

ENVIRONMENTAL ASSESSMENT

PROPONENT: Plum Creek Timberlands LP **SITE NAME:** Libby
LOCATION: E2, Sec 34, T31N, R31W **COUNTY:** Lincoln

TYPE AND PURPOSE OF ACTION:

Plum Creek proposes to amend its Libby gravel pit site to expand the permit from 10.5 to 38.6 acres, to submit a new plan of operations and a new map. This expansion would allow removal of an additional 370,000 cubic yards of material. The site is located across the Kootenai River, 1/2 mile north of Libby (see FIGURE 1 – AREA MAP). It is currently in steep forested terrain, divided east and west by the Bonneville Power Administration’s (BPA) high power line and adjacent to Pipe Creek Road. The site elevation is approximately 2140 feet MSL at the bottom near pipe Creek Road and 2250 feet MSL near the top. There are several BPA power line towers, which will not be disturbed. No other existing manmade features are to be affected by this operation. The City of Libby and the Lincoln County gravel pits are located adjacent to this permit.

The existing 1983 permit allows the use of a crusher, grizzly, screen, and an asphalt plant (see FIGURE 2 – SITE MAP). The amended area would be mainly used as additional gravel resources and would be reclaimed by contouring the site and grading slopes to no steeper than 3:1, re-soiling and reseeding to grass. Final reclamation would be done by December 2020. Hours of operation at this site would be 6:00 a.m. to 7:00 p.m., Monday through Saturday.

This environmental assessment (EA) is required under the **Montana Environmental Policy Act (MEPA)**. An EA functions to identify, disclose and analyze the impacts of an action, in this case operating a gravel pit on which the state must make a decision, so that an informed decision can be made.

MEPA sets no environmental standards, even though it requires analysis of both the natural and human environment. This document may disclose many impacts that have no legislatively required mitigation measures or over which there is no regulatory authority. The state legislature has provided no authority in MEPA to allow DEQ or any other state agency to require conditions or impose mitigations on a proposed permitting action that are not included in the permitting authority and operating standards in the governing state law, such as the Opencut Mining Act, the Clean Air Act of Montana, or any other applicable state environmental regulatory law. Beyond that, a company may agree to voluntarily modify its proposed activities or accept permit conditions.

The state law that regulates gravel-mining operations in Montana is the **Opencut Mining Act**. This law and its approved rules place operational guidance and limitations on a project during its life, and provide for the reclamation of land subjected to Opencut materials mining. This law requires that a reclamation bond, cash deposit or other financial instrument be submitted to the state to cover the complete costs of reclaiming the site to its approved, post-mining land use, if the permittee fails to reclaim the site as required by the law, the rules, and the permit.

The permit decision cannot be based upon the popularity of the project, but upon whether or not the proponent has met the requirements of the Opencut Mining Act and pursuant rules.

IMPACTS ON THE PHYSICAL ENVIRONMENT

| RESOURCE AND EXAMPLE/GUIDANCE QUESTIONS | POTENTIAL IMPACTS AND MITIGATION MEASURES |
|---|---|
| 1. GEOLOGY AND SOIL QUALITY, STABILITY | The proposed mine is located in steep terrain in the foothills of the Precambrian sedimentary rocks |

