# **ENVIRONMENTAL ASSESSMENT**



# SETTLER'S STRIPPING COAL FIRE COAL SEAM FIRE ABATEMENT TREASURE COUNTY, MONTANA

#### PREPARED BY:

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY REMEDIATION DIVISION P.O. BOX 200901 HELENA, MONTANA

IN COOPERATION WITH

UNITED STATES DEPARTMENT OF THE INTERIOR OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT CASPER, WYOMING FIELD OFFICE

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# CHAPTER 1 – INTRODUCTION Purpose and Need for the Action

In accord with the Montana Abandoned Mine Reclamation Plan, as amended July 19, 1995 (Federal Register Vol. 60 No. 138 pg. 36998), the Montana Department of Environmental Quality, Remediation Division (DEQ-Rem), has elected to undertake the reclamation of the Settler's Stripping Coal Fire, Treasure County, Montana The Remediation Division has investigated the Settler's Stripping Coal Fire (PA MT049069) and has determined that the site is eligible for expenditure of abandoned mine reclamation funds. Eligibility for the abandoned mine reclamation fund is based on the site being mined for domestic coal coal prior to August 3, 1977 and being left in an unreclaimed or inadequately reclaimed condition. The fire is burning on a coal seam located in the Rosebud-Robinson coal zone of the Colstrip Coalfield. The fire is believed to have generated the Horse Creek wildfire in 2012. The Horse Creek fire became part of the Ash Creek Complex wildfire.

The project will protect the health and welfare of local residents, visitors, wildlife, domestic animals, and the nearby Colstrip-Broadview 500kv A and B power lines. Specific actions to be taken as part of the project include:

- 1. Improve road access to the fire to allow passage of heavy equipment
- 2. Drill sufficient holes to determine the location of the leading edge of the fire.
- 3. Excavate and extinguish the fire
- 4. Contour, topsoil, and reseed the disturbed area

#### Project Background/General Information

The project is located on the north side of an unnamed, deeply incised, intermittent stream that is a tributary of Horse Creek. The site is accessed through either Hysham or Hardin, MT via State Highway 384, Horse Creek Road, an unnamed county road, and a two track following the Colstrip-Broadview power line. The fire is found on the USGS Minnehaha South 1:24000 quadrangle and is in the NW ¼, NW ¼ S5 T2n R38E.

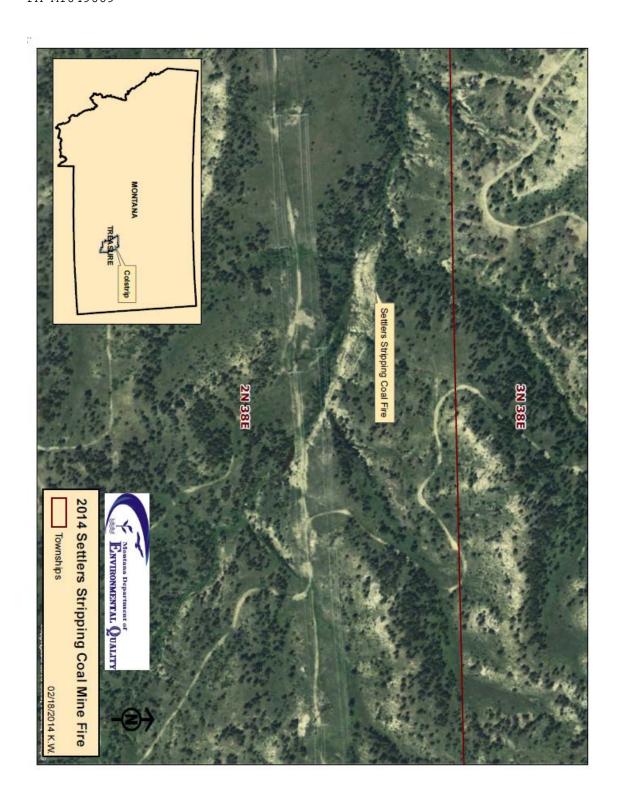


Figure 1. Location map for Settler's Stripping Coal Fire

### Use of the Property

The property is used principally for cattle grazing. Recreational activities including hunting occur in the area.

#### Previous Reclamation Work

No Previous reclamation work has occurred on this site.

#### **Existing/Related Environmental Documents**

The following documents are attached as appendices:

- Montana State Historic Preservation Office review
- Montana Natural History Program review
- US Fish and Wildlife review

#### CHAPTER 2 - DESCRIPTION OF THE ALTERNATIVES

Alternative 1: Approval of the Proposed Settler's Stripping Coal Fire Abatement Project (The Preferred Alternative)

Under this alternative, the Office of Surface Mining (OSM) Field Office Director would approve extinguishing the fire using best available technologies.

