AML Project 17J Statewide
Coal Acme No.Fire Subsidence

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Coal Acme No.Fire Subsidence

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

April 22, 2008

Mr. Jeffrey Fleischman, Director
Casper Field Office
Office of Surface Mining
100 East "B" Street, Room 2128
Casper, WY 82601-1918

Re: Categorical Exclusion, Acme No. 1 Fire Subsidence
(AMLIS PAD No. WY033278SGA)

Dear Mr. Fleischman:

Enclosed is a Categorical Exclusion document and Eligibility Determination Letter for the proposed action to fill an open subsidence feature associated with the Acme No. 1 Mine in Sheridan County, Wyoming. This hazard is located in the SE1/4 of Section 10, T57N, R84W. AML proposes to backfill this feature using local fill materials. Clearance surveys were performed on April 14, 2008, and no environmentally sensitive issues were identified.

With this transmittal, we are requesting Authorization to Proceed on the proposed Acme No.1 Subsidence reclamation project.

Sincerely,

Richard Chancellor
AML Administrator

cc: Richard Chancellor, Grant File
Ernie Robb, AML Project Manager
Marcia Murdock, AML NEPA Coordinator
Chron

EXHIBIT X5-11-1

ABANDONED MINE LANDS
CATEGORICAL EXCLUSION CERTIFICATION AND DETERMINATION

State: Wyoming
PA # WY033278SGA
Project Name: Acme No. 1 Mine Fire Subsidence
Project Description: A new subsidence has opened to the workings of the Acme No. 1 Mine where an active historic underground fire is continuing to cause surface expressions. This open subsidence is in an area near a mine property access road, and is not marked in any way. While the access road into the area has a locked gate, mine personnel and others have access to the area. The subsidence has unstable ground around the actual opening, and is prone to continued failure, creating a hazard for any personnel who approach the edges of the subsidence. The fire at the bottom of the subsidence creates a more dangerous situation, should someone fall in, than a normal open subsidence of this nature.

The proposal of AML for this hazard is to backfill the subsidence opening with local material. This will close the dangerous feature, and will also deny the fire the substantial oxygen supply at that location. Removing the air supply "chimney" effect at this location will likely slow the fire.

Yes responses require submission of an environmental assessment.

I. GENERAL EXCEPTIONS

Does the project type specifically require an EA in 516 DM 6, Appendix 8, as specified in Item I of the attached instructions? No [X] Yes [ ]

II. DEPARTMENT OF INTERIOR EXCEPTIONS

Will the project have any of the following:

A significant adverse effect on public health or safety? No [X] Yes [ ]

An adverse effect on any of the following unique geographic characteristics? No [X] Yes [ ]
If yes, check the ones that apply.

[ ] Parks (State, Local, or National)
[ ] Wild or Scenic Rivers
[ ] Recreation or Refuge Lands
[ ] Wetlands
[ ] Wilderness Areas
[ ] Floodplains
[ ] Ecologically Significant or Critical Areas
[ ] Sole or Principal Drinking Water
[ ] Prime Farmlands
[ ] Aquifers

Highly controversial environmental effects? No [X] Yes [ ]

Highly uncertain and potentially significant environmental effects or unique or unknown environmental risks? No [X] Yes [ ]

A precedent for future action or a decision in principle about future actions with potentially significant environmental effects? No [X] Yes [ ]

Directly related to other actions with individually insignificant but cumulatively significant environmental effects? No [X] Yes [ ]

Adverse effects on properties listed or eligible for listing on the National Register of Historic Places? No [ ] Yes [ ]

Adverse effects on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have adverse effects on designated Critical Habitat for these species? No [ ] Yes [ ]

Require compliance with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Wetlands Protection) or The Fish and Wildlife Coordination Act? No [X] Yes [ ]

Threaten to violate a Federal, State, Tribal or local law or requirement imposed for the protection of the environment? No [X] Yes [ ]

III. RESOURCE IMPACT EXCEPTIONS

Are there any unresolved issues, or adverse effects requiring specialized mitigation, for any of the following resources? No [X] Yes [ ]
If yes, check the ones that apply.

[ ] Topography
[ ] Historic and Cultural
[ ] Land Use (includes prime farmland)
[ ] Recreation
[ ] Soils
[ ] Air Quality
[ ] Vegetation (includes wetlands)
[ ] Noise
[ ] Hydrology
[ ] Other (includes socioeconomics)
[ ] Fish and Wildlife

IV. ATTACH CONSULTATION LETTERS AND A LOCATION MAP

V. RESPONSIBLE OFFICIAL CERTIFICATION

Signature: Richard A Chancellor Date: 16 April 08

Name and Title: Richard Chancellor, Administrator

VI. OSM DETERMINATION

[ ] This project conforms with the exclusion criteria in 516 DM 6, Appendix 8, and is excluded from further NEPA compliance.

[ ] This project does not conform with the exclusion criteria in 516 DM 6, Appendix 8, and requires an environmental assessment.

Signature:_____ Date:_____

Name and Title:_____

EXHIBIT X5-11-2

INSTRUCTIONS FOR CATEGORICAL EXCLUSION DETERMINATION

The attached checklist is used to determine if an abandoned mine land project funded through Title IV of the Surface Mining Control and Reclamation Act (SMCRA) is eligible for a categorical exclusion under the National Environmental Policy Act (NEPA). A yes answer to any question means that the project is not eligible and requires preparation of an environmental assessment. Additional guidance in complying with NEPA is found in the OSM NEPA Handbook.

A brief description of the project using AML Inventory keywords is required for the title block.

I. GENERAL EXCEPTIONS

Abandoned Mine Land projects that include any of the following problems, situations, or activities require an EA.

1. Subsidence projects involving the placement of any material into underground mine voids through drilled holes to address more than one structure.
2. Mine fires and refuse fires.
3. Hazardous or explosive gases. For instance, projects involving the venting of methane or carbon dioxide.
4. Dangerous impoundments, both surface and underground, as defined in the inventory guidelines (AML 1).
5. Dangerous slides where the abatement work can result in damage to inhabited property.
6. Undisturbed, non-commercial borrow or disposal sites.
7. Hazardous wastes as defined by EPA.
8. The use of explosives.
9. Projects over 100 acres in size.

DEPARTMENT OF INTERIOR EXCEPTIONS

These exceptions are presented in 516 DM 2, Appendix 2. The Department's procedures were published in the Federal Register on April 29, 1980 (45 FR 27541) and revised on May 21, 1984 (49 FR 21437).

III. RESOURCE IMPACT EXCEPTIONS

The resource values correspond to those listed in OSM's NEPA Handbook. If any agencies, persons, or groups have unresolved issues with the proposed project, an EA must be prepared.

If project activities result in impacts that must be mitigated through the use of techniques beyond common construction practices, an EA must be prepared to analyze the potential environmental effects, and alternatives. Specialized mitigation is an indicator of the potential for significant adverse effects. Please refer to the NEPA Handbook for more discussion on resource values and definitions.

The following examples are provided to help the reviewer determine when mitigating measures require preparation of an EA. These examples are for guidance only and are not inclusive.

Common Mitigation Practices Not Normally Requiring an Environmental Assessment:	Specialized Mitigation Practices Normally Requiring an Environmental Assessment:
Watering roads to suppress dust.	Developing detailed dust control plans in response to air quality zone requirements, or public health considerations.
Installation of silt fence and hay bales to control sediment.	A specialized sediment control plan required to protect sensitive off-site resources.
Routine traffic control such as flagmen, safety barricades.	The use of road closures and detours resulting in a substantial alteration of traffic patterns.
Replanting of trees, shrubs and grass to replace lost vegetation types.	Developing a specialized revegetation plan in response to concerns over adverse impacts on plant communities.
Placement of brush piles and rock piles to replace wildlife habitat.	Developing a specialized plan in response to concerns over adverse impacts on wildlife communities.
The routine placement of barriers that allow continued use of mines by non-endangered bats or other species.	Specialized mine closure procedures in response to site specific concerns about bat habitat.

