



Waste and Underground Tank Management Bureau  
P.O. Box 200901  
Helena, Montana 59620-0901

**Draft Environmental Assessment**

Hazardous Waste Permit Modification  
BNSF Railway Company  
Former Tie Treating Plant  
Paradise, Montana

**Table of Contents**

1. FACILITY INFORMATION..... 3  
1.1. Facility Name ..... 3  
1.2. Permit ..... 3  
1.3. Facility’s Legal Location ..... 3  
1.4. Facility History ..... 3  
2. PURPOSE AND NEED FOR ACTION ..... 4  
2.1. Purpose of the Environmental Assessment..... 4  
2.2. Need for Action..... 4  
2.3. Objectives of DEQ’s Action ..... 4  
3. DESCRIPTION OF ALTERNATIVES ..... 5  
3.1. No Action Alternative ..... 5  
3.2. Permit Modification Alternative (Proposed Action)..... 5  
3.3. Permit Modification Denial Alternative ..... 6  
4. POTENTIAL IMPACTS ON PHYSICAL AND BIOLOGICAL ENVIRONMENT ..... 6  
4.1. Air Quality ..... 7  
4.2. Water Quality, Quantity, and Distribution ..... 7  
4.3. Geology and Soil Quality, Stability, and Moisture ..... 8  
4.4. Historical and Archaeological Sites..... 9  
4.5. Aesthetics ..... 9  
4.6. Terrestrial and Aquatic Life and Habitats ..... 10  
4.7. Vegetation Cover, Quantity, and Quality ..... 10  
4.8. Unique, Endangered, Fragile, or Limited Environmental Resources..... 10

4.9. Demands on Environmental Resource of Water, Air, and Energy .....10

4.10. Sage Grouse Executive Order .....11

4.11. Cumulative and Secondary Impacts .....11

5. POTENTIAL IMPACTS ON SOCIAL, ECONOMIC, AND CULTURAL ENVIRONMENT.....11

5.1. Social Structures and Mores.....11

5.2. Cultural Uniqueness and Diversity .....11

5.3. Local and State Tax Base and Tax Revenue .....12

5.4. Agricultural or Industrial Production.....12

5.5. Human Health.....12

5.6. Access to and Quality of Recreational and Wilderness Activities .....13

5.7. Quantity and Distribution of Employment.....13

5.8. Distribution of Population .....13

5.9. Demands for Governmental Services .....13

5.10. Industrial and Commercial Activity .....14

5.11. Locally Adopted Environmental Plans and Goals .....14

5.12. Cumulative and Secondary Impacts on the Social, Economic, and Cultural Environment .....14

6. RECOMMENDATION .....14

7. INDIVIDUAL OR GROUPS CONTRIBUTING TO EA.....14

8. ANALYSIS OF REGULATORY IMPACTS ON PRIVATE PROPERTY RIGHTS .....14

9. PREPARERS.....15

10. PUBLIC INVOLVEMENT .....15

## **1. FACILITY INFORMATION**

### **1.1. Facility Name**

BNSF Railway Company  
Former Tie Treating Plant  
Paradise, Montana

### **1.2. Permit**

Montana Hazardous Waste Permit Number MTHWP-14-01

### **1.3. Facility's Legal Location**

Northwest ¼ of Section 20, Southeast quarter of Section 18, Southwest quarter of Section 17, Township 19 North, Range 25 West in Sanders County, Montana (latitude 47° 24' 00", longitude 114° 48' 30")

### **1.4. Facility History**

BNSF Railway Company (BNSF), and its predecessors, operated a creosote tie treating facility at the Paradise, Montana site from 1908 to 1982 (site). In 1988, the Montana Department of Environmental Quality (DEQ) issued BNSF a Hazardous Waste Permit (MTHWP-88-03) establishing operations, closure, and post-closure care requirements for a waste pile unit (WPU) and a surface impoundment (SI). In 1989, the permit was modified to include the operation, closure, and post-closure care requirements for a land treatment unit (LTU) used to treat creosote-contaminated soils from the WPU.

