

## FINDING OF NO SIGNIFICANT IMPACT

South Canyon #1 Coal Mine Fire Abatement - East Cover project

eAMLIS Keys: C0-002302 and 002311

### **Introduction**

The Office of Surface Mining Reclamation and Enforcement (OSMRE) has reviewed the Environmental Assessment (EA) submitted by the Colorado Inactive Mine Reclamation Program (CIMRP) in support of the South Canyon #1 Coal Mine Fire Abatement - East Cover project. This EA was developed pursuant to 516 DM 13.5 B. (33) which specifically bars mine fires and refuse fires from Categorical Exclusion-level analysis under the National Environmental Policy Act. Under the Preferred Alternative, OSMRE would provide an Authorization to Proceed to CIMRP to expend federal Abandoned Mine Land grant funds to cap, seal, and revegetate the eastern portion of the South Canyon fire. The work would entail the construction of a clay soil cover to seal and reduce air intake into the underground burning mine and the subsequent soil cover installation and revegetation. This site is located in Garfield County, Colorado, and according to historical records, a coal fire has been burning in this canyon since October 1906. Additional fire activity also occurred in 1950 and 1951 and led the mine to close in 1951.

### **Reason**

This fire has been ranked as Priority 1 public health and safety hazards by CIMRP. This classification and the need for the Preferred Alternative is designed to protect human health and safety and reduce the risk of injury caused by falls, burns, smoke inhalation, and/or suffocations from falling into or being near the fire vents. The proposed action also is designed to mitigate the human health risk, ecological damage, and property loss associated with a wildfire ignited by the mine fire.

Under the Preferred Alternative, OSMRE would authorize CIMRP to seal and reduce air intake into the underground burning mine to control and contain the underground mine fire, then resoiling and revegetating the affected areas totaling approximately three acres of surface disturbance. This is intended to control and contain the underground mine fire.

### **Context 40 CFR 1508.27(a)**

To determine whether the Preferred Alternative would have a significant effect on the human environment, impacts related to the Preferred Alternative were analyzed in terms of context and intensity based on the criteria at 40 CFR 1508.27(b). The Preferred Alternative project area includes the former historical mine sites where recent events (e.g. hot vents and open subsidence fissures) have caused a more surface expression of high temperatures and a greater air intake into the fire. In 2002, a large wildfire was caused by the South Canyon Mine Fire. The project area is in Garfield County, Colorado approximately five miles west of the town of Glenwood Springs in Township 6 South, Range 90 West, Section 14. It is situated on west and east facing slopes in a steep valley bisected by South Canyon Creek at an elevation of approximately 7,100 feet. The mine fire area is accessed from Interstate 70 at exit 111, then to CR 134, South Canyon Creek

Road. The project area is approximately 10 acres. The Preferred Alternative would result in approximately three acres of surface disturbance. The Preferred Alternative is project-specific and any impacts would be likely realized at the local rather than regional, national, or global levels.

Affected interests include recreational Glenwood Springs Open Space users whose physical safety is impacted by the coal fire (the Preferred Alternative has the support of the City of Glenwood Springs) and the private landowners adjacent to this site. These private landowners' physical safety and risk to property is also of concern.

#### **Intensity 40 CFR 1508.27(b)**

*(1) The following resources were analyzed in the South South Canyon #1 Coal Mine Fire Abatement - East Cover Project EA for beneficial and adverse impacts. A significant effect may exist even if OSMRE believes that on balance the effect will be beneficial.*

#### Historic and Cultural

The project area falls within the non-contributing areas of an historical mine site. As a whole, the entire South Canyon Mine is in very poor condition. Except for the Wheeler Incline, the mine workings are no longer clearly interpretable. Repeated flash flooding, the South Canyon Fire, extensive bulldozing before that, and recent efforts to extinguish seam fires have erased most of the complex's historical elements. The Wheeler Incline site is eligible for listing on the National Register of Historic Places, however this site will be avoided by this project. The Colorado State Historic Preservation Officer has concurred that the recommended effect finding of "no adverse effect" is appropriate for this undertaking if the Wheeler Incline site is avoided. There would be little to no impact to historic and cultural resources under the No Action Alternative.

