

ENVIRONMENTAL ANALYSIS
WALDIE-RASMUSSEN SUBSIDENCE
02/25/2012

SECTION 1.0: PURPOSE AND NEED FOR ACTION:

AGENCY NAME:

Montana Department of Environmental Quality
Abandoned Mine Lands Bureau

LOCATIONS:

- NE ¼ of Section 1 Township 4N, Range 45E

TYPE AND PURPOSE OF ACTION:

The Montana Department of Environmental Quality (DEQ), Mine Waste Cleanup Bureau, has prepared this Environmental Assessment in compliance with the National Environmental Policy Act (NEPA) and relevant federal and state laws and regulations. This Environmental Assessment is developed by DEQ to facilitate action under NEPA by the Office of Surface Mining Reclamation and Enforcement.

DEQ has elected to investigate and evaluate an abandoned coal mine subsidence on the Waldie-Rasmussen Properties' land in Custer County, Montana. The purpose of this project is to address the coal mine subsidence.

Specific actions, which will take place as part of this reclamation project to control the most imminent threat from the coal mine subsidence, include:

- a. Excavating and stockpiling surface soil material within the subsidence collapse
- b. Backfill and compact material to grade (material for backfill secured from a nearby borrow area)
- c. Completed backfilled subsidence hole to be covered with stockpiled soil
- d. Revegetation of surface disturbance

To accomplish the reclamation project described above, the Office of Surface Mining and Enforcement Field Office Director must authorize the use of the Montana DEQ Abandoned Mine Lands Program funding.

The coal subsidence has a high risk of damage and injury to vehicles and livestock. The reclamation plan would be centered on excavating, backfilling, grading, and contouring any disturbance area, and revegetating the disturbed area with native grasses.

SECTION 1.1 PROPOSED ACTION:

This project will be completed under the direction of the Abandoned Mine Lands Program administered by the Remediation Division of the Montana Department of Environmental Quality to perform coal subsidence mitigation work and repair surface damage at the site located in Custer County.

Coal subsidence mitigation work will consist of recovering surface top soil collapsed into the subsidence and stockpile. Soil for backfill will be taken locally and compacted to grade at the subsidence collapse. This work will establish a soil borrow area on Waldie-Rasmussen Properties' land, 900 feet to the west of the subsidence hole. Approximately three acres of borrow area will be disturbed for backfilling, grading and contouring and will be reclaimed at the end of the project. Erosion control measures will be put in place. Water will be supplied and delivered to the sites for dust suppression and compacting backfill material.

SECTION 2: IMPACTS ON THE PHYSICAL ENVIRONMENT

WALDIE-RASMUSSEN PROPERTIES SUBSIDENCE

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</p> <p>Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?</p>	<p>Soils present at the site are grazing grass land. There are no special reclamation activities being considered for the subsidence and soil borrow area outside the normal scope of work.</p> <p>Stratigraphically, the highly dissected terrain, underlain by discontinuous sandstones, siltstones, shales, and relatively thin coal seams, are found in Custer County in eastern Montana. The upland agricultural and livestock grazing land is dissected by natural drainages, exposing sandstone cliffs, steep slopes, and badland land formations.</p>
<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION:</p> <p>Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>Very little surface water is available in the area. Surface water that flows in the vicinity of the subsidence is ephemeral and occurs primarily during the spring run-off. The project will not impact the groundwater or surface water quality in the vicinity of the Waldie-Rasmussen subsidence.</p>
<p>3. AIR QUALITY:</p> <p>Will pollution or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>This project is not located in any special air quality zones regulated by the State of Montana. The current ambient air quality of the area of the project work area is good. Dust abatement during project when securing borrow soil for the backfill and compacting of the subsidence will be kept below the levels typical of agricultural or ranching activities.</p>
<p>4. VEGETATION COVER, QUALITY AND QUANTITY:</p> <p>Will vegetative communities be significantly impacted? Are any rare plants or cover types present?</p>	<p>The native plant communities that would be impacted are common on the sedimentary plains of Montana. Consultation with the Montana Natural Heritage Program indicates no sensitive or plant species of concern occur within the project area. No noxious weed infestations were noted. Reclamation of the sites and seeding of native plant species would limit impacts to the vegetative communities.</p>
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE HABITATS:</p> <p>Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>A variety of big game, small mammals, game birds, and song birds typical of undeveloped land throughout Custer County potentially use this area. The existing land use is anticipated to continue; therefore, no direct or cumulative wildlife impacts are anticipated.</p>
<p>6. UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES:</p> <p>Are any federally listed threatened</p>	<p>The Department of Environmental Quality has consulted with the Montana Natural Heritage Program for information on threatened and endangered animal species that might reside in the vicinity of the Waldie-Rasmussen subsidence. The Montana Natural Heritage Program indicated that the Black-tailed Prairie Dog (<i>Cynomys ludovicianus</i>) and the Greater Sage-Grouse (<i>Centrocercus urophasianus</i>) are species of concern for the area. The project work area does not</p>