The hazardous waste permit was renewed on October 9, 2001 (Permit MTHWP-01-02). In 2002, corrective measures for the contaminated soils at the site were completed. Soils were excavated and treated on the LTU. In 2009, the LTU was certified closed and began its post-closure care period. On July 25, 2006, Permit MTHWP-01-02 was modified to include requirements for two permitted storage tanks and for an alternate concentration limit (ACL) for groundwater.

On October 17, 2014, the hazardous waste permit was renewed (Permit MTHWP-14-01). Permit MTHWP-14-01 includes requirements for operation of two storage tanks and a corrective action management unit (CAMU), post-closure care of a surface impoundment (SI), waste pile unit (WPU), land treatment unit (LTU), and implementation of facility-wide corrective action.

A product recovery system (PRS), to remove free phase creosote from the subsurface, began operation 1997. The system was designed to remove creosote through total fluids extraction (i.e. both creosote and groundwater). The fluids were pumped from recovery wells to a treatment building where creosote and groundwater were separated in an oil-water separator. Recovered creosote was stored in two tanks located on-site. Contents of the tanks were disposed offsite at a hazardous waste permitted disposal facility as needed.

In May 2018, flooding resulted in a shutdown of the product recovery system. During flooding, the electrical transformer was submerged, rendering the product recovery system inoperable due to safety concerns with the electrical system. Under the force majeure condition in Permit MTHWP-14-01, BNSF

implemented an alternative product recovery using an air-lift pump system while flood mitigation was completed.

On February 1, 2019, BNSF submitted a temporary authorization request to continue using the air-lift pump recovery system and begin demolition of the product recovery system. The temporary authorization was approved by DEQ on March 1, 2019 and extended on August 27, 2019. BNSF submitted an accompanying Class 3 permit modification application in May 2019. The permit modification request is to remove two permitted storage tanks, change the creosote product recovery method in the surface impoundment to an air-lift pump recovery system, and modify the groundwater monitoring program.

## **2. PURPOSE AND NEED FOR ACTION**

### **2.1. Purpose of the Environmental Assessment**

(DEQ is required under the Montana Environmental Policy Act (MEPA) to conduct an environmental assessment (EA) on DEQ's proposed action described below. An EA documents:

- All reasonable alternatives to DEQ's action; and
- Outlines the potential impacts to the human environment resulting from DEQ's action and the reasonable alternatives to that action.

Based on the impact analysis and professional judgment, DEQ makes a decision on the proposed action and summarizes the decision in the EA. If the decision significantly impacts the human environment then a more detailed environmental review, called an environmental impact statement, must be conducted by DEQ.

### **2.2. Need for Action**

DEQ received a Class 3 permit modification application from BNSF for its Montana Hazardous Waste Permit (MTHWP-14-01). The permit modification application included a request to remove two permitted storage tanks, modify the creosote product recovery method within the surface impoundment to localized recovery from individual wells using an air-lift pump recovery system, and modify the groundwater monitoring program.

BNSF submitted the Class 3 permit modification application in May 2019 and provided a public hearing and a 60-day public comment period on the application. The public comment period ended August 6, 2019, with no comments received. Therefore, DEQ is proceeding with the permit modification as requested.

### **2.3. Objectives of DEQ's Action**

The objective of DEQ's action is to comply with the Montana Hazardous Waste Act as specified in the Montana Code Annotated (MCA) and administered through the provisions of the Administrative Rules of Montana (ARM). Montana incorporates by reference applicable Code of Federal Regulations (CFR) for hazardous waste into ARM. For ease of reading, only the applicable CFR citations are noted in this EA.

As per 40 CFR 270.42(c)(6): After the conclusion of the 60-day comment period, the Director must grant or deny a permit modification request according to the permit modification procedures of 40 CFR 124. In accordance with 40 CFR 124.5, DEQ must prepare a draft permit incorporating the proposed changes submitted by BNSF. The modified permit conditions must ensure appropriate and compliant management of hazardous waste, as well as implementation of facility-wide corrective action that is protective of human health and the environment.

### **3. DESCRIPTION OF ALTERNATIVES**

DEQ considered three alternatives for this EA: no action alternative; permit modification (proposed action); and permit modification denial. The three alternatives are described below.

