

DEPARTMENT OF ENVIRONMENTAL QUALITY

PERMITTING & COMPLIANCE DIVISION

Community Services Bureau  
Waste Management Section

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ENVIRONMENTAL  
QUALITY COUNCIL

December 29, 1998

Mineral County Commissioners, P.O. Box 550, Superior, MT 59872  
Terry Smith, D.O., Mineral County Health Department, P.O. Box 698, Superior, MT 59872  
Wayne Marchwick, Mineral Co. Environmental Health and Planning, P.O. Box 396, Superior, MT 59872  
Mitchell Leu, Plum Creek Timber Company, L.P., P.O. Box 1990, Columbia Falls, MT 59912  
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Paul Shiler, Administrative Officer, Director's Office, Fish, Wildlife & Parks, 1420 E 6th Avenue, Helena, MT 59620  
Tom Ellerhoff, Department of Environmental Quality, Helena, MT 59620  
Environmental Quality Council, Capitol Complex, Helena, MT 59620  
Documents Section, State Library, Capitol Complex, Helena, MT 59620  
State Historic Preservation Office, 225 N. Roberts, Helena, MT 59620

Ladies and Gentlemen:

Pursuant to the Administrative Rules of Montana, 17.4.607(2) and 17.4.609(2), the following Environmental Assessment has been prepared by the Department of Environmental Quality concerning the proposed Plum Creek Timber Company, L.P., Class III Landfill located in the SE $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 19, Township 17 North, Range 26 West, M.P.M., Mineral County, Montana. Generally, the site is located approximately three (3) miles north west of Superior, Montana, on Pardee Creek Road.

The purpose of the Environmental Assessment (EA) is to inform all interested governmental agencies, public groups, and individuals of the proposed action and to determine whether or not the action may have a significant effect on the human environment. This EA will be circulated for a period of thirty (30) days at which time a decision will be made as to our future action.

If you care to comment on this proposed action, please do so in writing, within the allotted time.

Sincerely,

A handwritten signature in cursive script that reads "Rick Thompson".

Rick Thompson  
Solid Waste Licensing Program

Encl: Environmental Assessment

## ENVIRONMENTAL ASSESSMENT (EA)

### **Division/Bureau:**

Permitting and Compliance Division\Community Services Bureau, Waste Management Section, Solid Waste Program.

### **Project or Application:**

Plum Creek Timber Company, L.P. (Plum Creek), has made application for a Class III wood waste landfill. The proposed facility is located approximately three (3) miles north west of the Town of Superior. It is anticipated that the facility will accept approximately 4,000 cubic yards (cy) of wood waste and rock per year.

### **Description of Project:**

Site Location: The proposed 1.5-acre Class III landfill will be located on a two (2) acre parcel owned by Plum Creek. Specifically, the site is located in the SE $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 19, Township 17 North, Range 26 West, M.P.M., Mineral County, Montana. (Figure 1. Location Map). Generally the site is located three (3) miles to the north west of Superior off Pardee Creek Road.

Operation Plan Description: Source, Types and Amount of Wastes: Plum Creek will be the only source of incoming wastes to the proposed landfill. Incoming wastes will be generated from the cleanup at local Plum Creek log sorting and transfer sites. No other wastes will be accepted at the facility. The landfill will accept the following wastes:

1. Log yard wastes including, barks and logs pieces.
2. Inert wastes such as rock and dirt.

The average disposal rate for the facility is anticipated to be 4,000 cy of waste per year over 6 years. The final capacity for the facility will therefore be approximately 24,200 cy.

Operating Schedule: Only Plum Creek personnel will utilize the proposed facility between the hours of 6:00 a.m. and 6:00 p.m. The applicant anticipates some deviation from the given operating hours, but all attempts will be made to adhere to the above schedule.

Access and Traffic Control: Access to the proposed facility will be via an access road off Pardee Creek Road (Figure 2. Site Map). A locked gate on the access road will regulate authorized access to the facility with signs posted at the disposal site. The various truck drivers will man the site during the times waste material is being disposed of.

