

ENVIRONMENTAL ASSESSMENT

On an Application for an

OPENCUT MINING PERMIT

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose, and analyze the impacts of a proposed action. This document may disclose impacts that have no legislatively required mitigation measures, or over which there is no regulatory authority.

The state law that regulates gravel mining operations in Montana is the Opencut Mining Act. This law and the rules adopted thereunder place operational guidance and limitations on a project during its lifetime, and provide for the reclamation of land affected by opencut mining operations.

Local governments and other state agencies may have authority over different resources and activities under their regulations. Approval or denial of this Opencut Application will be based on a determination of whether or not the proposed operation complies with the Opencut Mining Act and the rules adopted thereunder. The DEQ approval of this application would not relieve the operator from the obligation to comply with any other applicable federal, state, or county statutes, regulations, or ordinances. The operator is responsible for obtaining any other permits, licenses, approvals, etc. that are required for any part of the proposed operation.

Applicant: Plum Creek Timber Company, LP **SITE NAME:** Dorr Skeels, Amendment 1

LOCATION: Section 15, T25N, R27W **COUNTY:** Lincoln

DATE: July 2011

PROPOSAL: The proponent has submitted an application to amend its existing Opencut Mining Permit #487 to enlarge the permit area, to increase the volume of gravel to be extracted, to change the reclaimed use to add planting of conifer trees, to set a final date of reclamation as December 2020, to submit a new map and to raise the performance bond.

This 19.1 acre site is located along State Highway 56 (also known as the Bull Lake Road) approximately 15 miles south of the city of Troy (See [FIGURE 1 – AREA MAP](#)). The application would add 17.8 acres to a 1.3 acre permit, but only 6.3 acres would be bonded for mining. This would allow mining of an additional 112,393 cubic yards of sand & gravel. The site would be reclaimed by December 2020.

As part of the permit application, the proponent has submitted a revised re-vegetation plan that would replace soils, plant trees and return the affected lands to a post-mine land use of forest. Reclamation is required by the Opencut Mining Act and the operator must comply with that statute and the rules and regulations promulgated under it.

IMPACTS ON THE PHYSICAL ENVIRONMENT

| RESOURCE | POTENTIAL IMPACTS AND MITIGATION MEASURES |
|---|---|
| 1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: | This site is located in glaciated terrain in a fault-controlled valley in the foothills of the Cabinet Mountains (See FIGURE 2 – SITE MAP). The material was most likely deposited by glacial activity and then re-worked by mountain streams. Soils generally average 7 inches deep. <i>Impacts:</i> Mining this area will result in irreversible and irretrievable removal of mineral material from the site and will create a small impact to the quantity and quality of soils from salvaging, stockpiling, and re-soiling activities, but this would not impair the capacity of the soils to |