#### Hydrology

The Preferred Alternative would not modify or alter any waterways or water bodies and there would be no water depletion. Temporary drainage controls would be used during the project to help ensure any hydrologic impacts are minor and temporary. There would be little to no impact to hydrologic resources under the No Action Alternative.

#### Vegetation

The project area is mostly devoid of vegetation and consists of sandstone outcrops and colluvium. Portions of the project area contain a sparse cover of cheat grass, with sporadic scrub oak and pinyon pine trees. A total surface disturbance of approximately three acres is expected. All disturbed areas would be topsoiled and reseeded. Impacts to vegetation would be minor and temporary and should represent an improvement upon current conditions in the long term. Under the No Action Alternative, the fire could cause a wildfire to the remaining surrounding vegetation and contribute to continued plant mortality and the spread of noxious weeds.

The Ute Ladies'-tresses (*Spiranthes diluvialis*) is a threatened species without designated critical habitat that may occur in the project area, according to the U.S. Fish and Wildlife Service. Ute Ladies'-tresses requires moist meadows supported by perennial streams and floodplains at

elevations between 4,300 to 6,850 feet. Aside from areas immediately adjacent to South Canyon Creek, Ute Ladies'-tresses is not expected to occur in the project area because it lacks suitable wet meadow habitat.

### Fish and Wildlife

A total of seven federally protected species with the potential to occur in or near the project area were identified using data available through the US Fish and Wildlife Service. All seven species were evaluated and eliminated from further review based on the following criteria: the species' known geographic ranges; whether the Preferred Alternative project area contains necessary conditions similar to those known to support the species; and whether the project would remove or adversely affect any habitat of the species. No critical habitat exists within the project area. Little to no impact to fish and wildlife resources is expected under the Preferred Alternative. Under the No Action Alternative, wildlife habitat would continue to be negatively affected by vegetative mortality and the potential for wildfire to adversely affect a large amount of habitat.

### Soils and Geology

Under the Preferred Alternative, the soil resource is expected to be positively impacted. Capping the surface expression of the fire and reseeded the area would protect the surrounding vegetation and promote natural revegetation. Erosion control and surface stabilization would also assist in the revegetation processes. Under the No Action Alternative, local soil resources would continue to erode as vegetative mortality would continue and further subsidence would expand erosion and vegetative mortality.

### Recreation

Little to no impact to the recreation resource value is expected under the Preferred Alternative. Under the No Action Alternative, surface instability plus heat and gas emissions related to the refuse fires would continue to pose a safety threat to recreational users.

### Air Quality

Under the Preferred Alternative, an overall improvement to air quality is expected with suppression of the fire. Construction activities would cause minor, temporary dust impacts to the local area (although the project includes active dust suppression during project activities). The fires would likely continue to burn and emit gasses and smoke into the atmosphere under the No Action Alternative.

### Noise, Topography, Paleontology

Little to no impact is expected for noise, topography, or paleontology values under the Preferred Alternative or the No Action Alternative.

*(2) The degree to which the Preferred Alternative affects public health or safety.*

The Preferred Alternative's effect on local public health and safety would be moderate and positive. Glenwood Springs Open Space users and nearby residents are currently subject to surface instability and heat and gas emissions in the areas near the underground fire. Under the

Preferred Alternative, CIMRP would cap and limit oxygen to the underground fire, eliminating the heat and gas hazard, and stabilize the project area through regrading and revegetating.

*(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

The Wheeler Incline site is located near the project area, but will not be disturbed. There are no park lands, prime farmlands, wetlands, wild and scenic rivers, wilderness areas, recreation / refuge lands, or ecologically critical areas within the Preferred Alternative project area.