IV. ATTACH CONSULTATION LETTERS AND A LOCATION MAP

Attach the SHPO consultation letter, the endangered species consultation letter, and any other consultation letters required by the state reclamation plan. The location map should be from a 7.5 minute quadrangle map, with the map name, project name, and project location legibly marked.

V. RESPONSIBLE OFFICIAL CERTIFICATION

Please complete block as indicated. The official signing this block is certifying the accuracy and completeness of the statements on the form. The persons name and title should be typed on the second line.

VI. OSM DETERMINATION

The OSM official making the determination is to review this document, check the appropriate block, and sign as indicated. The person's name and title should be typed on the second line.

EXHIBIT X5-11-3

Categorical Exclusion
Authorization to Proceed

State Agency
Address

Dear [State AML Director]

OSM has reviewed the categorical exclusion certification regarding [name of project] and determined that the project conforms with exclusion criteria in 516 DM 6, Appendix 8, and is excluded from further NEPA compliance. Accordingly, pursuant to section 5-11-20D.3 of the Federal Assistance Manual, you are authorized to proceed with this project and expend Federal funds in accordance with AML grant terms and conditions.

Sincerely

Regional Coordinating Center Representative
Field Office Director

Site Report: Acme No. 1 Fire Subsidence Site
April 14, 2008

A site visit was made to determine potential environmental effects from proposed backfilling of the open fire vent. Without an engineering design or proposed disturbance footprint, the probable areas of disturbance were determined based on apparent soil depth and evidence of past surface disturbance. By carefully inspecting the subsidence hole, it could be determined that the depth of loose soils above obvious layers of fractured shale and sandstones was between five and six feet deep. Several mounded areas surrounding the subsidence suggest that sufficient loose material for the small amount of backfill needed (± 350 cy) is present nearby. There is potential to fill the subsidence virtually in place by using loose material from the mound within which the subsidence is situated.

From the standpoint of potential cultural materials present, it was determined that as long as the excavation remains in the previously disturbed area that is covered with reclamation grasses, no effect to cultural resources is likely. The entire surface in this area has been reworked to the extent that should any materials still exist, they are no longer in context, and are unlikely to remain intact. This previously disturbed area is clearly visible at the site if one observes the vegetation carefully. As a general statement, where there is only grasses, and no shrubs or trees are growing, this is where the area was previously disturbed and revegetated with reclamation grasses. See Photos 5 and 6 for an illustration of the limits where a borrow area could be established. Care should be taken to have the borrow area remain within the State quarter-section at the location.

Regarding wildlife concerns, this action will be of short duration and will affect a very small area. No raptor nests were detected nearby, although a red-tailed hawk was foraging in the area. The pines and cedars in the locale are used heavily as bedding areas by deer, and wild turkeys do forage in the area as well, but these mobile species can be expected to avoid the short-term construction activity. Therefore no wildlife impacts are anticipated.

Although the active fire is burning about 30 feet underground, there is concern that it has potential to start a range fire. There was no evidence that the fire has actually reached the surface. Blackened vegetation appears to be the result of deposition of coal smoke residue in the form of a tarry deposit like creosote. The fire gasses are hot enough to kill vegetation at the edge of the opening before dissipation cools the exhaust. To address concerns about the potential a range fire could start while construction is arranged, a discussion with Mr. Greg Passini about contingency actions was initiated. The best preventative action is considered to be the removal of nearby dry grasses immediately surrounding the opening so that adjacent fuel is not available. Mr. Passini decided to investigate having the local fire company do a limited area controlled burn around the perimeter of the subsidence to remove the potential fuel.

Summary:

Natural Resources – Provided that this is a short-term, limited area action, no ecological effects are anticipated.

Cultural Resources – Provided that the soil borrow area is limited to the previously disturbed surface as indicated, no cultural impacts are anticipated.

Consultation was deemed unnecessary due to lack of findings at worksite.

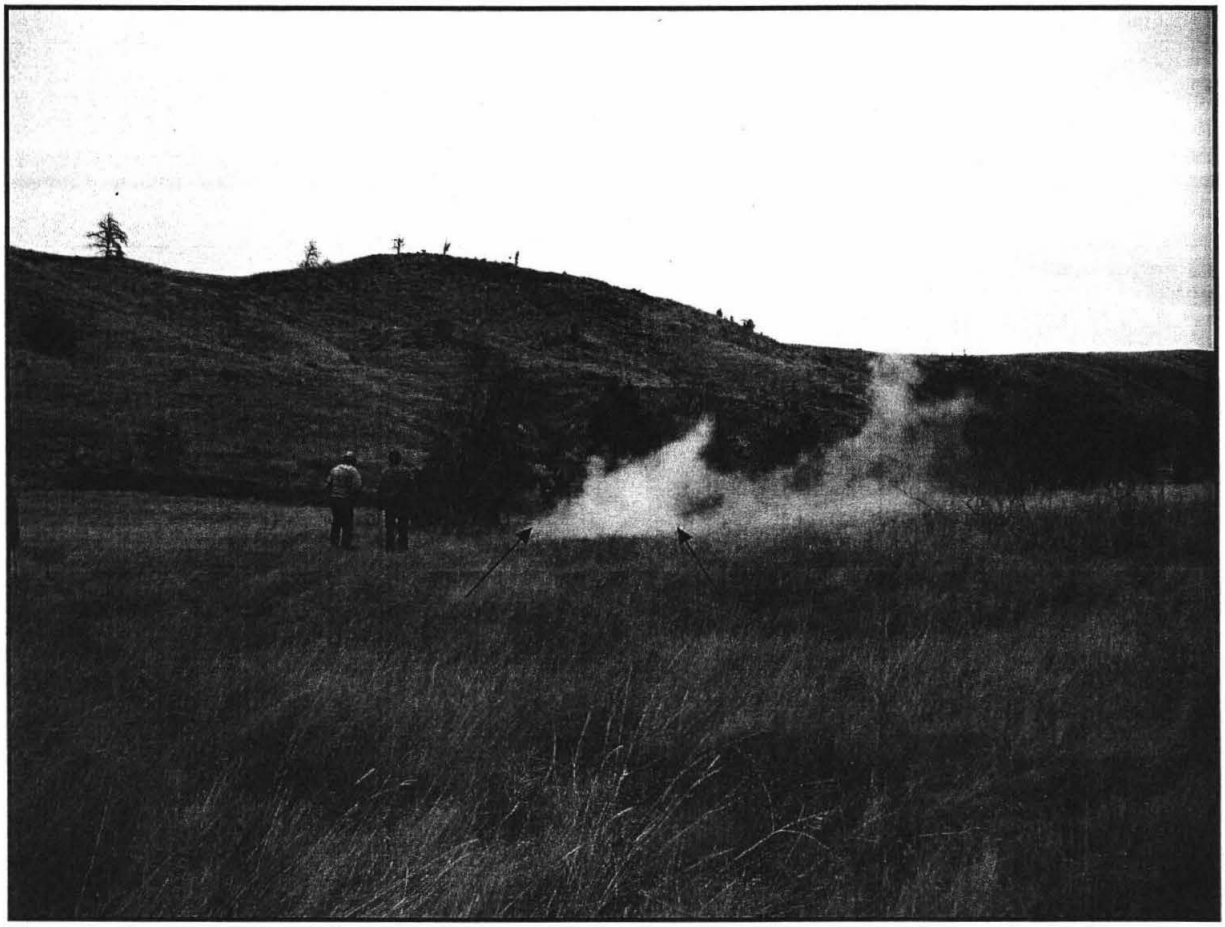

Photo 1: Acme No. 1 coal fire subsidence vent hole. Arrows indicate approximate edges of opening.