IMPACTS ON THE PHYSICAL ENVIRONMENT

| RESOURCE | POTENTIAL IMPACTS AND MITIGATION MEASURES |
|---|---|
| | support full reclamation. There are no unusual topographic, geologic, soils or special reclamation considerations that would prevent reclamation success. |
| 2. WATER QUALITY, QUANTITY AND DISTRIBUTION | The nearest surface water is a small intermittent tributary to Bull Lake located 50 feet northeast of the original permit area. Mining activities will not go any closer than 50 feet to the centerline of the creek. There is a wetland area along the Highway side of the amendment area that will not be disturbed. Bull lake is located 1500 feet west of the amendment across Highway 56, which will not be affected. Surface and groundwater will not be impacted by this activity. |
| 3. AIR QUALITY | <p>Air quality standards are based upon the Clean Air Act of Montana and pursuant rules and are administered by the DEQ Air Resources Management Bureau (ARMB). Its program is approved by the Environmental Protection Agency (EPA). These rules and standards are designed to be protective of human health and the environment.</p> <p>Air quality permits would be required on the processing equipment before installment. Machinery, such as generators, crushers and asphalt plants, are individually permitted for allowable emissions. Best Available Control Technology (BACT) is the usual standard applied. Fugitive dust is that which blows off the pit floor, stockpiles, gravel roads, farm fields, etc. It is considered to be a nuisance but not harmful to health.</p> <p><i>Impacts:</i> Air quality standards as set by the federal government and enforced by the ARMB would allow minimal detrimental air impacts.</p> |
| 4. VEGETATION COVER, QUANTITY AND QUALITY | The general area in this undulating terrain is planted with conifer trees. During soil stripping operations, all vegetation will be removed. Some vegetative seed will remain viable in the soil and could assist in regeneration of those species when soils are replaced. The applicant will re-seed the area to species compatible with the forest post-mine land use. |
| 5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: | <p>Although the site is primarily forest, it also supports populations of deer, some wintering elk, rodents, song birds, coyotes, foxes, black bears, raptors, insects and various other animal species. Population numbers for these species are not known.</p> <p><i>Impacts:</i> The proposed mine is expected to temporarily displace some individual species and it is likely that the site would be re-inhabited following reclamation to similar habitat.</p> |
| 6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: | <p>The Montana Natural Heritage Program has indicated that the <i>Coeur d'Alene Salamander, Western Toad, Common Loon, Bald Eagle, Westslope Cutthroat Trout, Bull Trout, Gray Wolf, Grizzly Bear, Fisher, Wolverine and Canada Lynx</i>, are potential animal species that could be present in the region.</p> <p><i>Impacts:</i> These species have not been identified at this site. Even if suitable habitat did exist at this specific location, the disturbance area would be small and large areas of similar or identical habitat surround the site. The possible impact to these species would be minimal.</p> |

| IMPACTS ON THE PHYSICAL ENVIRONMENT | |
|--|---|
| RESOURCE | POTENTIAL IMPACTS AND MITIGATION MEASURES |
| 7. HISTORICAL AND ARCHAEOLOGICAL SITES | <p>The Montana State Historic Preservation Office (SHPO) has not identified any sites that have been previously discovered on this property. A walkover of the area by DEQ personnel did not reveal any artifacts or signs of occupation. No signs were evident at depth in the previously disturbed area.</p> <p><i>Impacts:</i> If during operations, resources were to be discovered, activities would be temporarily moved to another area or halted until SHPO was contacted and the importance of the resources was determined.</p> |
| 8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY | <p>Energy in the form of diesel fuel for crushers, dozers, loaders and trucks would be consumed while this site is operated and material is hauled to the job sites. Water in minimal amounts would be utilized as necessary for dust control.</p> |

| IMPACTS ON THE HUMAN POPULATION | |
|--|--|
| RESOURCE | POTENTIAL IMPACTS AND MITIGATION MEASURES |
| 9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS | <p>This area is unzoned. The site complies with Lincoln County's zoning regulations. The Lincoln County Planning Department signed the Zoning Compliance Form on 3/14/11.</p> |
| 10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING | <p>None of these resources will be affected.</p> |
| 11. AESTHETICS | <p>This site is partially visible from the Bull Lake Road. The reclamation plan will ensure that over time the site will become visually acceptable.</p> |
| 12. QUANTITY/DISTRIBUTION OF EMPLOYMENT | <p><i>Impacts:</i> No impact on employment.</p> |
| 13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION | <p>This will occasionally be used as an industrial site with periods of stripping, mining, crushing and hauling, as the company conducts periodic forest road construction and maintenance.</p> <p><i>Impacts:</i> This site would be taken out of forest and tree production from time to time and would be returned to productive forest within several years of project completion.</p> |
| 14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME | <p>Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, etc. from the companies, employees, or landowners benefitting from this operation.</p> |
| 15. DEMAND FOR GOVERNMENT SERVICES | <p>Minimal oversight from DEQ, MDT, MSHA, and OSHA.</p> |
| 16. HUMAN HEALTH AND SAFETY | <p>Industrial activities are inherently more dangerous than non-use of an area. The OSHA and MSHA regulations provide specific regulation and oversight to ensure safety is paramount.</p> |
| 17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES | <p>This site may be used occasionally to access recreational or wilderness resources. The public is generally invited to camp, ride horses, hunt and conduct other legal recreational activities on Plum Creek land when it is not actively being logged or mined.</p> |
| 18. NATIVE CULTURAL CONCERNS | <p><i>Impacts:</i> None.</p> |