The fire abatement program at the Settler's Stripping Coal Fire would include limited drilling to determine extent of the fire, excavation of the burning coal seam, extinguishing the fire, recontouring and seeding of the disturbed area.

The proposed time schedule for this alternative is:

Winter-Spring 2014

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|----------------------|---|
| Summer 2014          | Prepare bid package, advertise for bids and award |
|                      | contract for reclamation.                         |
| Fall 2014            | Project Construction completed                    |

Fligibility determination and field investigation

2014-2015 Project Monitoring

A professional engineering firm licensed in Montana will complete the engineering design for the project. Work by this firm will be contracted for, supervised, and approved by staff from the Montana Department of Environmental Quality. Contract bidding and award will be by the Department of Environmental Quality staff. After the construction contract is awarded, and construction begins, a full-time construction inspector will be on-site to ensure quality control during construction.

Alternative 2: "No Action", Settler's Stripping Fire Abatement Project is not approved and no work will be conducted at this site.

Under this alternative, the OSMRE Field Office Director would not approve the Settler's Stripping Fire Abatement Project and the fire will be allowed to burn with no control activities undertaken.

This may create conditions that pose a risk to area residents, wildlife, including the Greater Sage-Grouse and Sprague's Pipit which are species of concern. Under this scenario conditions may be created that will endanger the Colstrip-Broadview 500KW A&B power line.

Other Reasonable Alternatives:

Montana AML knows of no other reasonable alternatives for concerns and dangers created by the Settler's Stripping Fire.

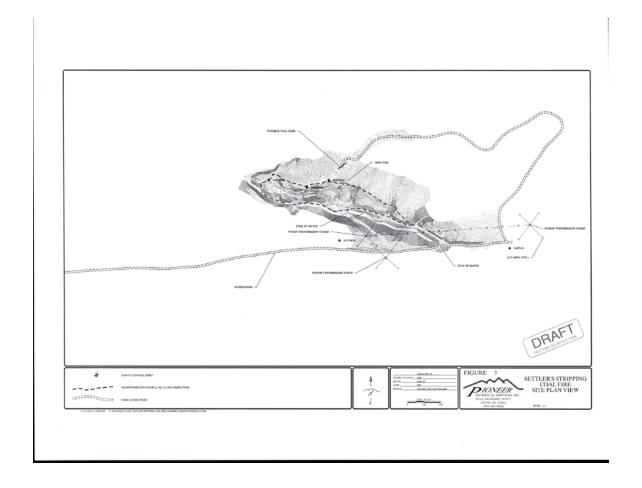


Figure 2. Contour Map of proposed reclamation project

# **CHAPTER 3 The Effected Environment**

## **General Setting**

The Settler's Stripping Coal Fire is located on land which is essentially unchanged since settlers moved to this part of Montana in the late 1800's. The topography rugged with Ponderosa forests providing cover for Elk, Mule Deer, Upland birds, and small mammals. Ephemeral streams feed into Horse Creek and provide water for wildlife and livestock.

#### Critical Elements

#### Cultural or Historic Resource Values

Consultation with the Montana State Historic Preservation Office showed no known cultural history sites in the immediate area of the Settler's Stripping Coal Fire.

Cultural Resources consultation accompanies this document. .

#### b. Hydrology

#### Surface Water:

The Settler's Stripping Coal Fire is burning in the northern bank of a deeply incised, unnamed, ephemeral drainage. Water from this drainage feeds into Horse Creek.

#### Groundwater:

Montana Bureau of Mines and Geology, Montana Groundwater Information System no information on water wells within T2N R38E.

#### c. Fish and Wildlife

Game and nongame species are found on the property. Mule Deer and Elk are the primary game species. According to the Montana Dish Wildlife and Parks Field Guide

Mule Deer and Elk are present at an average density of one to fourteen per square mile.

Nongame species include but are not limited to rabbits, bobcats, fox, coyotes, porcupines, raccoon, and skunk.

While a variety of species are found on the property the property does not serve as primary habitat for any threatened or endangered species. The project site is on the margin Greater Sage Grouse habitat but the project will not endanger Greater Sage

Grouse populations or habitat.

Consultations related to fish and wildlife accompanies this document.

#### d. Soils and Vegetation

The project falls within the Great Plains Ponderosa Pine Woodland and Savanna system. Soils are shallow sandy A-horizon generally less than 10 cm. Vegetation consists of ponderosa pine, Rocky Mountain juniper, and mixed grass species.

#### e. Recreational Resource Values.

The site is located entirely on private land. No wilderness areas, National Parks, Wild and Scenic Rivers or other recreational resource areas are contained within the project area. The site is currently used for ranching and is posted as private property.

#### f. Air Quality

Air quality in Treasure County is classified as "Unclassifiable/Attainment or Better than National Standards" (40 CFR 81.327) for the National Ambient Air Quality Standards for all criteria pollutants.