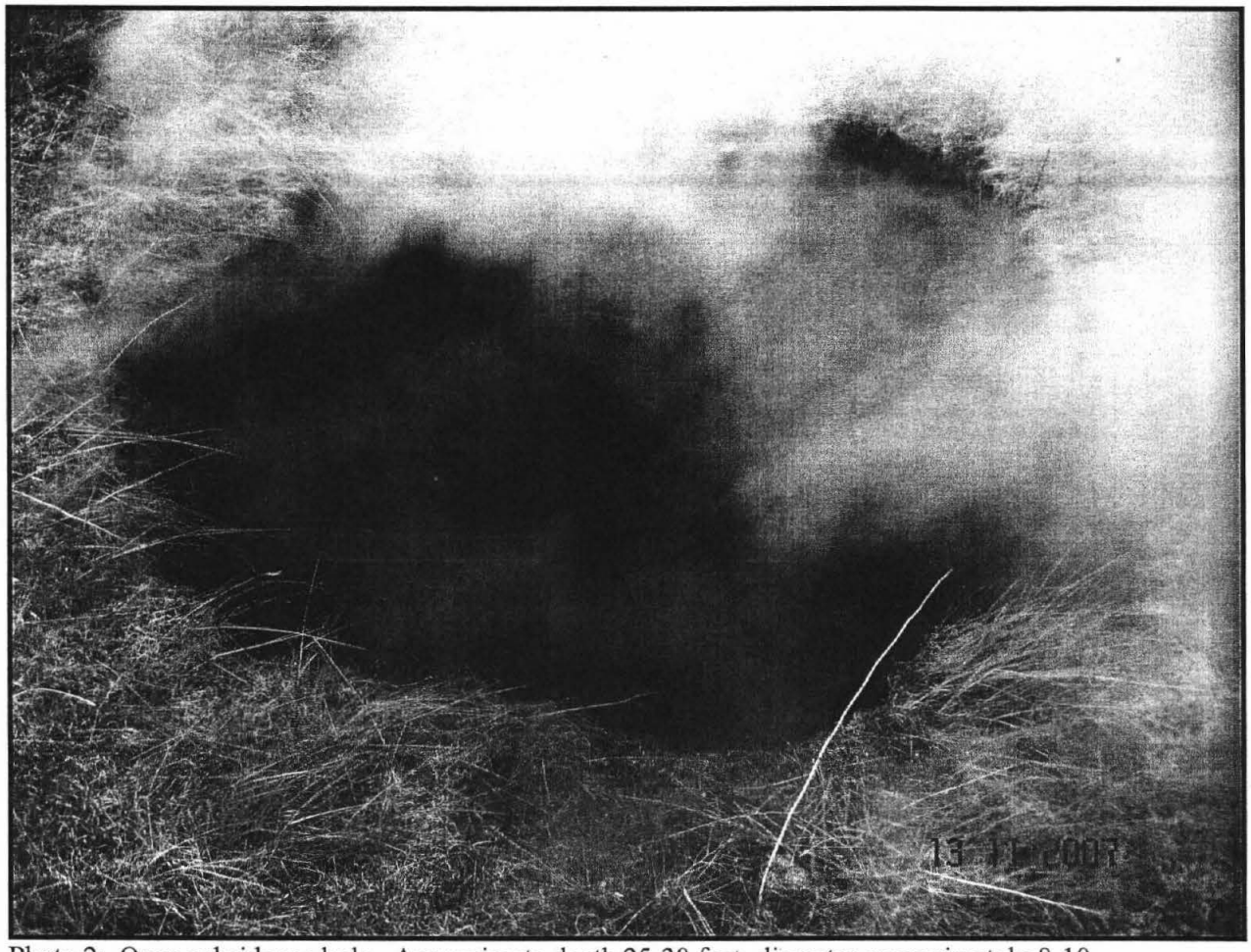

Photo 2: Open subsidence hole. Approximate depth 25-30 feet, diameter approximately 8-10 feet.

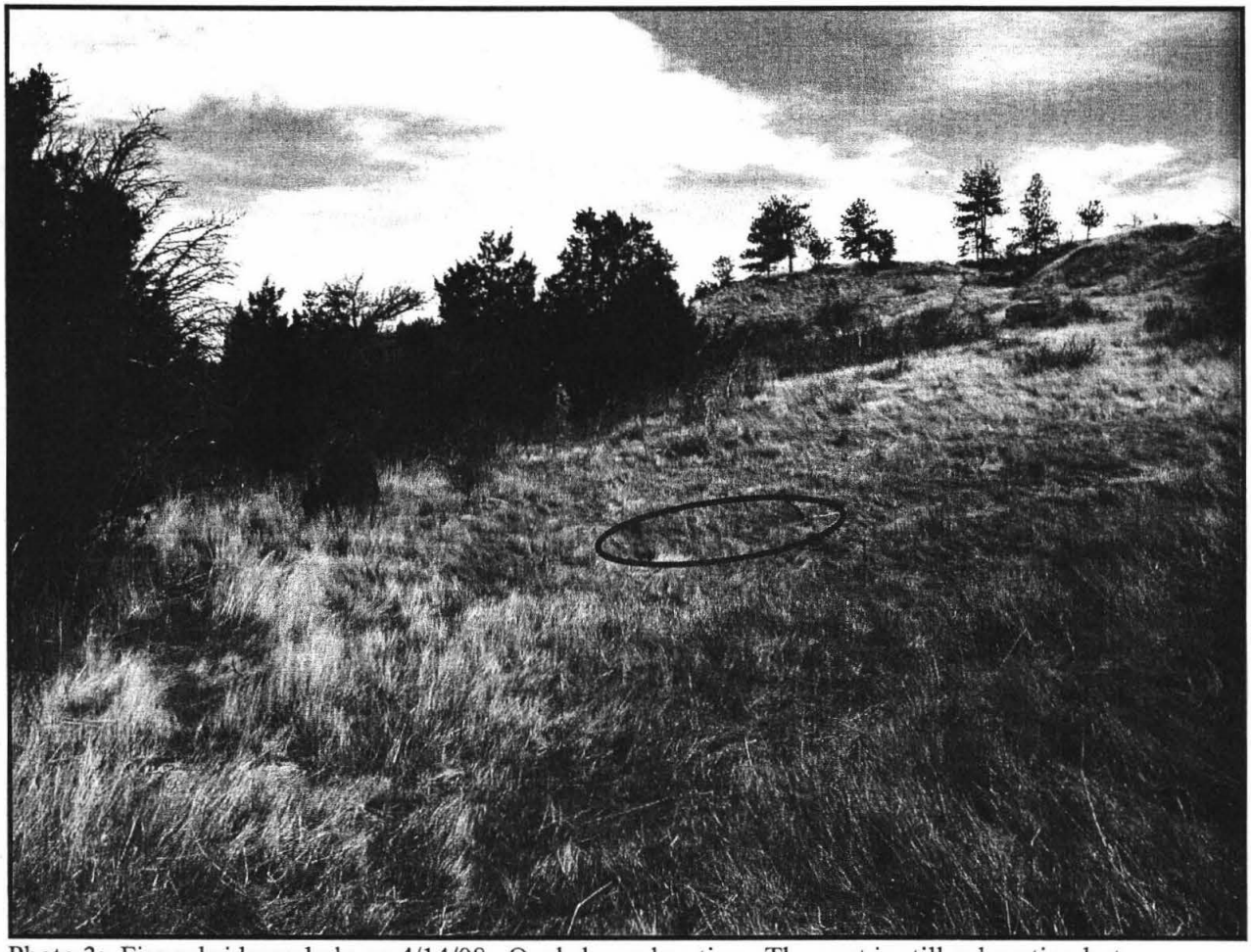

Photo 3: Fire subsidence hole on 4/14/08. Oval shows location. The vent is still exhausting hot fumes, but no smoke is visible in warm weather. At the edges of hole the surrounding overhanging vegetation is black with smoke residue and coal tar from coal combustion byproducts.

Photo 4: Looking into bottom of fire subsidence vent hole. Note smoke residue/coal tar deposit on wall where smoke chimnies up the side. Vegetation overhanging this area is also stained dark brown-black as if from creosote.