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| <p>AND MOISTURE</p> | <p>of the Purcell Mountain Range above the Kootenai River. The deposit consists of glacial alluvium that overlies the bedrock.</p> <p>Test holes on the property indicate the average topsoil depth is 6 inches and the underlying gravelly clay (i.e. overburden layer) ranges from 12 to 36 inches. This material would be salvaged and stockpiled away from the pit, roads and facility areas. Following mining, grading and ripping, the soils would be replaced, disked and seeded to grass. There are no fragile, compactable or unstable soils present, no unusual geologic features and no special reclamation considerations.</p> |
| <p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION</p> | <p>The site is a high and dry feature, 30 feet above the water table at the lowest point. According to GWIC records, there are 31 water wells located in Section 34, Township 31 North, Range 31 West in Lincoln County, with an average depth of 124 feet. The wells in this area are a mix of domestic, commercial and public water supply wells. These wells are not very deep but with low static water levels influenced by the river at an average of 93 feet, and they have yields averaging 17 gallons per minute.</p> <p>Special precautions would be taken to prevent contamination of the groundwater. Vehicles and equipment would be refueled with a fuel truck so no fuel containment area is needed. Any accidental spills or leaks from equipment would be excavated and contaminated materials would be properly disposed of. No waste or trash other than clean fill would be disposed of at the site. Any water used for dust control would be trucked in. While working with large, disturbed slopes, best management practices such as silt fences, hay bales, water bars and slope stabilization fabric common in the logging business would be used to control erosion and prevent sediment from running off site. With these precautions, the quality and quantity of the groundwater should not be adversely impacted.</p> |
| <p>3. AIR QUALITY</p> | <p>Air quality would not be further degraded and there would not be an increase in particulate matter during times of operation as a result of this amendment. Dozers, loaders, crushers and trucking equipment typically cause dusty conditions in disturbed soil sites. Dust would be controlled around the site by water truck and dust suppressant. Crushers and asphalt batch plants are regulated for emissions and the equipment used must be tested and approved by the DEQ (Air Resources Management Bureau). The site is not within a Class I airshed.</p> |
| <p>4. VEGETATION COVER, QUANTITY AND QUALITY</p> | <p>There are no known rare or sensitive plants or cover types present in the site area. Vegetation consists of conifers and forest ground cover. They would be removed as soil is stripped and the site would be replanted with grass species compatible with the proposed reclaimed use.</p> |
| <p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS</p> | <p>The land has been harvested for log production, but because of its location still provides limited habitat. Occasional deer, rodents, song birds, coyotes, raptors, and other animal species frequent the site. Population numbers for these species are not known. These animals would be displaced on a small scale as mining progresses, but some would re-inhabit the area as reclamation follows behind mining. Permanent impacts on wildlife are considered to be minimal.</p> |
| <p>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES</p> | <p>Site evaluations have not revealed any endangered or threatened plant or animal species that would be directly affected. Bald eagles and grizzly bears are known to range in this area, but no nesting or denning sites are known on or near the proposed amendment area. No adverse effects are anticipated on the eagles or grizzlies as a result of this proposed action.</p> |
| <p>7. HISTORICAL AND ARCHAEOLOGICAL SITES</p> | <p>Although there are cultural values in the general area, much of this site has been previously disturbed by modern man by logging, thus altering the integrity of resources that may have existed. A surface reconnaissance did not discover any cultural, historical or archeological resources. The operator would give appropriate protection to any values or artifacts discovered in the affected area. If significant resources are found, the operation would be routed around the site of discovery for a reasonable time until salvage could be conducted. The State Historic Preservation Office would be promptly notified.</p> |
| <p>8. AESTHETICS</p> | <p>The site is located in a forested area with industrial development. There would be very little alteration of aesthetics as a result of this amendment while mining is under way. Reclamation would return the area to a visually acceptable landscape. This project is considered to be long-term, i.e., planned to take 12 years to complete.</p> <p><u>Visual:</u> The site is visible by homes, businesses, roads and rivers in the local area. Hours of operation for the site are currently 6:00 am to 7:00 pm, Monday through Saturday.</p> |