Landfilling Procedure: Only 1.5 acres will be used for disposal. The other 0.5 acre will be used for overburden storage. The 1.5-acre disposal site will be excavated down to three (3) feet to provide periodic cover and final cover. The stockpiled soils will be seeded with native grass species to reduce soil erosion. Wastes will be placed in the landfill as generated using a dump truck and mounded to a depth of ten (10) feet. The up gradient end of the landfill will be filled first, then moving down gradient. Periodically the waste will be leveled and contoured to a 3:1 slope to reduce erosion. At least once per quarter (90 days) the wastes will be compacted and

# Location of Proposed Landfill

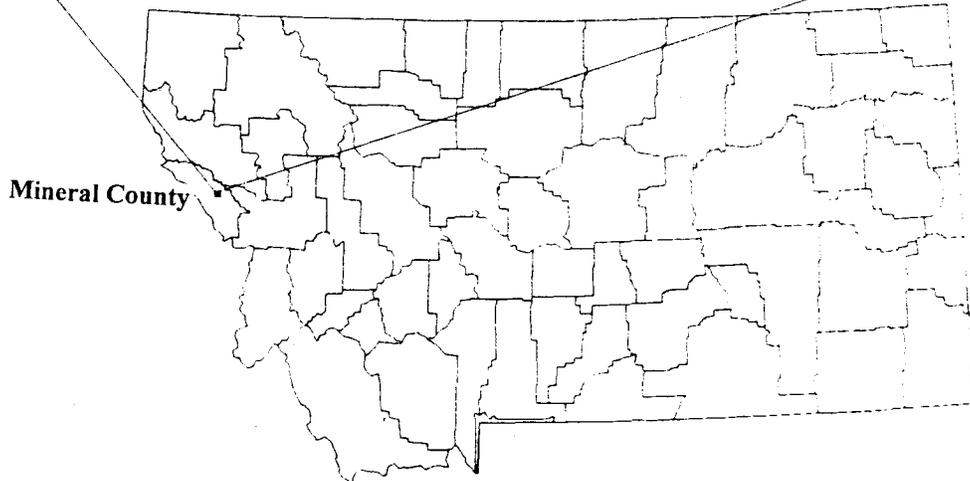
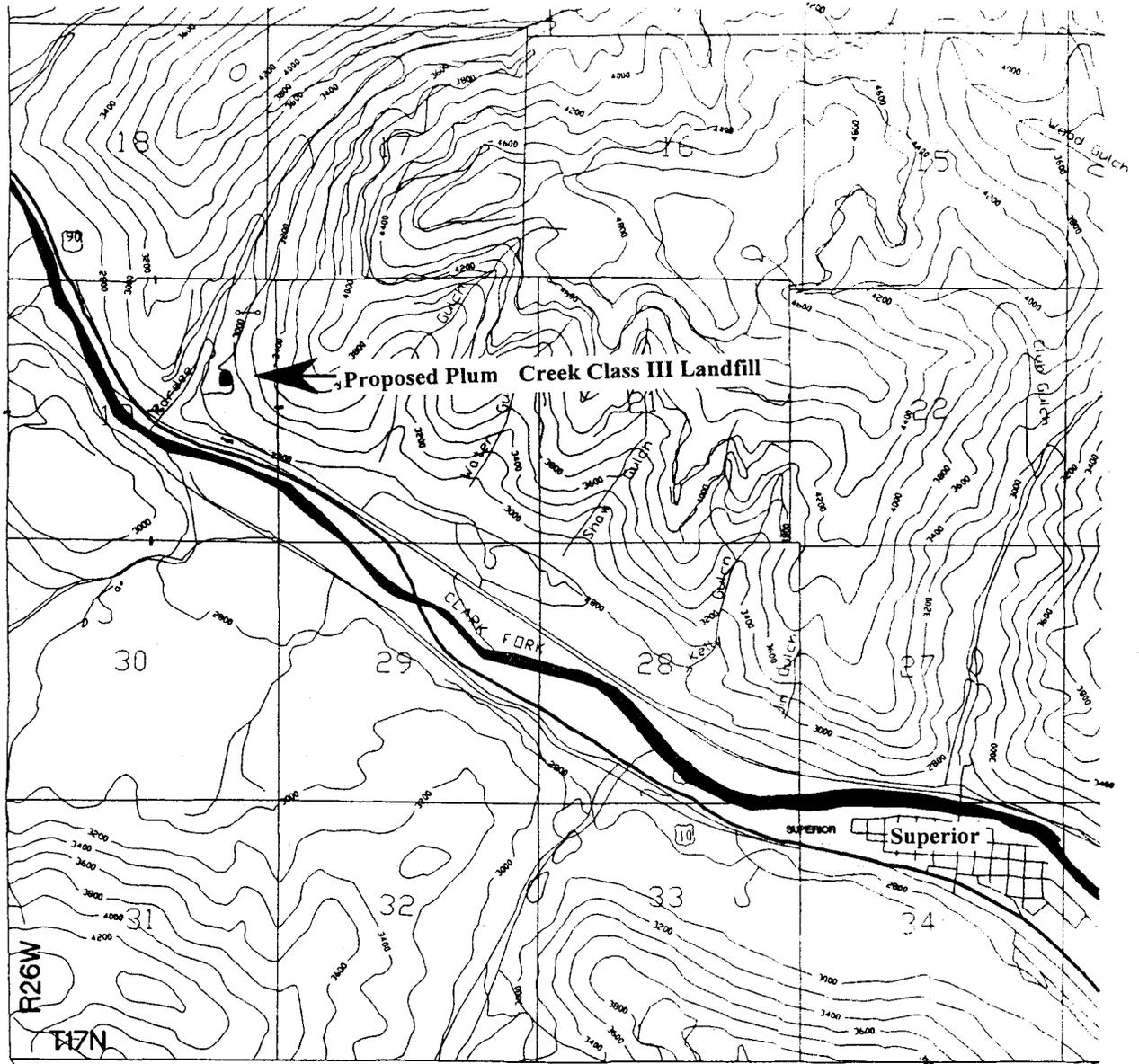