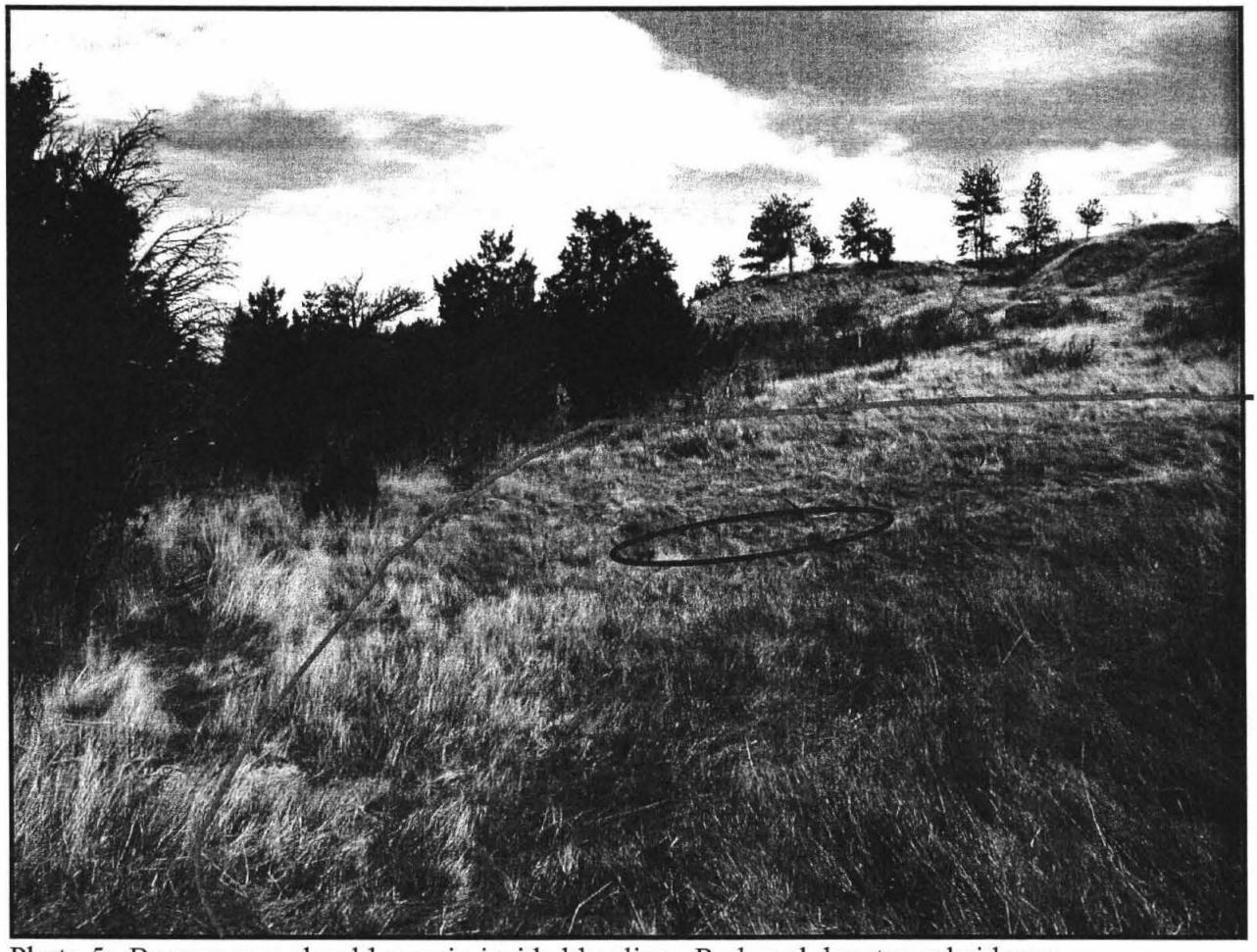

Photo 5: Borrow area should remain inside blue line. Red oval denotes subsidence location.

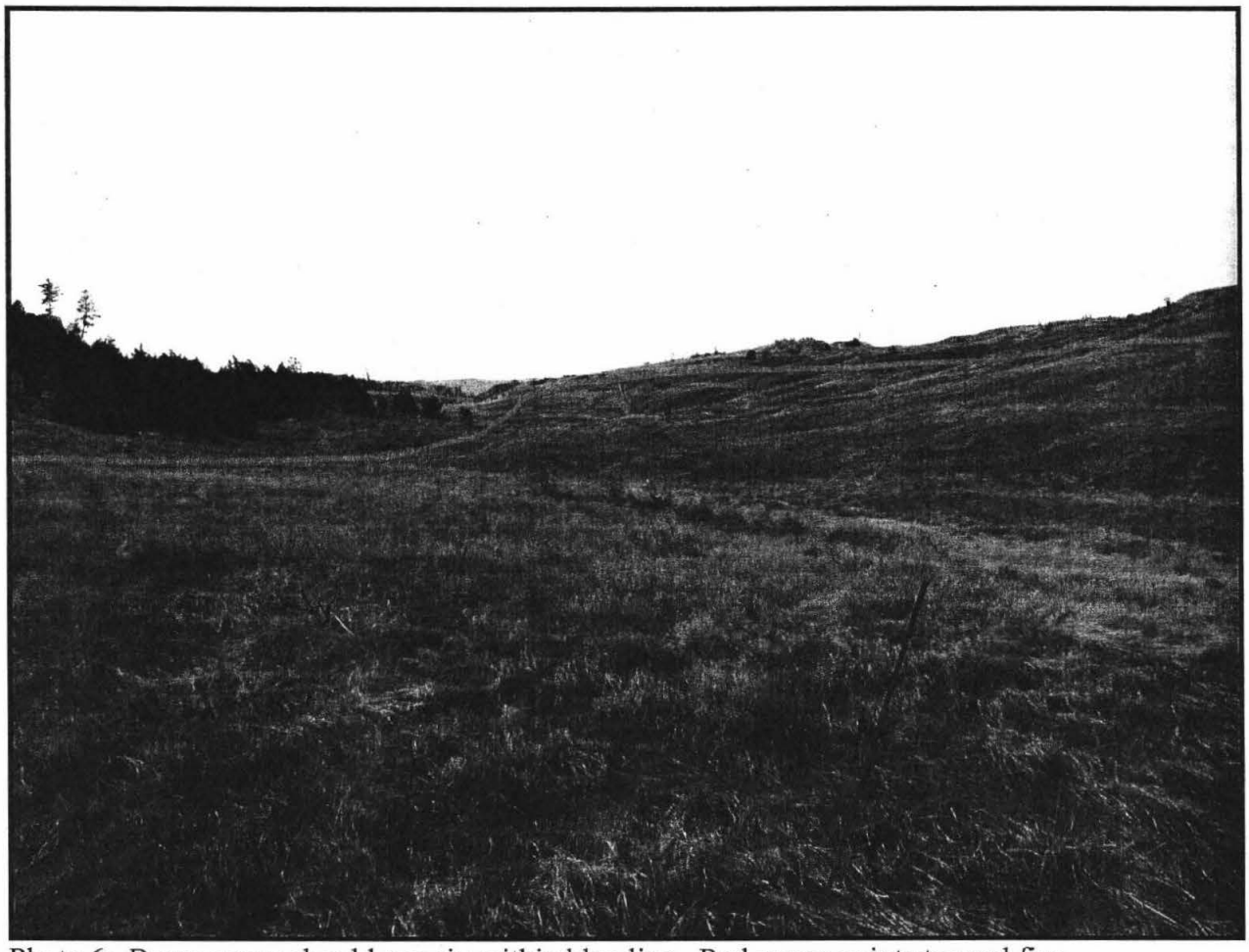

Photo 6: Borrow area should remain within blue line. Red arrow points toward fire subsidence hole.

Office of the Attorney General

Governor
Dave Freudenthal

Attorney General
Bruce A. Salzburg

Water and Natural Resources Division
123 State Capitol
Cheyenne, Wyoming 82002
307-777-6946 Telephone
307-777-3542 Fax

Chief Deputy Attorney General
Elizabeth C. Gagen

Division Deputy
Jay A. Jerde

March 17, 2008

Mr. John Corra
Director, Department of Environmental Quality
122 West 25th Street
Herschler Building, 4W
Cheyenne, WY 82002

Re: Eligibility Determination for AML Project 17J – Acme No. 1 Fire Subsidence (AMLIS PAD No. WY163178SGA)

Dear Mr. Corra:

A review by the Abandoned Mine Land Division (AML) of the Wyoming Department of Environmental Quality, of available records reveals that the coal mine involved with this reclamation project was abandoned prior to the reclamation requirements of the Wyoming Environmental Quality Act. This project will abate hazards resulting from active subsidence in the mine workings. The project area is located in T57N, R84W, N½ SE ¼ Section 19.

