soil that we just heard about, we can have the same desired future outcome, is a wise decision and would be leaving that habitat alone and still having our desired outcome in the end. It would be a win-win.

C4

You know, also, I would mention the company, from what I understand, has done a great deal of work on dust abatement. And I think messing with the pit run would be a lot better dealing with that dust abatement issue, moving forward.

B2

The last thing, really quick, that I would mention would be on the removal of the concrete and cement foundations in the buildings up there, an argument being made that it would be best to bust it up and take it away because it could pose a threat to the groundwater quality. But it's going to be busted up and it's going to be buried somewhere else. So I guess I would like to know where exactly it should be buried where it wouldn't be impacting water. And I would suggest that the mine's application to just strip what's necessary out, bury it,

1 would be the proposed action.
2 My time is up. I had one other thing to say,
3 but maybe I'll catch up with you in my formal comments;
4 thank you.
5 MS. CORSI: Thank you.
6 Our next commenter is Steve Lloyd.
7 MR. STEVE LLOYD: My name is Steve Lloyd,
8 L-l-o-y-d. I'm the mill manager at the Troy Mine.
9 I just wanted to talk a little bit about
10 the -- kind of what the EIS was predicated on. And that
11 was the scoping was done back in 2007. And there's three
12 issues that came out of that scoping. And they were all
13 really concerning the mechanical stability of the
14 tailings pipe itself, the threat of tailings water or
15 water from the adit getting into the environment because
16 of a break, the pipeline actually breaking. And my
E1 17 experience, and Chas mentioned it also, is that the
18 mechanical condition of the tailings line is very
19 excellent. The pipe is still three-eights of an inch
20 thick. The lining was designed from the factory between
21 one-quarter and three-eighths of an inch thick. And it
22 is still that thick. So Chas had mentioned that lines
23 had run about thirteen years. They actually had -- each
24 line had over 16 million tons of slurry run through them
25 during that period of time. But yet the liner was

E1

intact. We also have eleven years of down time in between when ASARCO ran this mine and when Genesis started the mine. And during those eleven years, water ran through those tailings lines. And of course, with water, there is no appreciable wear. So we have a really good dynamic test that's already been done at this place that indicates that the tailings lines should take that water for a long period of time. I personally feel like the mechanical condition of the tailings line is very, very good. And so breakage, to me, is the least of our troubles. So that's my perspective on the tailings lines for what it's worth; thank you.

MS. CORSI: Is there anyone else who would like to talk tonight? Oh, come on; there's a lot of people here. Nothing? All right. Well, I hope that you'll take the opportunity while you're here tonight to ask some of those questions. Because I think, Chas, you had a few. I think there's probably some specialists that could address a lot of those. So please stay and --

MR. MCCULLOUGH: He's a senator. Why don't you give him another minute.

MS. CORSI: Well, he speaks.

MS. STENBERG: We will be here until nine o'clock. This was advertised to last until nine o'clock,

so we will be here till 9:00, and we'll be happy to take additional testimony at any time.

MS. CORSI: So I think we'll give Chas another opportunity to come back up, since the Bureau chief says so. But you only have five minutes.

MR. CHAS VINCENT: That's what happens when you go from the House. Then you do get extra time; right?

MR. MCCULLOUGH: I'm just looking forward to the next legislative session.

MR. CHAS VINCENT: They had a hard time shutting me up there, too.

The other thing that I -- and I guess it -- I was going to give some statistics on how much slurry went through those pipes, and it was just covered by the next gentleman.

But I wanted to say one other thing related to the topsoil and what it was going to be, as far as I believe there was one -- there was some discussion about maybe taking half of it or taking a part of it and not -- but I would highly recommend that -- there was quite a few studies that were done on this western toad, the sensitive species. And it has, from what I understand, I have not seen it yet, there is a great body of work relative to that. And I would just encourage the

H1

K1

H2

E1

agencies to take a look at that and see what -- if there was a way -- if there really is a way to mitigate the impact for that habitat. And if there isn't, I think that it's a pretty common sense solution to just use the other borrowed soil. And I don't think that you're going to have anybody -- I've heard from a lot of folks. We do a lot of things around here in a collaborative way. There are a lot of folks from the soil side that would be supportive of that that maybe the agencies may be worried about objecting to doing something like that. But I do believe that you would find some consensus in the State board, if you should choose to have that approach in discussing in that matter. Is that a minute?

MS. CORSI: Bruce, we'll get you to sign a card afterwards.

MR. BRUCE VINCENT: Bruce Vincent, V-i-n-c-e-n-t.

I'd like to concur with the point that Chas brought up, as far as the pipeline. I think we should seriously take a look at the environmental consequences of intermittently having to do repair work and that repair work involve disturbing the ground.

I'd like to also concur that there are some people that don't like to look at that hand of man out in nature. But there are some places where I think it can

E2

1 be appropriate and aesthetically pleasing for some of us
2 that are watching families getting raised in the mine.
3 So I don't have a problem with the pipeline running next
4 to the road.