*(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

The Preferred Alternative would have no effects on the human environment that would be highly controversial.

*(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

The Preferred Alternative would have no effects on the human environment that would be highly uncertain or involve unique or unknown risks.

*(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

This decision is not precedent setting. The issues considered in the EA were developed by the interdisciplinary team within the context of past, present, and reasonably foreseeable actions. Significant cumulative impacts are not anticipated.

*(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.*

CIMRP's fire suppression project is the only activity known or anticipated under the Preferred Alternative. Temporary drainage controls, and appropriate reclamation techniques and fire suppression efforts would result in minor cumulative impacts in the short term and a positive contribution to the cumulative impacts of any other activities which have occurred or are expected occur in the local area.

*(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.*

The Wheeler Incline site is near the project area but would not be affected by the Preferred Alternative. No sites of tribal importance are known to exist within the Preferred Alternative project area.

*(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*

No threatened or endangered plant or animal species are known to exist within the Preferred Alternative project area. No critical habitat exists within the project area. Little to no impact to fish and wildlife resources is expected under the Preferred Alternative.

*(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The Preferred Alternative would not violate any known federal, state, local, or tribal law or requirement imposed for the protection of the environment. The Preferred Alternative is consistent with applicable plans, policies, and programs.

### **Mitigation Measures**

Under the Preferred Alternative, CIMRP would ensure the following mitigation measures are implemented:

- Interpretive signage would be installed at a nearby location to educate the public about the mining history of the area, the significance of the South Canyon Mine fire, and its impact to the local community.
- If unidentified archaeological or paleontological resources are discovered in the course of the project, work would be interrupted until the resources have been evaluated in terms of the NRHP eligibility criteria, in consultation with the OAHF.
- Best Management Practices would be installed, such as S-fence along excavation boundaries and at the toe of slopes in the disturbed area, to minimize the transport of sediment laden water from the project site.
- Disturbed areas would be re-contoured, graded, and revegetated following reclamation activities. Permanent sediment controls, such as a roughened surfaces, berms, and swales would be installed during contouring and grading of the project area.
- If the threatened orchid is found in the project area, the appropriate regulatory agency would be contacted, such as the USFWS, so that appropriate mitigation may occur.
- If signs of site usage from listed birds or fishes are found, the appropriate regulatory agency, such as USFWS, would be contacted so that appropriate mitigation may occur.
- Topsoil would be stockpiled for reuse during site reclamation.
- Excessive dust would be controlled using dust suppression measures for access roads, soil stockpiles, and excavation work.
- Emissions from vehicles and heavy equipment would be minimized by ensuring that equipment is properly maintained and equipped with emission control devices.
- Hours of operation would be limited to 6:00 a.m. to 7:00 p.m.
- A Project Safety Plan would be developed and implemented to address safety concerns, including use of multi-gas meters to ensure that atmospheres in the work area would not be hazardous to health.
- Contractors for the project would adhere to roadway weight limitations and would provide traffic control, when necessary, for oversized vehicles accessing the project site.

## Statement of Environmental Significance

The Preferred Alternative would not have a significant impact on the human environment and an Environmental Impact Statement is not required. The Preferred Alternative is the only action alternative contemplated in the EA. Under the No Action Alternative, the underground coal fire would continue to burn for an extended, undetermined length of time, increasing risks to public health and safety. Under the No Action Alternative, the ignition risk to surrounding vegetation would remain; smoke and combustion gas emissions would continue; and erosion and subsidence potential would increase as the coal burns. The Preferred Alternative would have a moderately beneficial impact on the local human environment. OSMRE selects the Preferred Alternative for the Trail Mountain Coal Refuse Fires project.

Reviewed



Daniel MacKinnon

Natural Resources Specialist

Denver Field Branch

Approved



Howard E. Strand

Manager

Denver Field Branch