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or endangered species or identified habitat present? Any wetlands? Species of special concern?	support suitable habitat for either the Black-tailed Prairie Dog or the Greater Sage-Grouse. Consultation with the Montana Natural Heritage Program shows that the nearest Greater Sage-Grouse habitat is one mile from the project work area. The Montana Natural Heritage Program consultation shows that the nearest Black-tailed Prairie Dog habitat is over four miles from project work area. No other species of concern have been documented near the project area. No wetlands have been delineated in the project area.
7. HISTORICAL AND ARCHEOLOGICAL SITES: Are any historical, archeological or paleontological resources present?	A historical and archeological site survey has been conducted and no historical or archeological assets were identified within the proposed work area.
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	The project area is situated in a quiet rural area. Ranching activities associated with the movement of livestock are the only noises at the sites. Access to the project area is via Moon Creek Road, exit 126 on I-94. The project area is not located on or near any prominent topographic features.
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?	The project will require the use of minimal quantities of water in order to perform compaction of material and dust control. Sources of water will come from landowner supplied livestock watering tanks.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	There are no other activities nearby that will affect the projects.

SECTION 3: IMPACTS ON THE HUMAN POPULATION

WALDIE-RASMUSSEN PROPERTIES SUBSIDENCE

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. HUMAN HEALTH AND SAFETY:</p> <p>Will this project add to health and safety risks in the area?</p>	<p>The backfilling of the subsidence hole will eliminate threats to public health, live stock and general welfare.</p>
<p>2. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</p> <p>Will the project add to or alter these activities?</p>	<p>The project area has social and economic values as part of Montana ranch operations. The project area contributes little in the way of social or economic value outside of the ranching context.</p>
<p>3. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</p> <p>Will the project create or eliminate jobs? If so, estimated number.</p>	<p>The project will have minimal impact on the local economy. However, payment to the selected contractor conducting the work will be beneficial to the contractor.</p>
<p>4. LOCAL AND STATE TAX BASE AND TAX REVENUES:</p> <p>Will the project create or eliminate tax revenue?</p>	<p>No effect on tax base or revenues.</p>
<p>5. DEMAND FOR GOVERNMENT SERVICES:</p> <p>Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?</p>	<p>Any additional traffic added to existing roads will occur during initial mobilization and final demobilization of the project areas and will not require any additional government services.</p>
<p>6. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</p> <p>Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>Reclamation construction activities associated with the project area would comply with all federal, state, regional, and local land use plans, programs, and policies. The project area has negligible recreational resource value.</p>
<p>7. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:</p> <p>Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?</p>	<p>The project areas are located on private property. Access is via Moon Creek Road, exit 126 of I-94. The project area receives very little to no recreational use; thus, the project area has negligible recreational resource value and wilderness activities will not be adversely affected by the project.</p>

SECTION 3: IMPACTS ON THE HUMAN POPULATION

WALDIE-RASMUSSEN PROPERTIES SUBSIDENCE

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>8. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</p> <p>Will the project add to the population and require additional housing?</p>	<p>The project will not require long term housing needs. However, due to the remoteness of the project areas, temporary lodging such as hotels may be needed throughout the project duration.</p>
<p>9. SOCIAL STRUCTURES AND MORES:</p> <p>Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>The project will not disrupt native or traditional lifestyles or communities.</p>
<p>10. CULTURAL UNIQUENESS AND DIVERSITY:</p> <p>Will the action cause a shift in some unique quality of the area?</p>	<p>The projects will not cause any shifts in unique qualities of the areas.</p>
<p>11. PRIVATE PROPERTY IMPACTS:</p> <p>Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants, of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.</p>	<p>At the completion of the projects, work areas that required revegetation will be fenced off in order to provide opportunities for successful revegetation. This action has been approved by all landowners involved with the projects. No other regulatory action will take place.</p>

A. PERSONS, ORGANIZATIONS AND AGENCIES CONTACTED

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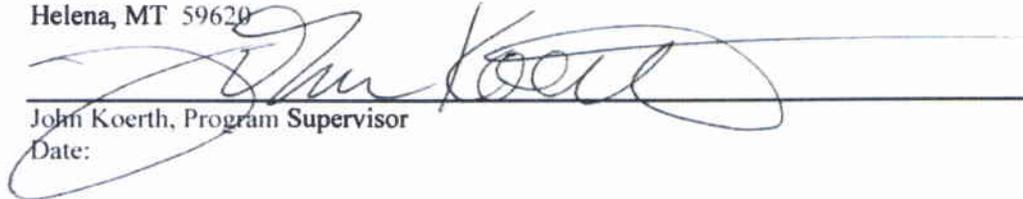
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