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| | <p><u>Noise:</u> Noise levels generated by a crusher, asphalt plant, dozers, loaders and truck traffic hauling to off-site projects at the pit are generally within the range of 60 to 90 decibels measured on-site, decreasing with distance. As a comparison, sound levels for ordinary activities such as close conversation at 60 decibels and music from a radio at 70 decibels are considered to be moderate. Levels above 90 decibels lasting 8 hours or more are severe, and prolonged exposure to employees on site without hearing protection could lead to hearing loss.</p> <p>Noise decreases with distance. A crusher noise level of 85 decibels measured at 50 feet reduces to 79 decibels at 100 feet, 72 decibels at 200 feet and 65 decibels at 400 feet. Thus, the noise level would be reduced to moderate levels at the permit boundary and would continue to decline beyond that. Noise is not cumulative. A truck operating at 65 decibels and a loader at 75 decibels do not add up to the equivalent of a 140-decibel jet plane at takeoff.</p> <p><u>Traffic:</u> Access to the site is via Pipe Creek Road (Route 567) and State Highway 37 to Eureka. These roads are paved and crowned roads in good condition. Estimated traffic from this site is approximately 29 loaded trucks and 29 returning empty trucks per day based on 12 cubic yard dump trucks hauling 300 cubic yards each working day. Thus, 844,000 cubic yards ÷ 12 years ÷ 200 working days per year ÷ 12 cubic yards per truck = an average of 29 loaded trucks per day. Traffic counts would not change from current levels as a result of this amendment.</p> |
| 9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY | There are no unusual demands on land, water, air or energy anticipated as a result of this project. |
| 10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES | There are no other environmental resource impacts anticipated as a result of this project. |
| IMPACTS ON THE HUMAN POPULATION | |
| RESOURCE | POTENTIAL IMPACTS AND MITIGATION MEASURES |
| 11. HUMAN HEALTH AND SAFETY | Heavy equipment and facilities including crushers, hot plants, trucks and loaders would create hazards, but the operator must comply with all MSHA and OSHA regulations. The operator must employ proper precautions to avoid accidents. This proposed operation should not significantly affect human health. |
| 12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION | The acreage listed in the Type and Purpose of Action would be taken out of forest use and put into industrial/commercial use. Upon completion of mining, the land would be reclaimed to grassland. |
| 13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT | Existing employees would mainly be utilized for this operation. There is low potential that this project would create a significant number of new jobs. |
| 14. LOCAL AND STATE TAX BASE AND TAX REVENUES | Additional taxes may be generated for the county and state in the form of income to the applicant and fuel and highway taxes paid by hauling equipment. |
| 15. DEMAND FOR GOVERNMENT SERVICES | The operation would require periodic site evaluations by DEQ staff until such time as the site is successfully reclaimed to the required post-mining use. However, these evaluations are usually performed in conjunction with other area operations. |
| 16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS | City/County zoning clearance has been obtained on March 1, 2007. |
| 17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES | No wilderness or recreational areas are nearby or accessed through this tract. |
| 18. DENSITY AND | The project would not add to the population or require additional housing. |

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| DISTRIBUTION OF POPULATION AND HOUSING | |
| 19. SOCIAL STRUCTURES AND MORES | The area is rural with limited residences in the immediate area. The surrounding area has had several large gravel pit operations operating for decades. The traditional land use has been logging, but the area is also underlain by a high quality deposit of sand and gravel. |
| 20. CULTURAL UNIQUENESS AND DIVERSITY | This area is gradually shifting from forest to commercial land use. |
| 21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES | None known. |

Alternatives Considered:

- A. Denial:** The Department would deny an incomplete application or one that does not comply with the Act or Rules. The proponent could then submit a modified application or submit an application for another site.
- B. Approval of the application with mitigating conditions:** The Plan of Operation has been written with mitigating conditions including hours of operation, water protection, soil salvage and full reclamation.

Public Involvement, Agencies, Groups, or Individuals contacted:

Lincoln County Planning and Zoning.

Other Governmental Agencies with Jurisdiction, List of Permits Needed:

Mine Safety and Health Administration for safety permit; DEQ for Air Quality Permit.

Magnitude and Significance of Potential Impacts:

Impacts are unlikely to be significant on the general environment because of the scope and location of the project, the lack of significant or threatened wildlife or habitat, and because of the mitigation measures placed in the Plan of Operation and proposed to be attached to the permit as conditions of approval.

Regulatory Impact on Private Property:

The analysis conducted in response to the Private Property Assessment Act (PPAA) indicates no impact is expected on the use of private property. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking. See attachment for PPAA checklist assessment.

References cited:

