

CHECKLIST ENVIRONMENTAL ASSESSMENT

COMPANY NAME: Blaine Warburton
OPERATING PERMIT #: 78011R and 86016
LOCATION: Blackjack I and II Mines
PROPERTY OWNERSHIP: Federal State

Project: Alternate Reclamation--Cropland
County: Blaine
 Private

TYPE AND PURPOSE OF ACTION: The proposed action for Blackjack I is to change the currently approved reclamation and postmine land use from special use pasture to dryland cereal crops. Blackjack I mine occupies 10 acres, located in Section 33, T32N, R20E, Blaine County. Surface Mining Permit number is 78011R.

The proposed action for Blackjack II is to change the currently approved reclamation and postmine land use from livestock and wildlife grazing (native grass) to dryland cereal crops. Blackjack II mine occupies 7 acres, located in Section 34, T32N, R20E, Blaine County. Surface Mining Permit number is 86016.

Reclamation plan:

N = Not present or No Impact will occur.
 Y = Impacts may occur (explain under Potential Impacts).

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	[Y] The interface between soil and spoil was found to be compacted. This compaction could impede plant root penetration and reduce moisture permeability. The permittee has committed to deep-ripping the spoil down to 3 feet prior to following. Due to inadequate soil salvage prior to mining, the two reclaimed fields have lesser replacement soil depth than the premine profile. The surrounding unmined croplands have 28"+ to 60"+ soil, whereas the reclaimed fields received 7" to 24"+. However, MT DEQ personnel have sampled the underlying spoil/overburden materials in the past, and all samples have shown characteristics suitable as plant growth medium. With the use of soil amendment, the productivity of the reconstructed root zone is not expected to decline.
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	[N]
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N]
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] Dryland cereal grains will replace pasture grass and native grass under the proposed action. Given that dryland cereal farming is a common land use in Blaine County, and that both permit areas are small and surrounded by cropland, the switch to cropland will not significantly impact the vegetative communities around the mines.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] Dryland farming will replace livestock and wildlife grazing as the postmine land use under the proposed action. Given that dryland cereal farming is a common land use in Blaine County, and that both permit areas are small and surrounded by cropland, the switch to cropland will not significantly impact wildlife populations around the mines.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	[N]
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N]
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[N]
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?	[N]
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N]

IMPACTS ON THE HUMAN POPULATION	
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N]
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[Y] The proposed action will make farming easier for the operator because each permit area and adjoining fields could then be farmed as a contiguous parcel.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N]
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] With cropland farming, the operator expects to pay higher tax per acre. However, since the total additional cropland will be 17 acres, the increase in tax revenue to the local and state governments will be insignificant.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N]
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]

IMPACTS ON THE HUMAN POPULATION	
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N]
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N]
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
21. PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[Y]
22. PRIVATE PROPERTY IMPACTS: Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required.	[N]
23. PRIVATE PROPERTY IMPACTS: Does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives.	[N/A]
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

25. Alternatives Considered:

No Action: The operator would reclaim Blackjacks I and II to the currently approved plans: special use pasture for Blackjack I, and native grass (livestock and wildlife grazing) for Blackjack II.

Approval: The operator would reclaim Blackjacks I and II to dryland cereal cropland.

Approval with modification: No unresolved issues were identified that would require modification of Warburton's proposal.

- 26. **Public Involvement:** Announcement of Warburton's requests for alternate reclamation was published in Chinook in *The Journal, News-Opinion*. DEQ also sent out notice of the applications to local, state, and federal government agencies. Copies of the applications were available for public review at the Blaine County Courthouse and at the DEQ offices in Helena and Billings. Finally, DEQ published a notice of acceptability of the applications in *The Journal, News-Opinion*.
- 27. **Other Governmental Agencies with Jurisdiction:** None
- 28. **Magnitude and Significance of Potential Impacts:** The impacts of the proposed alternate reclamation plans identified above are unlikely to differ substantially from the presently approved reclamation plans.
- 29. **Cumulative Effects:** No other activities have been identified in the area with impacts that could result in significant adverse effects when added to the impacts of this proposal.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

EA Checklist Prepared By: Lih-An Yang
Industrial and Energy Minerals Bureau

Approved By:

Signature

Date