#### **3.1. No Action Alternative**

Under the no action alternative, DEQ would not accept or deny the permit modification application. The requirements in the current permit would remain fully effective and enforceable.

DEQ has determined there is no regulatory cause to take no action on the BNSF permit modification application because DEQ reviewed the BNSF permit modification application and found it complete. In accordance with 40 CFR 270.42(c)(6), DEQ must grant or deny the permit modification request in accordance with the permit modification procedures of 40 CFR Part 124.

The no action alternative would not comply with the requirements of the regulations. If DEQ takes no action on BNSF's permit modification request, legal action against DEQ from BNSF would be expected.

The no action alternative will not be considered further in the EA because it is not permitted in the federal regulations.

#### **3.2. Permit Modification Alternative (Proposed Action)**

Under the proposed action, DEQ would modify BNSF's hazardous waste permit to include changes to creosote product recovery, removal of permit requirements for tank storage, and modifications to the groundwater monitoring system. DEQ considers this alternative reasonable because:

- BNSF has been in substantial compliance with Montana hazardous waste regulations throughout the duration of its current permit;
- DEQ reviewed BNSF's permit modification application and found it complete; and
- BNSF complied with requirements to publish a public notice, provide a 60-day public comment period, and hold a public meeting regarding their permit modification application.

DEQ's proposed action modifies the existing permit by removing two storage tanks from the permit, modifying the method used to extract creosote product from the subsurface within the surface impoundment, and modifying the groundwater monitoring system by reducing the number of monitoring wells and sampling frequency. The modifications are explained in further detail below:

*Change the Method for Product Recovery:*

Due to a reduction in the amount of creosote that can be extracted from the recovery wells, and due to the damage to the current product recovery system as a result of flooding in 2018, BNSF has proposed an alternative extraction method for removal of creosote product from the subsurface within the surface impoundment. The alternative extraction method is called an air-lift pump recovery system. Each recovery well will be checked regularly for creosote product accumulation in the recovery well sump. The extracted creosote will be transferred directly into 55-gallon drums for shipment offsite.

*Removal of Permitted Creosote Storage Tanks:*

BNSF has requested removal of creosote storage tanks (Tank # T-6 and #T-7) from the hazardous waste permit. Creosote will be stored in 55-gallon drums and shipped offsite within 90-days. Hazardous waste that is stored onsite for less than 90 days is not required to retain a hazardous waste storage permit.

*Modify the Number of Groundwater Monitoring Wells and Sampling Frequency from the Point of Compliance (POC) and Point of Exposure (POE) Monitoring Networks:*

Based on historical sampling results, BNSF is requesting to streamline the POC and POE monitoring networks due to redundant data collection and/or non-detect concentrations of contaminant constituents. Several monitoring wells will be removed from the sampling schedule, and the sampling frequency of the remaining monitoring wells will be reduced.

The proposed permit modification does not impose any additional corrective action remedies or operation, closure, or post-closure care requirements.

### **3.3. Permit Modification Denial Alternative**

Under the denial alternative, DEQ would deny BNSF's permit modification request. BNSF would continue operating under the current permit. This is not DEQ's preferred alternative because:

- DEQ has determined that the permit modification request and accompanying application is complete.
- BNSF provided a public meeting, public notice, and a 60-day public comment period on the permit modification application. No public comments on the BNSF permit modification application were received during the 60-day public comment period and no concerns regarding the permit modification request were voiced during the public meeting.
- BNSF has been successfully conducting the alternative product recovery extraction method since 2018.
- BNSF has been in substantial compliance with Montana hazardous waste regulations throughout the duration of its permit.

## **4. POTENTIAL IMPACTS ON PHYSICAL AND BIOLOGICAL ENVIRONMENT**

#### **4.1. Air Quality**

The BNSF Paradise site is a former tie treating plant that has been inactive since 1982. No air quality emissions are currently present.

##### Proposed Action and Denial Alternative

No impacts to air quality will occur because the current use of the site is not expected to change.

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

The site is situated on the northern bank of the Clark Fork River, approximately 2.7 miles downstream of the confluence of the Flathead River. Depth to groundwater at the site ranges from approximately 15 to 25 feet below ground surface. The aquifer is between 15 to 60 feet thick and is underlain by a clayey silt combined with fine silty sand, which acts as an aquitard. An aquitard is a geologic layer of low permeability that can store groundwater above its surface.