No person has continuing responsibility to reclaim the mine or correct mine-related safety hazards. Thus, problems associated with this Project qualify for reclamation under Wyoming's Abandoned Mine Land Program.

Pursuant to 30 C.F.R. §874.12, the following items concerning eligibility are identified with respect to the above-referenced Project:

a. The proposed reclamation on this Project is the result of abandonment of coal mines.
b. Mining activities ceased prior to August 3, 1977.
c. These sites were left in an unreclaimed condition.
d. No continuing reclamation responsibility exists.
e. The reclamation is within the Wyoming State Reclamation Plan, which has been approved by the Governor.

f. The reclamation is necessary for the protection of public health and safety.
g. Funding is available under Wyoming's AML Program.

Accordingly, it is my opinion that the referenced Project is eligible for funding under the Abandoned Mine Reclamation Fund as set forth in the Abandoned Mine Land Reclamation Act of 1990 and 30 C.F. R. §874.12.

Sincerely,

John Burbridge
Senior Assistant Attorney General

cc Rick Chancellor, AML Administrator, Grant File
Marcia Murdock, Project Manager/AML NEPA Coordinator

Office of the Attorney General

Governor
Dave Freudenthal

Attorney General
Bruce A. Salzburg

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Cheyenne, Wyoming 82002
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March 17, 2008

Mr. John Corra
Director, Department of Environmental Quality
122 West 25th Street
Herschler Building, 4W
Cheyenne, WY 82002

Re: Eligibility Determination for AML Project 17J – Acme No. 1 Fire Subsidence (AMLIS PAD No. WY163178SGA)

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Sincerely,

John Burbridge
Senior Assistant Attorney General

cc Rick Chancellor, AML Administrator, Grant File
Marcia Murdock, Project Manager/AML NEPA Coordinator

AML PROJECT 17J, STATEWIDE COAL ACME NO. 1 FIRE SUBSIDENCE RECLAMATION PROJECT

(AMLIS PAD No. WY033278SGA)

Sheridan County, Wyoming

DETAILED DOCUMENTATION

A. **Transmittal Letter to OSM**
B. **Eligibility Letter**
C. **Environmental Assessment**
   Includes:
   - **Natural Resource Evaluation Report**
   - **Public Notice**

TRANSMITTAL LETTER TO OSM

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

April 25, 2008

Mr. Jeffrey Fleischman, Director
Casper Field Office
Office of Surface Mining
100 East "B" Street, Room 2128
Casper, WY 82601-1918

Re: Detailed Documentation for Acme No. 1 Fire Subsidence
(AMLIS PAD No. WY033278SGA)

Dear Mr. Fleischman:

Enclosed are an Environmental Evaluation and Eligibility Determination Letter for the proposed action to fill an open subsidence feature associated with the Acme No. 1 Mine in Sheridan County, Wyoming. This hazard is located in the SE ¼ of Section 10, T57N, R84W. AML proposes to backfill this feature using local fill materials. Clearance surveys were performed on April 14, 2008, and no environmentally sensitive issues were identified. A legal notice was published, and no comments were received.

With this transmittal, we are requesting Authorization to Proceed on the proposed Acme No.1 Subsidence reclamation project.

Sincerely,

Bill Locke

For Richard Chancellor
AML Administrator

cc: Richard Chancellor, Grant File
Ernie Robb, AML Project Manager
Marcia Murdock, AML NEPA Coordinator
Chron

Lander Field Office • 510 Meadowview Drive • Lander, WY 82520 • http://deq.state.wy.us

ABANDONED MINES	AIR QUALITY	LAND QUALITY	SOLID & HAZARDOUS WASTE	WATER QUALITY
(307) 332-5085	(307) 332-6755	(307) 332-3047	(307) 332-6924	(307) 332-3144
FAX 332-7726	FAX 332-7726	FAX 332-7726	FAX 332-7726	FAX 332-3183

ELIGIBILITY LETTER

Office of the Attorney General

Governor
Dave Freudenthal

Attorney General
Bruce A. Salzburg

Water and Natural Resources Division
123 State Capitol
Cheyenne, Wyoming 82002
307-777-6946 Telephone
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March 17, 2008

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122 West 25th Street
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(AMLIS PAD No. WY163178SGA)

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No person has continuing responsibility to reclaim the mine or correct mine-related safety hazards. Thus, problems associated with this Project qualify for reclamation under Wyoming's Abandoned Mine Land Program.

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a. The proposed reclamation on this Project is the result of abandonment of coal mines.
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Accordingly, it is my opinion that the referenced Project is eligible for funding under the Abandoned Mine Reclamation Fund as set forth in the Abandoned Mine Land Reclamation Act of 1990 and 30 C.F. R. §874.12.

Sincerely,

John Burbridge
Senior Assistant Attorney General

cc Rick Chancellor, AML Administrator, Grant File
Marcia Murdock, Project Manager/AML NEPA Coordinator

ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL ASSESSMENT

AML PROJECT 17J – Acme No. 1 Fire Subsidence Reclamation Project

(WY033278SGA)

Sheridan County, Wyoming

(T57N, R84W, Section10)

Prepared by
Wyoming Abandoned Mine Land Program

In Cooperation with
U.S. Department of the Interior
Office of Surface Mining Reclamation and Enforcement
Casper Field Office
(April 2008)

ENVIRONMENTAL ASSESSMENT

AML Project 17J – Acme No. 1 Fire Subsidence Reclamation Project

A. DESCRIPTION OF THE PROPOSED ACTION

This project is intended to backfill and stabilize an active subsidence feature that is associated with the Acme No. 1 mine fire. The project area is located in SE ¼ of section 10, T57N, R84W, northwest of Sheridan, in Sheridan County, Wyoming. The hazardous subsidence is approximately eight feet in diameter and about 30 feet deep. The bottom of the subsidence opens into voids in at least two directions, indicating it may communicate with mine workings of the old Acme No. 1 Mine which undermines a large area in the vicinity of the fire subsidence. There is significant venting of fire gasses through this subsidence. The proposed project comprises over excavating, and then backfilling this fire-related subsidence. Material derived from soils immediately adjacent to the subsidence will be part of the backfill. A grouted riprap bulkhead plug may be installed for greater stability. Fire has been in these mine workings for decades, and the valley where the work will occur is pockmarked with numerous subsidence features that are from both simple mine void collapse and from fire-related collapse

B. NEED FOR THE PROPOSED ACTION

The proposed action is to backfill an existing 30-foot deep subsidence that is venting coal combustion gasses, and which has openings into two voids at its bottom. The area of collapse is very active, and has enlarged rapidly over the course of several months. The subsidence is a short distance from a two-track road that is used by mine property personnel who work for the nearby mine site, and is also used by gas field and utility personnel, who have all reported concerns about the fire. The hole is invisible from a short distance, during warm temperatures when steam cannot be seen, making it a considerable hazard for anyone unaware of its presence. Combustion gasses, while not measured, are noxious enough to cause coughing and hoarseness to those exposed. The subsidence is steep-sided, vertical, and deep, in addition to having the potential to hold sufficient CO to kill someone trapped in the subsidence. In addition to the physical danger to persons, livestock, and wildlife, there is concern the fire has potential to reach the surface and start a range fire. The fire gasses are hot enough to kill vegetation at the edge of the opening before dissipation cools the exhaust.

Figure 1 shows the general area of the work site.

C. ALTERNATIVES CONSIDERED

Only two alternatives were examined for this hazard. A quick, limited action is appropriate to address the immediate nature of the hazard. Further evaluation of the fire is planned.

Alternative 1 – Installing a compacted backfill plug into the subsidence is the preferred alternative. This proposed action will remove the falling and entrapment, and bad air hazard presented by the subsidence feature and fire gasses. Additionally the plug will help damp the

fire activity by denying oxygen. These actions will reduce the potential for burning material to reach the surface and start a range fire. Alternative 1 is issuance of authorization to proceed, by the Office of Surface Mining (OSM), for the reclamation activities included in the preferred alternative for AML Project 17J – Acme No. 1 Fire Subsidence Reclamation Project.