Figure 1. Location Map (Plum Creek, 1997)

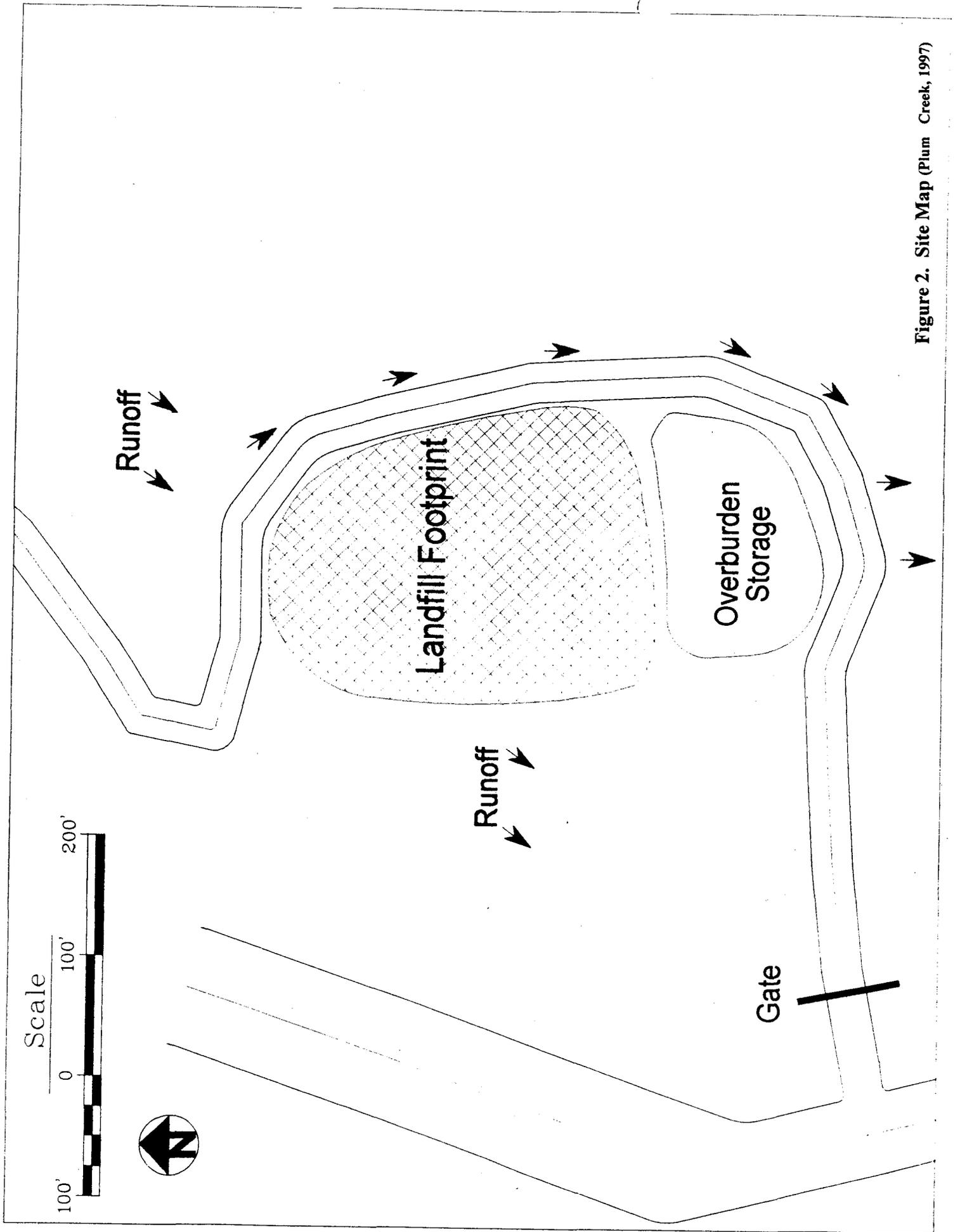


Figure 2. Site Map (Plum Creek, 1997)

contoured. Quarterly cover will not be placed over the material due to the high rock and dirt content of the wastes. Instead, a six (6) inch cover of stockpiled native soil will be placed over the wastes upon the completion of each lift.

**Surface Water Management:** The proposed site is surrounded on the three up gradient sides by the access road. The raised road collects and directs all off-site run-on and discharges it down gradient from the site. Run-off generated on site should be minimal due to the small surface area exposed to precipitation (2 acres), and it is anticipated that most of the on-site run-off will infiltrate into the soil or collect in the excavated hole and evaporate.

**Closure:** Closure of the facility will consist of contouring the fill to a maximum final 3:1 slope and placing two (2) feet of native soil for the final cover. The site will be revegetated with native grass species. Quarterly monitoring by Plum Creek personnel will ensure that integrity of the cap is maintained. The most probable use of the site after closure will be for wildlife habitat.

**Benefits and Purpose of Proposal:**

Plum Creek Timber Company, L.P. owns approximately 1.5 million acres of timberland in Montana. In order to economically harvest the timber from this land, certain parcels use staging areas where timber is stored or sorted before being transported to its final destination. In the process of handling the timber at these areas, some bark is inadvertently scraped off and some timber is broken. The bark and wood mixes with dirt and rocks and the resulting mixture is unusable and has to be disposed of.

The establishment of a private Class III landfill, is presently the most economical means by which Plum Creek can dispose of the wastes generated at the staging areas in the region. Although Sanders County operates a Class III landfill at Trout Creek and Plains, these facilities are burn sites and would not be suitable for disposal of the waste stream described above.

**Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider:**

*Alternative I - No Action:* The Department may deny the license based on findings of fact, which indicates that significant environmental degradation may result from the proposed facility. This alternative was considered, but not acted on by the Department due to the inert nature of the wastes to be landfilled.