Dissolved polycyclic aromatic hydrocarbons (PAHs) have been detected in groundwater beneath the site and creosote free-product is present below ground surface in the area of the former retort building and surface impoundment. The geologic aquitard beneath the aquifer has allowed the creosote free-product to pool at the bottom of the aquifer.

Remedial actions that have occurred at the site include soil excavation, land treatment, creosote product recovery, and monitored natural attenuation.

Creosote recovery was initiated in 1996 and is on-going. The permitted product recovery system has not been in operation since it was damaged during flooding in the spring of 2018. The air-lift pump recovery system has been in use since flooding receded.

The currently permitted product recovery system is on a timer that is connected to all recovery wells by the use of a manifold system. Creosote slowly pools in the recovery well sumps, entering each recovery well at different rates. If the timed recovery pumps turn on when water is present in the well, the water is also extracted. The extracted water is treated through a granular activated carbon system and the clean water is returned to the subsurface. Recovered creosote is regulated as a hazardous waste. The recovered creosote is permitted to be stored in two tanks onsite, tank T-6 has a 5000-gallon capacity and tank T-7 has a 275-gallon capacity.

The air-lift pump recovery system is not currently included in the permit; it initially was operated under the force majeure condition in the permit and is currently operated under a temporary authorization.

Groundwater monitoring wells are situated throughout the facility and are sampled and analyzed on a semi-annual or annual basis. Groundwater analytical results have shown no evidence that dissolved PAHs at concentrations above risk-based groundwater protection standards have migrated offsite. Groundwater monitoring also indicates contamination is not reaching the Clark Fork River.

A Controlled Groundwater Use Area was designated for the BNSF property by the Montana Department of Natural Resources and Conservation on June 11, 2011. This designation limits the use of groundwater on the site to provide added protection against human health exposure to groundwater.

### Proposed Action

The permit modification would remove requirements for operation of the flood-damaged product recovery system. Permit requirements would be modified to include requirements for product recovery via an air-lift pump recovery system in the surface impoundment. The amount of creosote product recovered using this system would be equivalent to the amount of creosote that would be recovered using the permitted product recovery system. Since the air-lift pump recovery system is manually turned on when creosote product is present in the recovery well, the pumping time and rate will be more precise, ensuring that water will not be extracted from the well. This will eliminate the need for water treatment.

The permit modification would remove requirements for operation of storage tanks T-6 and T-7 which would eliminate large quantity, long-term storage of creosote onsite. Recovered creosote will be stored in 55-gallon drums and shipped offsite. Storage of recovered creosote must follow hazardous waste generator accumulation requirements of less than 90-day storage; less than 90-day hazardous waste storage is not required to be permitted.

The permit modification would remove groundwater monitoring wells that have been deemed redundant or have had long-term non-detect PAHs, and reduce sampling frequency of monitoring wells. This effort will streamline the groundwater monitoring system.

No negative impacts to existing water quality, quantity, and distribution should occur under the proposed action. Positive impacts include eliminating the amount of creosote stored onsite long-term, thus removing the potential for a large spill to occur if the tank systems fail. Positive impacts also include the elimination of extracting groundwater via the product recovery system.

### Denial Alternative

BNSF would be required to submit a new application for an alternative product recovery method since the currently permitted product recovery system can no longer be used due to damage during flooding.

Tank T-6 and tank T-7 would continue to be included in the permit. Hazardous waste regulations allow BNSF to store recovered creosote in 55-gallon containers and ship it offsite within 90-days of being generated without modifying the permit.

The number of groundwater monitoring wells that are included in the monitoring well system would continue as specified in the permit.

Under the denial alternative, creosote recovery would cease until a new permit modification application and alternate product recovery system could be introduced. This would have a short-term negative effect on groundwater quality at the site.