K1

5 I'd like to concur about this discussion of the
6 toad, of the fill and -- and environmentally look at what
7 the consequences are of following that regulation to the
8 letter. Or should this be a case where the environmental
9 impact overrules the letter and we use some common sense?
10 If the fill will work instead of the top -- it's called
11 topsoil, but we've also learned that it's six or ten
12 inches on top is still topsoil and the rest of it is
13 dirt, because the organics have died inside those piles.
14 We need to take a good, hard look at what's really going
15 on there and what the real impact and the real
16 environment is before we decide that we need to follow
17 the exact letter as we currently interpret it.
18 There are a couple of other things that I'd
19 like to raise real quickly, just personal questions about

H3

20 things like: during the reclamation, there was an
21 instruction in there to provide woody debris on top of
22 the reclaimed area. And I understand why. It used to be
23 we cleaned logging areas completely up. We learned that
24 was wrong. So then we go back and we put our tops and
25 crap out there. But five to eight or maybe sometimes ten

H5

1 tons to the acre is what we used. Twenty-five tons of
2 three-inches and larger is asked for in this EIS. And
3 does that pass Montana Department of State Lands fire
4 requirements? I mean, how much fuel are we putting out
5 there? Twenty-five tons is a lot. I'd like to talk to
6 somebody about that number; how that was arrived at and
7 why that same number isn't used out in logging jobs.
8 The other thing I'd like to raise real quickly
9 is the question of organics. I'm a big believer in
10 environmental sensitivity and not crossing the line into
11 insanity. And there's a discussion about organic
12 fertilizer. And I'd like to see the backup for that.
13 The chemicals that are needed, the minerals and metals
14 and the other things that we add back into the ground to
15 replace what was taken out by the plants and to put it
16 back into the topsoil to make things grow, is there a
17 chemical difference between organic and the kind that
18 comes in a pellet? I know when I think of organic it's
19 not accurate -- you can get organic pellets now -- but I
20 think of manure. And we apply four-and-a-half to five
21 inches, 1100 pounds to the acre, of organics? Can
22 that -- is it true that that is greener than the chemical
23 kind? I know it may be more expensive, and that's not
24 the issue. Is there really an environmental reason for
25 that name on the fertilizer? Are they the same

H3

1 chemicals? I'd like to know.
2 And I'd like to conclude by thanking the DEQ
3 and the National Forest Service for all the work they put
4 into these things. There are many families that are
5 dedicated to making sure that while they're feeding and
6 clothing their families and sending them to college up on
7 that mountain, that the area that they live in, love and
8 play in, is taken care of. That's what this reclamation
9 plan should be; making sure that the next generation is
10 not going to have to pay for what this generation is
11 doing.
12 I'd like to thank you for taking a good, hard
13 look at the water and understanding that we can -- we
14 have a benign -- nearly benign geology up there where we
15 can mine. And one question that's never asked in the
16 EISes that should be asked is If not here, then where?
17 We have a society that consumes like none other in the
18 history of human kind. And we provide strategically
19 appropriate metals and minerals for that society. And
20 never in any EIS do we ask If we don't do it here, where
21 are we going to do it, and what are the environmental
22 consequences of doing that?
23 When they closed Noranda, after they didn't
24 meet their Montana water quality requirements, they moved
25 75 families to Venezuela. And I wonder what the

1 environmental consequences of providing copper from there
2 instead of here was.
3 Thank you for taking a good, hard look. Thank
4 you for trying to find common sense in all of this. I
5 look forward to offering my substantive comments in
6 writing; thank you.
7 (Applause.)
8 MS. CORSI: Thank you, Mr. Vincent.
9 Anyone else want to get up and talk? I know
10 that we do have specialists that can address a lot of the
11 questions that were raised in the comments tonight, so I
12 really encourage you to take the opportunity to talk to
13 them. And if you can think of other questions in the
14 meantime, please feel free to give Bobbie and I a call,
15 and we can direct you to the right specialist.
16 Thank you.
17 (Hearing concluded at 7:26 p.m.)
18
19
20
21
22
23
24
25

1 REPORTER'S CERTIFICATE

2 STATE OF MONTANA)
: ss.
3 County of Flathead)

4

5 I, BAMBI A. GOODMAN, Registered Professional
6 Reporter, Certified Realtime Reporter and Notary Public
7 duly qualified in and for the State of Montana, residing
8 in Whitefish, Montana do hereby certify:
9 That I was duly authorized to and did report
10 the public comments in the above-entitled matter.
11 I further certify that the foregoing pages of
12 this transcript represent a true and accurate
13 transcription of my original stenographic notes.
14 IN WITNESS WHEREOF, I have hereunto set my hand
15 this 17th day of June, 2011.

16

17

18 BAMBI A. GOODMAN, RPR, CRR and
19 Official Freelance Court Reporter
Residing in Whitefish, Montana

20

21

22

23

24

25