FIGURE 1 – AREA MAP

[\(go back\)](#)

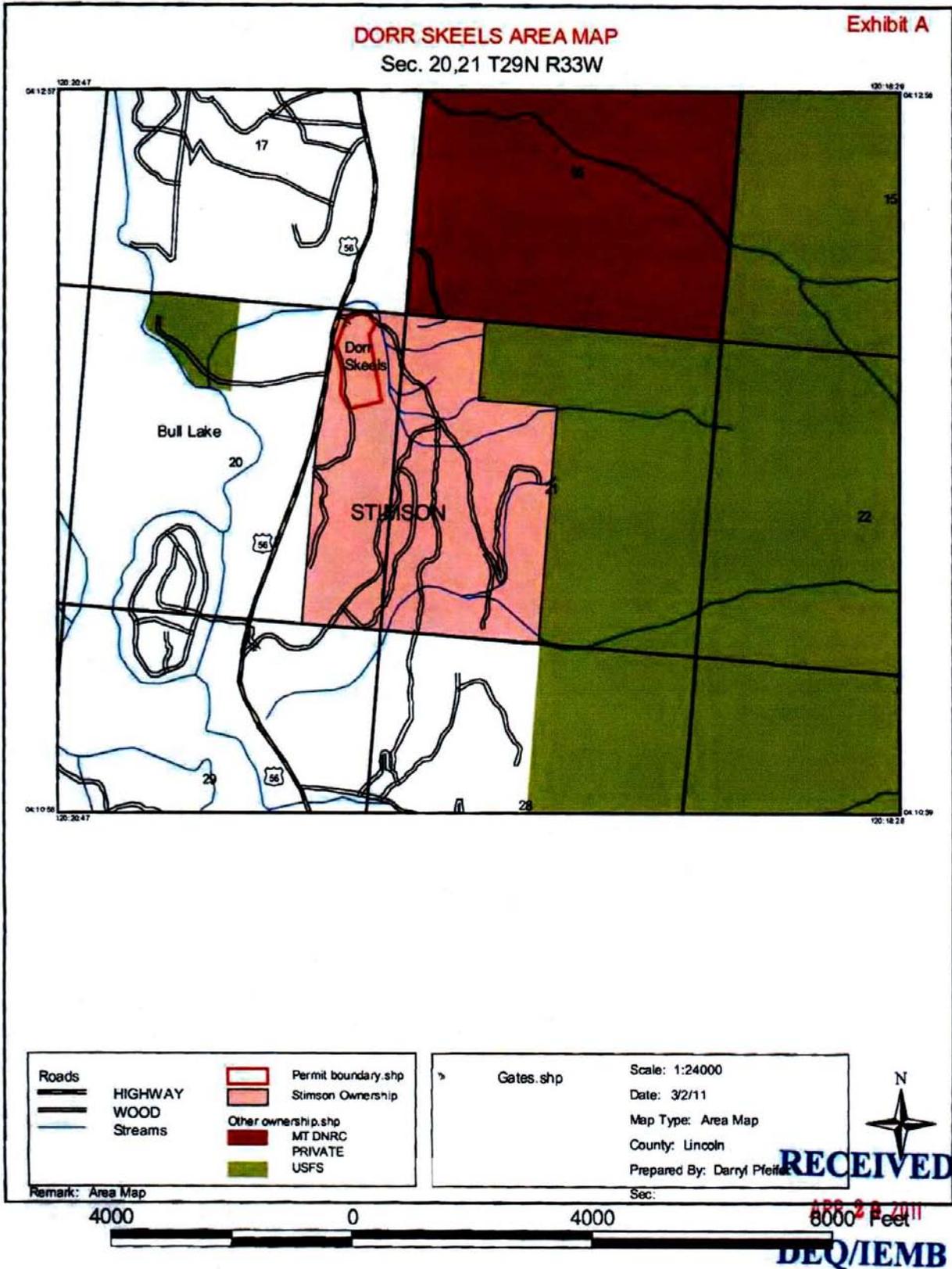
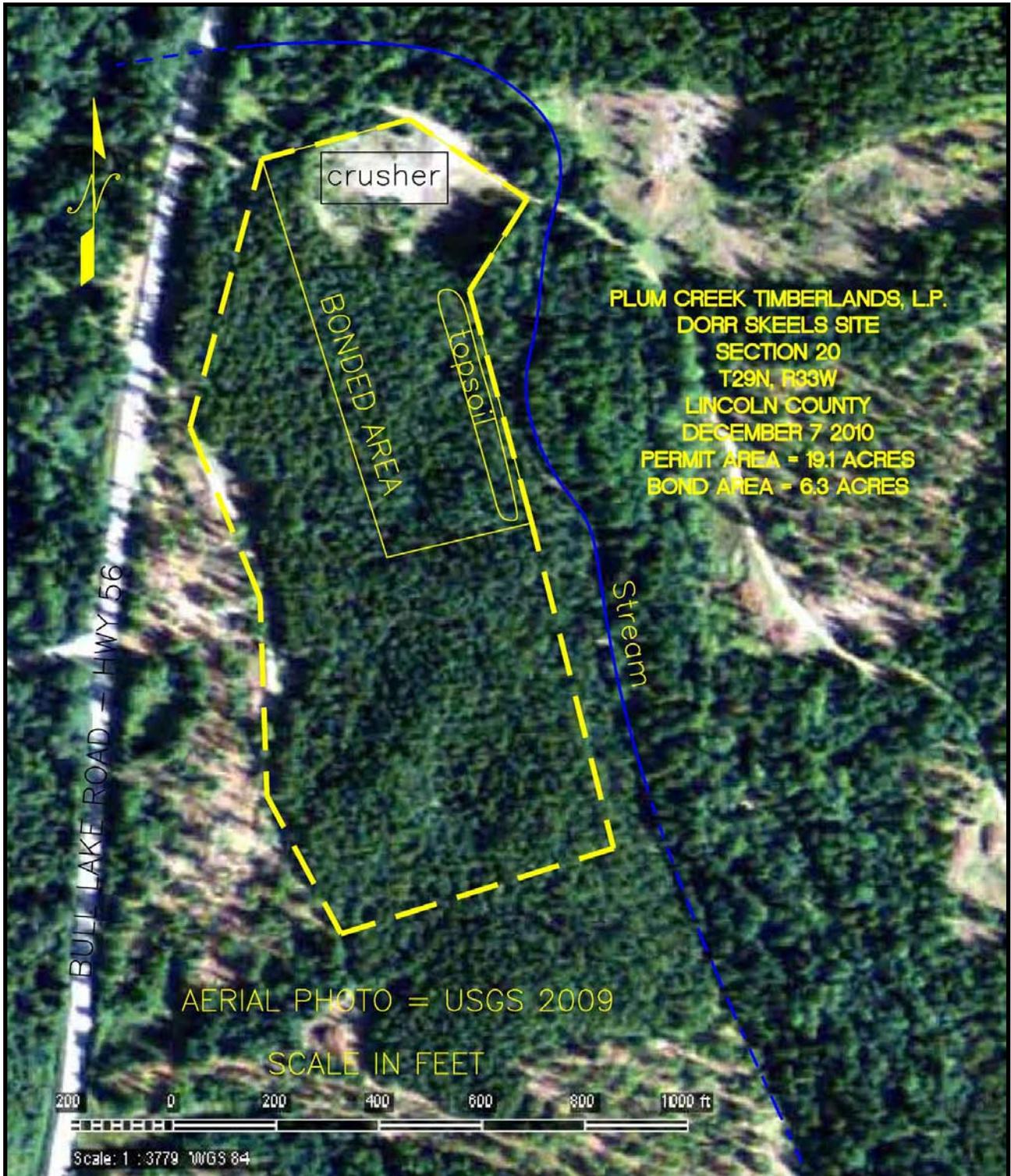


FIGURE 2 – SITE MAP

[\(go back\)](#)



PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

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.