*Alternative II - Alternative Site:* Plum Creek could withdraw the application for a Class III landfill at the proposed location and resubmit a new application for an alternative site. This alternative would be necessary if the proposed site did not meet the requirements for a Class III landfill.

The applicant did not express to the Department if an alternative site or sites were considered prior to the selection of the current site. It is not within the jurisdiction of the Department to select potential sites for solid waste management facilities. This is a task for the applicant to complete prior to the application being made. The local county planning board or county planner has the final authority over whether or not the location of the site violates any local zoning ordinances.

Alternative III - Proposed Project: If licensed, the proposed facility will serve as an economical means of disposal for log yard waste generated at Plum Creek staging and transfer sites in Mineral County and surrounding counties.

Alternative IV - Develop Alternative Uses For The Waste Material: The reuse of the waste material generated at log yards could be reused in several applications. This was demonstrated in Log Yard Debris Management Methods, Ron Mensch, Twin Creek Enterprises, October 1998. The Department however is not authorized to choose a waste management alternative for an applicant. Therefore, the waste management alternative chosen by an applicant for a particular waste stream is solely up to the applicant. The alternative chosen is generally based on its economic feasibility.

**A listing and appropriate evaluation of mitigation, stipulations and other controls enforceable by the agency or another government agency:**

The proposed facility must meet the minimum requirements of the Montana Solid Waste Management Act and the rules promulgated under that Act. In addition, the following stipulations would be imposed as conditions of licensure:

1. Acceptable means must be taken to reduce dust on the access road to the facility; and
2. No open burning at the facility.

**Recommendation:**

The recommendation of the Montana Department of Environmental Quality is to request input from the public regarding the proposal. In lieu of adverse comment indicating environmental problems that have not been heretofore identified, the Department proposes to license the site as a Class III solid waste management system.