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

Geology at the site is underlain by approximately 400 feet of lacustrine and fluvial sediments. The upper portion of these unconsolidated sediments has been subdivided into three zones: Zone I sediments vary in thickness from 0-14 feet, with an average thickness of 3.7 feet. Zone I consists of silt to sandy silt with rare fine-grained sand beds. Zone II has a thickness varying between 15 and 60 feet and consists of sandy



gravel. Zone III thickness ranges from 167 – 174 feet and ranges in composition from clayey silt to fine silty sands. Zone III is relatively impermeable, which allows free phase creosote to pool on top of Zone III.

Groundwater is generally encountered between 15 and 25 feet below ground surface. The Zone I sediments are unsaturated. The saturated portion of Zone II is an unconfined water table aquifer which is hydraulically connected to the Clark Fork River.

Soil at the site is contaminated from historical releases. Soil from 0-2 feet that exceeded the site-specific carcinogenic PAH level of 40ppm has been excavated and replaced with clean fill. The permit requires new releases or new discovery of historical releases to be remediated. Subsurface soil is contaminated with creosote in free-phase and residual phase.

Corrective action currently focuses on free-phase creosote product recovery and groundwater monitoring.

#### Proposed Action & Denial Alternative

BNSF will be required to address free product contamination under the proposed action and the denial alternative. Continuation of corrective action will continue to reduce free product levels. Minor positive impacts to soil quality are expected.

#### **4.4. Historical and Archaeological Sites**

The site began operation of a creosote tie plant in 1908 and continued operation until 1982, when the plant was destroyed by fire. The buildings were removed in the 1980s and no historical buildings remain.

#### Proposed Action & Denial Alternative

Corrective measures will continue at the facility under the proposed alternative and denial alternative. No impacts to historical and archaeological sites will occur because the current use of the facility is not expected to change.

#### **4.5. Aesthetics**

The site is located along the Clark Fork River, and is separated from the town of Paradise, (population approximately 200), by Montana Rail Link rail lines and buildings. Buildings on the site consist of the product recovery building, office building, and one small shed. Tanks are housed in buildings except for the 5000-gallon tank T-6. The remaining portions of the site are covered in vegetation.

#### Proposed Action

Tank T-6 would be removed from the site, which would minimally improve aesthetics. Tanks that are housed in buildings would also be removed from the site. Creosote would be stored in 55-gallon drums and would be housed inside the office building.

#### Denial Alternative

Tank T-6 would remain onsite, which would have minimal negative impacts on aesthetics.

#### **4.6. Terrestrial and Aquatic Life and Habitats**

The site is mostly vegetated, with deer, elk, and bear frequenting the area.

##### Proposed Action & Denial Alternative

Both the proposed action and denial alternative would present nearly the identical current habitat environment. No adverse effects on wildlife or habitat are anticipated.

#### **4.7. Vegetation Cover, Quantity, and Quality**

The site is primarily vegetated. Requirements for establishment and continued care of the vegetative cover of the Solid Waste Management Units (SWMUs) and the Land Treatment Unit are required in the permit.

##### Proposed Action & Denial Alternative

No impacts will occur to vegetative cover, quantity, or quality under the proposed action or the denial alternative.

#### **4.8. Unique, Endangered, Fragile, or Limited Environmental Resources**

The site is mostly vegetation, surrounded by fencing and with locked gates and signage to keep out trespassers.

##### Proposed Action & Denial Alternative

The permit modification will not alter the current site vegetation, fencing, or access, nor will it alter the requirements to continue to extract creosote product from the aquifer. BNSF would maintain their security fence and continue corrective action. Creosote product would continue to be extracted from the subsurface under both the proposed action and denial alternative. No additional impacts to environmental resources would occur under either the proposed action or denial alternative.

#### **4.9. Demands on Environmental Resource of Water, Air, and Energy**

Currently the only operations on the site are post-closure care of the land treatment unit and product recovery of creosote from the subsurface. BNSF does not have any state-issued permits for water discharge or air emissions.

##### Proposed Action

The proposed action would continue to require creosote recovery; however, the air-lift pump recovery system would eliminate groundwater extraction from the recovery process. This would have a minimal positive effect on the energy from extracting groundwater.

A slight increase in truck traffic to collect the recovered creosote every 90 days would have a minimal negative impact on energy.

The proposed action will not have any demands on air or water resources.