Alternative 2 – Alternative 2 is the no-action alternative. Under Alternative 2, funding for the proposed reclamation action would be denied, and the potential of public injury accidents would be unabated. Threats to public health and safety and private property at the site would continue.

D. AFFECTED ENVIRONMENT

The work area is of limited size, and the duration for this action will be very short.

1. General Setting

The work location is in rolling terrain. The present land use is rangeland. The native areas are sagebrush-grassland hills, or groups of pine and juniper, with sandstone and shale outcrops. Large portions of the area are dominated by prior mine land reclamation and recurring abatement of subsidence in the area. These areas are predominantly reclamation grassland species.

2. Affected Resources

Historic and Cultural Resources – The work location is in a heavily disturbed area. The entire surface in this area has been reworked to the extent that should any cultural materials still exist, they are no longer in context, and are unlikely to remain intact. This previously disturbed area is clearly visible at the site. The entire area is undermined with shallow coal mine workings. No cultural resources are present in the work area.

Hydrology – Project site is located in an upland area of the Tongue River valley. Aside from the river itself, the drainages in the area are predominantly ephemeral and intermittent. Moderate slopes, erosive soils, and sparse vegetative cover characterize the native drainage basins in this area.

Vegetation – The native vegetation within undisturbed areas of the project vicinity, typical of native sagebrush-grassland and ponderosa-juniper plant communities is scant. The area of the subsidence is dominated by revegetation grass species. Vegetation in the surrounding area includes alyssum, mustards, dockweed, needle-and-thread, Junegrass, yarrow, snakeweed, crested wheatgrass, western wheatgrass, intermediate wheatgrass, blue gramma, cheatgrass, prickly pear, Russian thistle, big sagebrush, fringed sage, rabbitbrush, and a variety of other species.

No plant species currently listed, or proposed/petitioned for listing, as threatened or endangered (T&E) were observed during surveys of the project area and none are expected.

Fish and Wildlife Resources – No wildlife species currently listed, or proposed/petitioned for listing, as threatened or endangered (T&E) were observed during surveys of the project area. Additionally, no sign (i.e., droppings, tracks) or critical habitats for those species were present. Potential habitat for any listed species at this location is unlikely.

Species observed during the site visit included pronghorn, mule deer, desert cottontail, wild turkey, American robin, red-tailed hawk, and western meadowlark. Raptor species frequent the area seasonally. No nests were observed in the immediate area.

Soils – The soils in the areas are intermingled units of Shingle-Theedle-Kishona, Shingle-Wibaux, Shingle-Wibaux Complex. These are a combination of clay loams and sandy loams which are described as best used for rangeland. No prime or unique soils are present in the project areas.

Recreational Resource Values – The project vicinity is predominantly private lands, however, there is considerable traffic through the area, and there are some parcels of public lands in the vicinity. Recreational uses include ATV use and hunting.

Air Quality – Local air quality is typical of a rural rangeland setting.

Noise – The noise level in the area is typical of rural rangeland

Topography – Natural terrain in the vicinity of the project varies from nearly level to steep hills. The elevation at the site is approximately 3,740 feet.

Socioeconomic – The project is situated in rural rangeland with little local economic influence.

Special Areas – No special areas are located near the proposed reclamation site.

E. ENVIRONMENTAL IMPACTS OF THE ALTERNATIVES

1. Resource Values

Historic and Cultural Resources –The area where the proposed action will occur has been previously disturbed and revegetated on multiple occasions. No cultural resources were identified. No impacts to cultural resources are anticipated from either the proposed action or the no-action alternative.

Hydrology – Drainage patterns in this semiarid work area will be maintained as required during and after construction of this project. Surface waters will be controlled through standard construction stormwater control methods as necessary. Construction impacts from the proposed action are expected to be short-term and negligible. No impacts are anticipated from the no-action alternative.

Vegetation – No vegetation species currently listed, or proposed/petitioned for listing, as threatened or endangered will be affected by this action. Where vegetation is disturbed, reclamation at the end of the project will restore native species. The vegetation in the project area will be minimally impacted. Impacts from activities associated with the proposed action are expected to be short-term and negligible. No impacts are anticipated from the no-action alternative.

Wetlands – No wetland impacts from either alternative are expected.

Fish and Wildlife Resources – No wildlife species currently listed, or proposed/petitioned for listing, as threatened or endangered will be affected by this action. More common wildlife species are expected to avoid the construction area, but displacement will be short-term. No impact to water resources is anticipated from this project. Impacts to wildlife from the proposed action are expected to be negligible. No impacts are anticipated from the no-action alternative.

Soils – No prime or unique farmland values exist in the project area, therefore, these will not be affected. Standard construction erosion controls will be used to conserve soils as necessary. No impacts are anticipated from either alternative.

Recreational Resource Values – Recreational resources in the project area are limited. Impacts to recreational values from either alternative are expected to be negligible.

Air Quality – Impacts to local air quality from the proposed action are expected to be negligible. Fugitive dust will be controlled by standard methods, and construction will be of short duration. No impacts are anticipated from the no-action alternative.

Noise – Impacts to noise levels from the proposed action are expected to be temporary and will not cause long-term effects. No impacts are anticipated from the no-action alternative.

Socioeconomic – No socioeconomic impacts are anticipated from either alternative.

2. Unavoidable Adverse Impacts

No unavoidable adverse impacts are anticipated from either alternative.

3. Cumulative Impacts

Cumulative impacts from the proposed project are expected to be negligible. Surface disturbance will be revegetated and restored to a more beneficial end use. Impacts from the no-action alternative include continued health and safety risks to the public due to abandoned mine hazards and an active mine fire. The risk of public accident and injury will remain unabated if the no-action alternative is selected.

F. PUBLIC PARTICIPATION

A legal notice was posted in the Casper Star-Tribune; March 23, 2008 and March 26, 2008. to notify the public that AML will undertake a reclamation project in this area, and to provide an opportunity for public comment on the projects. No comment was received. A copy of the notice is provided in Appendix A.

G. SUMMARY

The backfilling of the subsidence associated with the mine fire, and apparently leading to mine voids, will reduce public health and safety risks in an easily accessible area. Additionally, plugging the subsidence will reduce oxygen flow to the fire, dampening its activity. Removing a path for the fire to communicate to the surface will reduce the risk that the fire will ignite a range fire. Range fires that are attributed to coal fires in this area are common, and the most recent occurred only a few years ago. Approval of the proposed action is recommended.

H. PERSONS, ORGANIZATIONS, AND AGENCIES CONTACTED

The Wyoming Department of Environmental Quality, Abandoned Mine Land Division (AML) prepared this Environmental Assessment. Agency personnel and other professionals involved with preparation of any part of this analysis are listed below as well as personnel contacted in other state and federal agencies during the course of preparing this EA.