**If an EIS is needed, and if appropriate, explain the reasons for preparing the EA:**

At this stage of the Montana Environmental Policy Act process (MEPA), an Environmental Impact Statement (EIS) is not indicated and the EA is an adequate document to address the potential impacts of the proposed facility.

**If an EIS is not required, explain why the EA is an appropriate level of analysis:**

The Department finds that the operation of the proposed facility will not significantly affect the quality of the human environment. Potential environmental impacts to surface water resources, terrestrial and aquatic life, vegetation and other aspects of the physical environment are expected to be minor, if any, for the proposed Class III Landfill. The Environmental Assessment is therefore an adequate document to address the potential impact of the proposed facility.

**Other groups or agencies contacted or which may have overlapping jurisdiction:**

Mineral County Sanitarian.

**Individuals or groups contributing to this EA:**

Application for a Solid Waste Management System License - Plum Creek Timber Company, L.P.

**EA prepared by:**

Rick Thompson - Community Services Bureau, Solid Waste Licensing Program.

**DATE:** December 29, 1998

**Table 1. POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT**

	Maj	Mod	Min	None	Unkn	Att
1. Terrestrial and Aquatic Life and Habitat			XXX			XXX
2. Water Quality, Quantity, and Distribution			XXX			XXX
3. Geology and Soil Quality, Stability and Moisture			XXX			XXX
4. Vegetation Cover, Quantity and Quality			XXX			XXX
5. Aesthetics			XXX			XXX
6. Air Quality			XXX			XXX
7. Unique, Endangered, Fragile or Limited Environmental Resources					XXX	
8. Demands on Environmental Resources of Water, Air, and Energy			XXX			XXX
9. Historical and Archaeological Sites					XXX	XXX

\*Maj = Major; Mod = Moderate; Min = Minor; Unkn = Unknown; Att = Attached

CUMULATIVE AND SECONDARY IMPACTS: The overall impact of the proposed licensing action is anticipated to be **minor**, due to the inertness of some materials to be disposed of at the site.

**Table 2. POTENTIAL IMPACT ON HUMAN ENVIRONMENT**

	Maj	Mod	Min	None	Unkn	Att
1. Social Structure and Mores				XXX		
2. Cultural Uniqueness and Diversity				XXX		
3. Local and State Tax Base and Tax Revenue				XXX		
4. Agricultural or Industrial Production				XXX		
5. Human Health				XXX		
6. Access to and Quality of Recreational and Wilderness Activities				XXX		
7. Quantity and Distribution of Employment				XXX		
8. Distribution of Population				XXX		
9. Demands for Government Services			XXX			XXX
10. Industrial and Commercial Activity				XXX		
11. Locally Adopted Environmental Plans and Goals				XXX		XXX

\*Maj = Major; Mod = Moderate; Min = Minor; Unkn = Unknown; Att = Attached

CUMULATIVE AND SECONDARY IMPACTS: The licensing of the Plum Creek Timber Co., L.P. Class III Landfill is anticipated to have **minor** impacts on the human environment.

## **Evaluating The Potential Impact Of The Proposed Solid Waste Management System On The Environment.**

The following is a detailed explanation concerning the previous pages' comments on the potential impacts on the proposed solid waste management system on the environment (see Tables 1 and 2). In other words, the categories marked "attached" will be addressed in the subsequent pages. An overall impact of the proposed licensing action for each category will follow.

### **I. Potential Impacts on the Physical Environment.**

#### **1. Terrestrial and Aquatic Life and Habitats and 4. Vegetation Cover, Quantity and Quality.**

The proposed Class III Landfill is located on a relatively level bench on Plum Creek owned land. The flora consists of Ponderosa Pine, Douglas Fir and Western Larch trees in the overstory. The fauna in the area of the proposed facility consists of deer, bird, small mammal, reptile and native invertebrate populations.

The potential impact of the proposed Plum Creek Timber Co., L.P. Class III Landfill is anticipated to be minor. Upon closure of this site, Plum Creek plans to reclaim the 2 acres of land, utilizing native soil and revegetating with native plants returning it to a natural condition, thereby enhancing repopulation by any displaced native fauna.

#### **2. Water Quality, Quantity and Distribution.**

There are no well logs, or wells within a close proximity to the proposed facility to provide depth to ground water data. It is estimated the depth to ground water is greater than 20 feet. Distance to closest surface water body is 500 feet to Pardee Creek. At one time, maps indicated a spring, 1000 feet south from the proposed site, but this location now has Interstate 90 cut through it. The road cut is approximately 40 foot deep and has been reported to be dry.