## Denial Alternative

Under the denial alternative, creosote recovery would cease until a new permit modification application and alternate product recovery system could be introduced. This would have a short-term positive effect on the expenditure of energy. The denial alternative would not affect the demands on air or water resources.

### **4.10. Sage Grouse Executive Order**

The site is not located in sage grouse designated habitat, as provided by the Program at: <https://sagegrouse.mt.gov>.

### **4.11. Cumulative and Secondary Impacts**

Cumulative impacts are defined in MEPA as the collective impacts on the human environment when considered in conjunction with other past, present, and future actions related to the proposed action by location and generic type. Cumulative impacts are impacts that may be negligible or minor for a specific project or action under consideration, but collectively (many similar projects or actions) or incrementally may result in significant impacts. Secondary impacts are those occurring at a later time or distance from the triggering action.

The tie treating plant ceased operation in 1982. The hazardous waste permit is the only state-issued permit required for the site. The permit is intended to protect human health and the environment.

#### Proposed Action & Denial Alternative

The permit modification will not change the requirement to continue to extract creosote from the subsurface and ensure that any future discoveries of impact to surface soil will be remediated. The actions EPA and DEQ have required BNSF to implement have improved soil and groundwater quality.

In both the proposed action and denial alternative, corrective action will continue to be required that will result in the reduction of contamination in groundwater. The overall cumulative impact from the current permit and the proposed action will be positive to the physical and biological environment both on- and offsite.

Secondary impacts are not anticipated.

## **5. POTENTIAL IMPACTS ON SOCIAL, ECONOMIC, AND CULTURAL ENVIRONMENT**

### **5.1. Social Structures and Mores**

#### Proposed Action & Denial Alternative

DEQ does not anticipate impacts to social structures or the moral views of any social group due to the proposed action or denial alternative. The site is not in operation and will remain in its current state in both instances.

### **5.2. Cultural Uniqueness and Diversity**

Proposed Action & Denial Alternative

DEQ does not anticipate impacts to cultural uniqueness and diversity around the facility due to the proposed action or denial alternative. The site is not in operation and will remain in its current state in both instances.

**5.3. Local and State Tax Base and Tax Revenue**

The tie treating plant ceased operations in 1982. BNSF does not incur annual profit from the site and currently employs one part-time site manager.

Proposed Action & Denial Alternative

The proposed action or denial alternative will not impact tax revenues. DEQ does not anticipate impacts to local and state tax bases or tax revenue.

**5.4. Agricultural or Industrial Production**

The site is primarily vegetated with no current industrial production. The permit prohibits food chain crops from being grown on any land that has been used for the treatment of hazardous waste.

Proposed Action & Denial Alternative

DEQ does not anticipate any positive or negative impacts on agricultural or industrial production from the proposed action or denial alternative. The permit modification and denial alternative would not affect the current permit requirement that prohibits the use of the site for agricultural purposes.

**5.5. Human Health**

Groundwater data indicates the PAH contaminant plume is not increasing in size and is not migrating offsite. The absence of migration of the PAH plume is attributed to natural attenuation and degradation processes in the aquifer. To ensure PAH levels in the groundwater do not exceed risk-based standards beyond the property boundary, an Alternate Concentration Limit (ACL) has been established as part of the final corrective measures at the site. None of the wells located on the property are used for drinking water. The nearby town of Paradise receives groundwater from a well upgradient of the Paradise site.

Analytical data indicates subsurface soils have been contaminated above risk-based levels. The site is limited to industrial use for the foreseeable future. Future residential use is not intended or anticipated by BNSF.

Contaminated surface soil above risk-based levels has been excavated to 2 feet below ground surface and placed on an onsite LTU. The LTU is within the fenced property and appropriate signs are posted. Contaminant levels at the LTU are currently below the industrial risk-based level. The LTU has been in post-closure care since 2009.

Proposed Action & Denial Alternative

The proposed action and denial alternative will not result in the creation of any new human health hazard or potential hazards.

## **5.6. Access to and Quality of Recreational and Wilderness Activities**

The permit currently requires restricted access by a perimeter fence with locked access gates and signage stating, "Danger – Unauthorized personnel keep out". No wilderness or recreational areas are located at this facility or are accessed through the property.