Wyoming Department of Environmental Quality		
Richard Chancellor	AML Administrator	Cheyenne, WY 82002
Ernie Robb	AML Project Manager	Casper, WY 82604
Marcia Murdock	AML NEPA Compliance Coordinator	Lander, WY 82520

Assessment and Analysis		
Staff	U.S. Fish and Wildlife Service, Ecological Services, Threatened and Endangered Species	Cheyenne, WY 82001
Staff	Statewide Habitat Protection Wyoming Game & Fish Department	Cheyenne, WY 82001
Wyoming Natural Diversity Database	University of Wyoming	Laramie, WY 82072
Marcia Murdock	Natural Resource Evaluation, AML	Lander, WY 82520
Tom Larson	Cultural Consultant, LTA, Inc.	Laramie, WY 82072
Chris Walla	PHC Reclamation, Inc.	Cheyenne, WY 82009
Greg Passini	Big Horn Coal Company	Decker, MT 59025

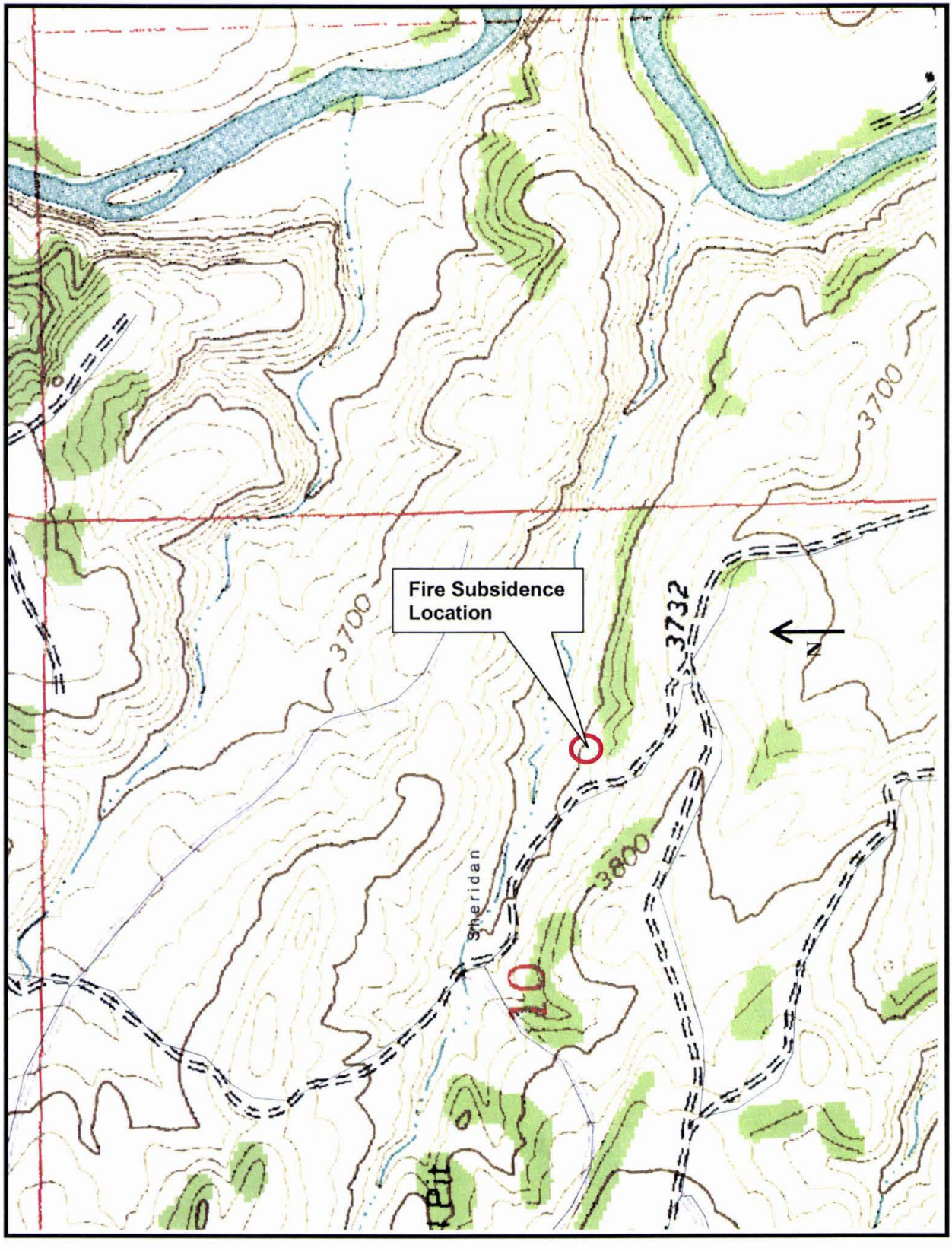

Figure 1. General area of fire subsidence, Acme, Wyoming USGS Quadrangle.

Photo 1: Acme No. 1 coal fire subsidence vent hole. Arrows indicate approximate edges of opening.

Photo 2: Open subsidence hole. Approximate depth 25-30 feet, diameter approximately 8-10 feet.

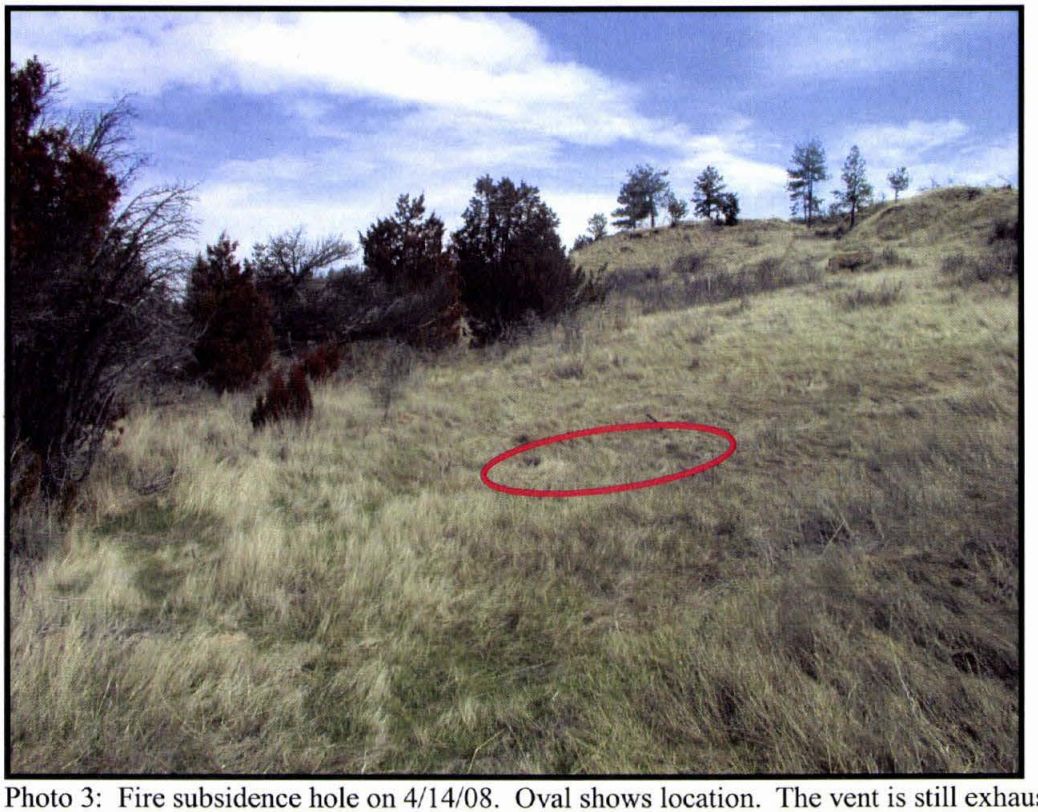

Photo 3: Fire subsidence hole on 4/14/08. Oval shows location. The vent is still exhausting hot fumes, but no smoke is visible in warm weather.

Photo 4: Looking into bottom of fire subsidence vent hole. Note smoke residue/coal tar deposit on wall where smoke chimnies up the side. Note opening in bottom leading to voids.

Photo 5: Blue line indicates division between native and previously disturbed area. Red oval denotes subsidence location.