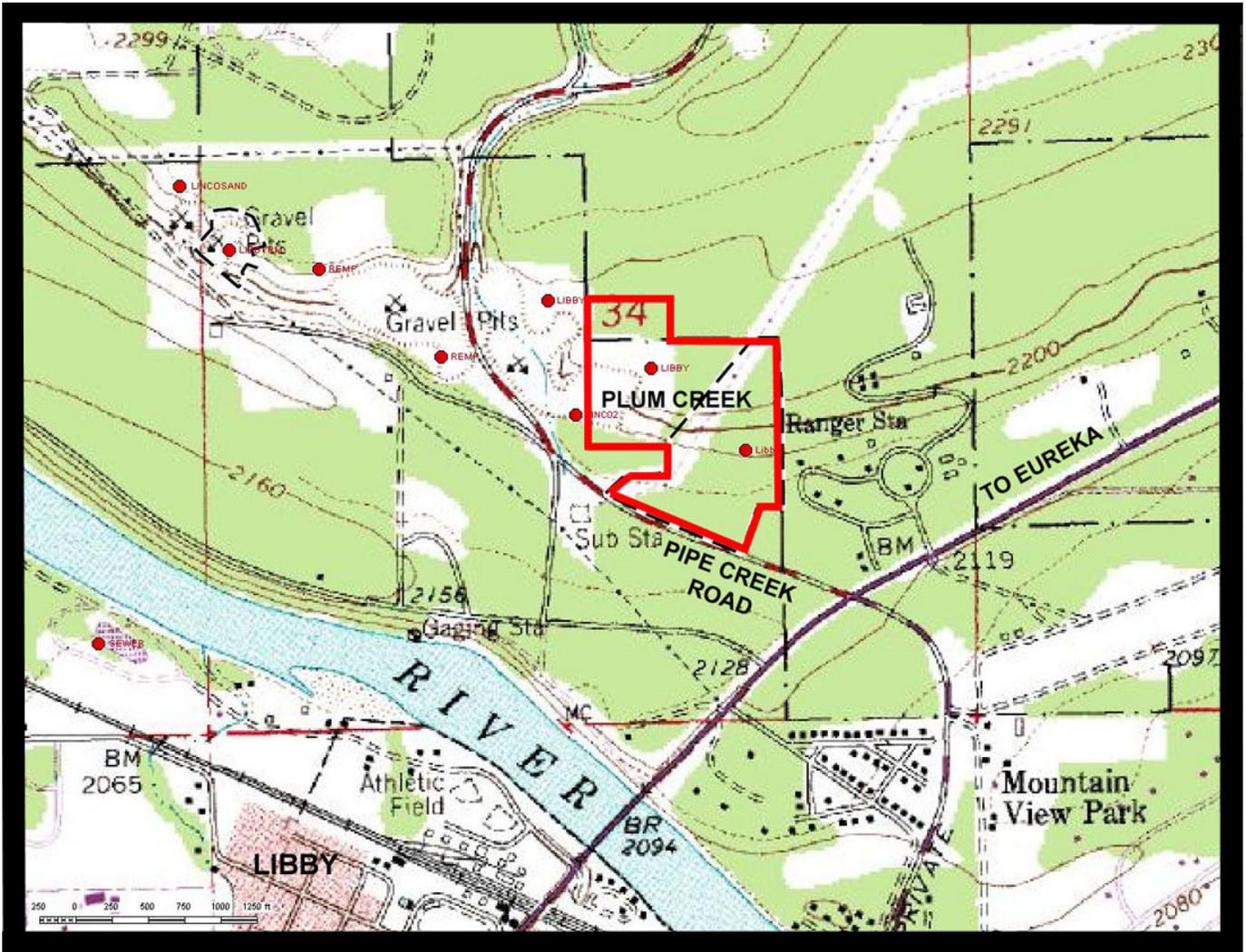
None

RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS:

- EIS MORE DETAILED EA NO FURTHER ANALYSIS

Written By: Rod Samdahl, Reclamation Specialist July 18, 2008

FIGURE 1 – AREA MAP



PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

PROPERTY DESCRIPTION: Section 34, T31N, R31W, Flathead County

COMPANY NAME: Plum Creek Timberlands Libby Site

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PPAA?

| YES | NO | |
|-----|----|---|
| X | | 1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights? |
| | X | 2. Does the action result in either a permanent or indefinite physical occupation of private property? |
| | X | 3. Does the action deprive the owner of all economically viable uses of the property? |
| | X | 4. Does the action deny a fundamental attribute of ownership? |
| | X | 5. Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 5a and 5b and continue with question 6.) |
| | | 5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests? |
| | | 5b. Is the government requirement roughly proportional to the impact of the proposed use of the property? |
| | X | 6. Does the action have a severe impact on the value of the property? |
| | X | 7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? (If the answer is NO, skip questions 7a-7c) |
| | | 7a. Is the impact of government action direct, peculiar, and significant? |
| | | 7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded? |
| | | 7c. Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question? |

Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.