### Proposed Action & Denial Alternative

There is no current potential for recreational or wilderness use at the site. The proposed action and denial alternative will both continue to require corrective action which is intended to prevent and correct any offsite migration of hazardous constituents. No positive or negative impacts to the recreational potential of the surrounding area is anticipated.

## **5.7. Quantity and Distribution of Employment**

BNSF currently employs one part-time contractor to manage the site. Additional contractors work, mostly remotely with minimal presence onsite, to implement the requirements of the current hazardous waste permit and corrective action.

### Proposed Action & Denial Alternative

The proposed action and denial alternative are not anticipated to create, move, or eliminate any existing jobs. Therefore, no changes to the quantity or distribution of employment is expected.

## **5.8. Distribution of Population**

The site is located in between the Clark Fork River and Montana Rail Link railroad tracks and buildings. The town of Paradise (approximate population 200) is located east of the site, across the railroad tracks and across Highway 200.

### Proposed Action & Denial Alternative

The proposed action and denial alternative are not anticipated to have impacts on the distribution of the population of Paradise.

## **5.9. Demands for Governmental Services**

The Montana Hazardous Waste Act requires BNSF to have a hazardous waste permit for post-closure care of the SI, WPU, and LTU, and for corrective action. DEQ must require corrective action for all releases of hazardous waste or hazardous constituents at a permitted facility. BNSF has conducted investigations at the facility, including soil and groundwater monitoring and is implementing groundwater monitoring and creosote product extraction to address groundwater and subsurface contamination onsite and to mitigate offsite contamination.

### Proposed Action & Denial Alternative

Permitted activities including corrective action will continue under both the proposed action and denial alternative. DEQ staff time and resources will be required to oversee BNSF's activities associated with the

Montana hazardous waste permit under both the proposed action and denial alternative. No change to the current level of government services is anticipated for DEQ oversight.

#### **5.10. Industrial and Commercial Activity**

The creosote tie plant ceased operation in 1982. Since that time, the only industrial and commercial activity at the site has been related to requirements in the permit including corrective action. The surface soil has been remediated to site specific risk-based industrial action levels.

##### Proposed Action & Denial Alternative

Corrective action to improve subsurface soil and groundwater quality will continue. DEQ does not anticipate any new positive or negative impacts from the proposed action or denial alternative.

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

##### Proposed Action & Denial Alternative

DEQ is not aware of any locally adopted environmental plans and goals that will be impacted under the proposed action or denial alternative.

#### **5.12. Cumulative and Secondary Impacts on the Social, Economic, and Cultural Environment**

The BNSF tie treating facility ceased operation in 1982 when the plant was destroyed by fire. The buildings have been removed and commercial and industrial activities are related to the permit and corrective action activities, which have improved soil and groundwater quality.

##### Proposed Action & Denial Alternative

Corrective action will be required in the permit under both proposed action and denial alternative. Corrective action has reduced hazardous constituents in both soil and groundwater. The overall cumulative impact is positive to the social, economic, and cultural environment.

Secondary impacts of both the proposed action and denial alternative are not anticipated.

### **6. RECOMMENDATION**

DEQ recommends the proposed action. The permit modification is anticipated to continue to improve the quality of the human environment by reduction in subsurface and groundwater contaminants.

The EA is an adequate level of environmental review. An EIS is not required. The EA analysis demonstrates this State action will not be a major action significantly affecting the quality of the human environment.

### **7. INDIVIDUAL OR GROUPS CONTRIBUTING TO EA**

The Montana Department of Environmental Quality

### **8. ANALYSIS OF REGULATORY IMPACTS ON PRIVATE PROPERTY RIGHTS**

A Private Property Assessment Act Checklist was completed for this action and is on file at DEQ. DEQ determined that no taking or damaging implications exist requiring a further impact assessment

**9. PREPARERS**

Draft EA Prepared By: Ann Kron  
November 15, 2019

**10. PUBLIC INVOLVEMENT**

The public will be provided forty-five (45) calendar days to review and comment on the draft EA and proposed action. The comment period will extend from December 9, 2019 through January 28, 2020.

DRAFT