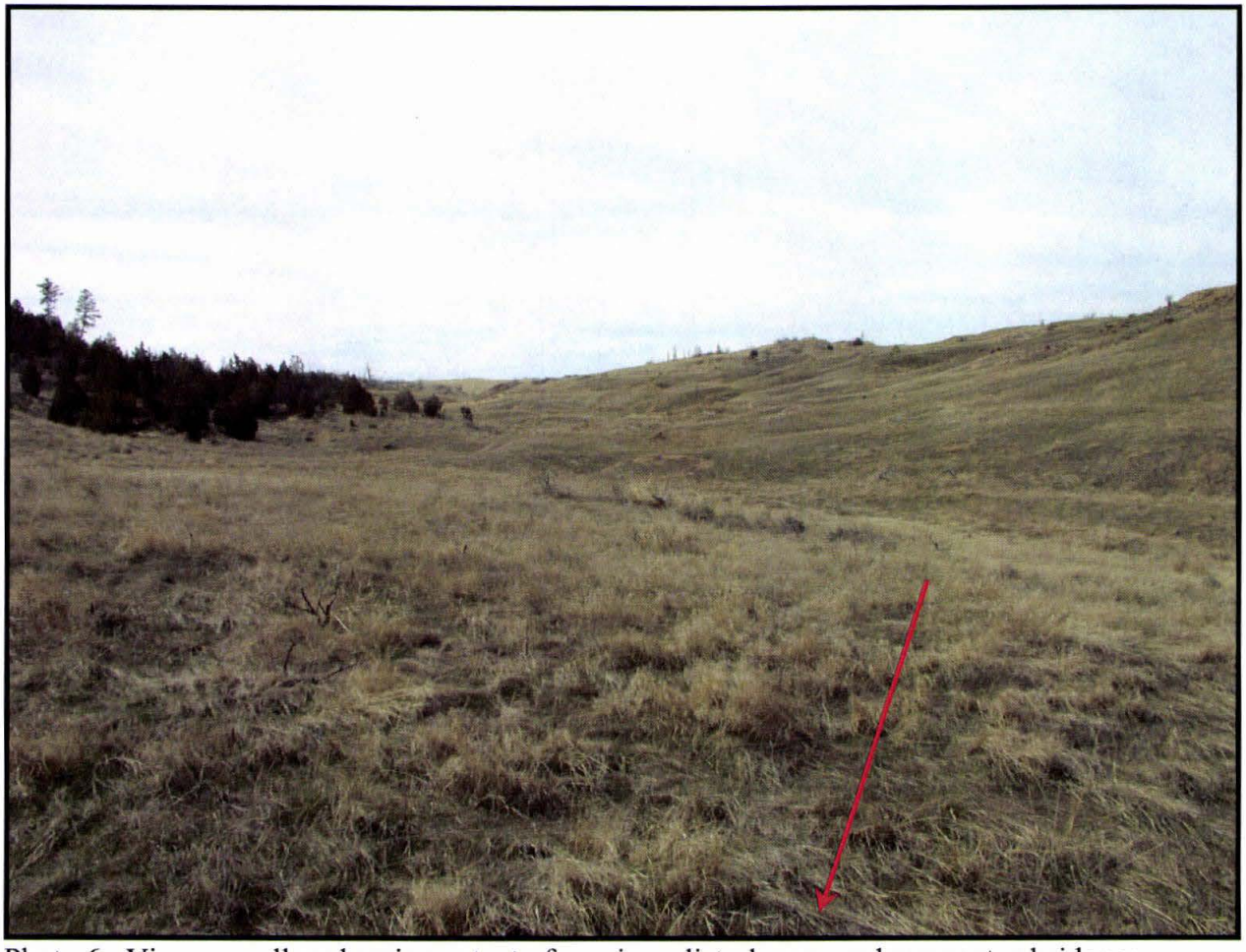

Photo 6: View up-valley showing extent of previous disturbance, and remnant subsidence features. Red arrow points toward fire subsidence hole.

APPENDIX A

NATURAL RESOURCE EVALUATION REPORT

AML Project 17J – Storm King Mine Subsidence Reclamation Project
Threatened and Endangered Species Survey and Natural Resource Evaluation

General Area Description – The Storm King project area is located northwest of Sheridan in Sheridan County, Wyoming. The work area is a mixture of previously reclaimed land, native mixed sagebrush-grassland, and strips of juniper and ponderosa pine trees on ridges. The soil is sandy, with outcrops of sandstone, shale, and scoria. The area is rural rangeland with low density settlement typical of a rural residential area.

A survey of the work area was conducted on April 14, 2008 by Marcia Murdock, AML Ecologist.

Vegetation – Vegetation included large areas of reclamation plantings as well as native vegetation assemblages. Upland shrublands took the form of sagebrush steppe dominated by big sagebrush (*Artemesia tridentata*), and interspersed with rabbitbrush (*Chrysothamnus nauseosus*). Along the sandstone outcrops on the ridges are ponderosa pine (*Pinus ponderosa*) and juniper (*Juniperus scopulorum*), with some currant (*Ribes sp.*), rabbitbrush, and other shrubs.

Grasses observed included weedy, non-native, and native species such as cheatgrass (*Bromus tectorum*), Junegrass (*Koeleria macrantha*), western wheatgrass (*Agropyron smithii*), crested wheatgrass (*Agropyron cristatum*), intermediate wheatgrass (*Agropyron intermedium*), blue gramma (*Bouteloua gracilis*), and needle-and-thread (*Stipa comata*).

Only early season forbs were observed due to the season. Succulents were represented by yucca (*Yucca glauca*) and prickly pear (*Opuntia polyacantha*).

More generally, vegetation in the surrounding area includes skunkbush sumac (*Rhus aromatica*), chokecherry (*Prunus virginiana*), grasses including cheatgrass (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), Junegrass (*Koeleria macrantha*), western wheatgrass (*Agropyron smithii*), orchard grass (*Dactylis glomerata*), smooth brome (Bromus inermis), Canada bluegrass (*Poa compressa*), crested wheatgrass (*Agropyron cristatum*), intermediate wheatgrass (*Agropyron intermedium*), blue gramma (*Bouteloua gracilis*), and needle-and-thread (*Stipa comata*). Forbs in the area included bindweed (*Convolvulus arvense*), white sweetclover (*Melilotus alba*), black henbane (*Hyoscyamus niger*), wavy-leaf thistle (*Cirsium undulatus*), halogeton (*Halogeton glomeratus*), ragweed (*Ambrosia sp.*), milkweed (*Asclepias speciosa*), beeplant, false indigo, common mullien (*Verbascum thapsus*), verbena (*Verbena sp.*), blazingstar (*Mentzelia decapetala*), sowthistle (*Sonchus sp.*), alyssum (*Alyssum minus*), Jim Hill mustard (*Sisyimbrium altissimum*), dockweed (*Rumex sp.*), yarrow (*Achillea millefolium*), snakeweed (*Gutierrezia sarothrae*), curlycup gumweed (*Grindelia squarrosa*), penstemon (*Penstemon sp.*), aster (*Aster sp.*), Russian thistle (*Salsola tragus*), and fringed sage (*Artemesia frigida*).

Wildlife – Wildlife species observed in the area were pronghorn (*Antilocapra americana*), mule deer (*Odocoileus hemionus*), and desert cottontail rabbit (*Sylvilagus audubonii*). Other mammalian species expected in the area include red fox (*Vulpes vulpes*), skunk (*Mephitis mephitis*) and badger (*Taxidea taxus*), and a variety of small mammals.

Bird species observed included red-tailed hawk (*Buteo jamaicensis*), wild turkey (*Meleagris gallopavo*) western meadowlark (Sturnella neglecta), and American robin (*Turdus migratorius*). Other shrubland and grassland birds are expected to breed in the area. No raptor nests were observed in the immediate vicinity.

Wetlands – There are no wetlands.

Recommendations – The project is recommended for clearance. No time restrictions will be required for nesting raptors.

PUBLIC NOTCE

LEGAL NOTICE

The Wyoming Department of Environmental Quality, Abandoned Mine Land Division, is planning to remediate hazards from open shafts and adits, pits, spoils, and other mining-related dangerous features in Sheridan County, Wyoming. Remediation and reclamation will include closures of abandoned mine openings and other mine related hazards. The AML program hereby provides public notice of its intent to enter and perform work in T57N, R84W, Sections 20 & 21; T57N, R84W, Section 22; and T57N, R84W, Section 10 in Sheridan County, Wyoming.

The abandoned underground and surface mine workings are from past coal, metal, and mineral mining practices and constitute hazards to the safety and general welfare of the public. This project will be conducted under the Wyoming Abandoned Mines Program authorized by W.S. §§ 35-11-1201 through 1207 and associated regulations.

Comments on this project are hereby solicited from the public. Anyone desiring a public hearing on this matter should contact, in writing, the individual below giving reasons for their request. Further information may be obtained from:

Marcia Murdock, NEPA Compliance Coordinator
Wyoming Department of Environmental Quality
Abandoned Mine Land Division
510 Meadowview Drive
Lander, Wyoming 82520
(307) 335-6946

Written comments and requests must be received by April 26, 2008.
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