The potential impact of the proposed Plum Creek Timber Co., L.P. Class III Landfill is anticipated to be minor on local water systems. This assessment was made as the depth to ground water below the site is greater than 20 feet and the distance to the Pardee Creek is 500 feet. The applicant will have stormwater controls in place to prevent the stormwater from leaving the site. Leachate from wood waste landfills could increase the BOD, COD, pH, odor and taste associated with increases in lignin and tannin in the ground water aquifer or nearby surface water bodies. However, the depth to ground water could attenuate these constituents.

#### **3. Geology and Soil Quality, Stability and Moisture.**

The proposed site is located in the extreme west central portion of the state. In general, the geology of the area consists of slightly metamorphosed sedimentary rocks of the Precambrian Belt Series or Belt Supergroup, according to Veseth and Montagne (1980). The Belt series, as described by Ross (1963), is a monotonous assemblage of very thick units composed mainly of somber-hued fine grained quartzites, and some subordinate carbonate rocks. The soils found in the vicinity of the site, have been classified by the United States Department of Agriculture

(USDA) and the Natural Resource Conservation Service (NRCS) to be Nevine-Krause complex, 8 to 15 percent slopes. The Nevine-Krause complex is generally found on steeply sloping terrace escarpments and sidewalls of intermediate level terraces and fan terraces along the Clark Fork River. The USDA and NRCS describe this soil to be sandy and loamy. Nevine-Krause complex is generally found to be moderately permeable, with slow run-off.

The potential impact is anticipated to be minor because of the low erosion qualities of the soil as well as a moderate moisture retention capacity and low run-off potential.

#### 5. Aesthetics.

The proposed solid waste management facility is located 3 miles west of the town of Superior. It is not easily visible from Interstate 90, but is visible from Pardee Creek Road. Landfilling will take place below the ground for awhile. This practice should preclude much of the visible impact. No waste will be stockpiled but will be placed in the disposal cell as soon as it is transported to the site.

The potential aesthetic impact is anticipated to be minor due to the material being covered every 90 days and the wood rock mix resembles a natural product.

#### 6. Air Quality.

Additional vehicular traffic would be added to the existing traffic flow of the area as a result of landfilling. A slight increase in dust particles may occur in drier months of the year. However, no significant impact to the Superior area is anticipated due to operation of a Class III landfill. No open burning will take place at the site.

#### 8. Demands on Environmental Resources of Water, Air and Energy.

The operation of any solid waste management facility would require the consumption of energy, particularly equipment fuels.

The potential impacts of the proposed site may have minor positive effects on the environmental resources because it will reduce the amount of fuel used for waste hauling to other disposal sites. The reduced hauling will also reduce the amount of wear and tear on local roads.

#### 9. Historical and Archaeological Sites.

The applicant submitted no information on historical or archaeological sites within the proposed facility. Also, the State Historic Preservation Office (SHPO) was not contacted prior to the publication of this Environmental Assessment (EA). However, a copy of this EA will be sent to the SHPO for comment during the thirty (30) day public comment period.

## **II. Potential Impacts on the Human Environment.**

### **9. Demands for Governmental Services.**

The potential impacts of proposed facility is anticipated to be minor because the site will require periodic inspections by Departmental personnel and the County Sanitarian. The solid waste management license for this facility must be renewed annually.

### **11. Locally Adopted Environmental Plans and Goals.**

No impact is anticipated, as indicated by signature of the County Sanitarian, that the proposed facility is in compliance with local government zoning and ordinances.

## References

Application for a Class III Landfill, Plum Creek Timber Company, L.P., Mitchell Leu, 1997.

Response to Request for Additional Information, Plum Creek Timber Company, L.P., Mitchell Leu, 1997.

U. S. Department of Agriculture, Soil Survey, St. Regis, Ninemile Are, Montana, Lolo National Forest, 1972.

Log Yard Debris Management Methods, Ron Mensch, Twin Creek Enterprises, October 1998.

Geologic Parent Materials of Montana Soils, Roger Veseth and Clifford Montagne, Montana Agricultural Experiment Station Montana State University, Bozeman and USDA – Soil Conservation Service, Bozeman, Montana, Bulletin 721, 1980.

The Belt Series of Montana, C.P. Ross, U.S. Geologic Survey Prof. Paper, 1963.

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