#### g. Noise

This site is situated in ranching area located 30 miles south of the community of Hysham, MT. No traffic, construction, or other noise will be audible from this site.

#### h. Topography

The project is located in upland rugged terrain with steep hillsides and crosscut by perennial streams.

#### i. Social and Economic Values

The area around the Settler's Stripping Coal Fire site is privately owned ranch land. The project will have little economic impact on the area.

 j. Conformance with Federal, State, Regional, and/or Local Land Use Plans, Programs and Policies

Fire abatement construction activities associated with Alternative 1 would comply with Montana's Abandoned Mine Reclamation State Plan. Fire abatement would be in accord with the activities allowed by the property owner.

k. Environmental Justice

Based on United States Government 2010 Census figures the average annual wage for a job in Treasure County is \$24,537 (2012). Workers in Treasure County earn 57.5% of the U.S. per capita income. The dominant race in Treasure County is "white" with 94.6% of the population. The next largest percentage of the population by race is "Hispanic", followed by "Two or More Races."

The AMRB has prioritized the Settlers Stripping Coal Fire project in accordance with the programmatic mandate that requires reclamation of eligible coal sites as the highest reclamation priority. No consideration regarding the selection of this project was made in relation to income or race.

#### CHAPTER 4 - ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES

A. Approval of the Proposed Settler's Stripping Coal Fire Abatement Project (The "Preferred Alternative").

This alternative will result in the following site reclamation:

- . Excavate, and extinguish the burning coal seam.
  Grade and cover soil disturbed areas
- B. Disapproval of the Proposed Abandoned Mine Construction Project (The "No Action Alternative")

This alternative will result in continued site degradation. The coal seam fire will continue to burn and will have the potential to start additional wildfires which will endanger human health, wildlife, and habitat important to species of concern.

#### C. Critical Elements

a. Cultural or Historic Resource Values

The project contains no known cultural sites or historic resources.

b. Hydrology

Groundwater and surface water will not be impacted by this project.

c. Fish and Wildlife

U.S. Fish and Wildlife Service have reviewed the proposed project and has determined that the project will have no impact on federally listed species or designated critical habitat.

#### d. Soils and Vegetation

The abandoned mine reclamation will have no effect on prime and unique farmland. The proposed project will protect existing vegetation from the threat of new wildfires generated by the Settler's Stripping Coal Fire. No threatened or endangered species of vegetation will be impacted.

e Recreational Resource Values

Reclamation will have no impact on recreational resources.

f. Air Quality

The project will have no long term effect on air quality. Short term impacts may include fugitive dust. All reasonable efforts to control dust will be made.

#### g. Noise

The "preferred" alternative would result in a slight increase in noise from heavy equipment during the construction period for this abatement project.

The "no action" alternative would have no impact to noise values.

#### h. Topography

The "preferred" alternative would have minimal impact on site topography.

The "no action" alternative could result in continued slumping of the overburden.

#### i. Social and Economic Values

The "preferred" alternative would mitigate public health and safety hazards; improve environmental quality, and visual aesthetics. Reclamation project will allow ranching and conservation uses of the property to continue, preserving existing social and economic values. Jobs related to the fire abatement project will provide a short-term economic boost to the local economy.

The "no action" alternative may impact existing ranching uses of the property through loss of forage for wildlife and domestic animals.

j. Conformance with Federal, State, Regional, and/or Local Land Use Programs

Reclamation construction would be in accord with the Montana Abandoned Mine Reclamation Plan.

The "no action" alternative would not be in accord with the Montana Abandoned Mine Reclamation Plan.

#### k. Environmental Justice

The Settler's Stripping Coal Fire project will have no disproportionate effect on any demographic population with regard to either income level or minority status. The Abandoned Mine Land Program will provided the public with full opportunity for meaningful participation by minority or low-income populations through a standardized public participation and comment process. Reclamation project reports, studies and work plans will be available for public inspection at all times.

**CHAPTER 5 - CONSULTATION AND COORDINATION** 

In preparing this assessment the Montana Department of Environmental Quality Remediation Division consulted with the following agencies:

State Historic Preservation on issues related to cultural resources.

U.S. Fish and Wildlife Service, Montana National Heritage Program, on issues related to federally listed threatened and endangered species.

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#### CHAPTER 6 - REFERENCES

Montana Bureau of Mines and Geology. Ground-Water Information Center, 2004. Wells Report from GWIC Database.

Office of Surface Mining Reclamation and Enforcement, 1983. Approval of State and Indian Reclamation Program Grants under Title IV of the Surface Mining Control and Reclamation Act of 1977; final environmental impact statement; Washington DC. U.S. Government Printing office, OSM-EIS-11.

United States Department of Commerce-US Census Bureau-State and County Quick Facts.