ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR NATURAL RESOURCES
Division of Abandoned Mine Lands
2521 Lawrenceburg Road
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Secretary

May 3, 2011

Mr. Joseph L. Blackburn, Director
U. S. Department of the Interior
Office of Surface Mining
Lexington Field Office
2675 Regency Road
Lexington, KY 40503

RE: Treadway Ridge AML Water Supply Project (Lee and Owsley Counties)

Dear Mr. Blackburn:

We are requesting "Authorization to Proceed" with site-specific construction activities on the referenced project, as described in the enclosed package. Enclosed are a project description, location map, and problem area description (PAD) supplemental form, including a problem description and an engineer cost estimate, for the above-referenced project. The PAD for problem area # KY 4128 SGA has been prepared, approved by OSM, and will be entered into the e-AMLIS by the division when it is activated. An eligibility determination that finds the proposed project eligible for AML funding has been reviewed and signed by the Office of Legal Services. Support documents for the PAD and the eligibility determination will be made available to you upon request. Also, enclosed is an Environmental Assessment, with two agency consultation response documents and two DAML consultation documents attached. The placement of the waterlines within the roadside ditch is in an area that has been previously disturbed during road construction, and is exempt according to the Programmatic Agreement between AML and KHC.

AML Program Development staff conducted a search of the Kentucky State Nature Preserves Commission (KSNPC) BIOTICS database. This search revealed seven species of state concern, monitored by the KSNPC, are known to occur within one mile of the project site, and that two species listed as threatened or endangered, under the United States Endangered Species Act (USESA), are known to exist within ten miles of the project site. The species noted in the search are the:

KSNPC species found within 1 mile from the project sites:

- Kentucky Arrow Darter (*Etheostoma sagitta spilotum*)
- Little Spectaclecase (*Villosa lienosa*)
- Kentucky Lady's-Slipper (*Cypripedium kentuckiense)*
- Eastern Hellbender (*Cryptobranchus alleganiensis alleganiensis)*
- Indiana Bat (*Myotis sodalist*)

USESA listed species found within 10 miles from the project site:

- Indiana Bat (*Myotis sodalist*)
  Virginia Big-eared Bat (*Corynorhinus townsendii)*

According to the memorandum by Keith B. Coleman, dated April 25, 2011, none of these species should be negatively impacted by the proposed reclamation work. Although, the entire state of Kentucky has been declared to be potential Indiana Bat habitat, and since no disturbances to potential roost sites (including trees and/or cave-like structures) are planned as part of project-related construction, no negative impacts should result upon the Indiana Bat, regardless of the timing of construction.

A letter was sent to the DAML floodplain and hydrology staff specialist, soliciting their comments regarding this project. The letter requested comments regarding water quality certification (WQC) and floodplain permit issues. The response stated that no floodplain permit, WQC, or COE permits will be required. The engineers and/or contractors retained for this project are required to obtain all necessary permits. This Division will not fund this project until all required permits and authorizations are received. The other consulted agencies had no objections or concerns regarding this project.

Overall, the project is a Priority 2. The project is estimated to cost $100,000.00, exclusive of "in-house" personnel costs associated with project administration, design, support, surveying, and bid activities. Completion of the project will not require the acquisition of any land and will not significantly affect the potential recovery of residual coal reserves at the sites. The principal benefits to be derived from the successful completion of the project are the elimination of abandoned mine land problems as described in the attached project description.

Construction contract bidding, awarding, and subsequent construction completion will occur as soon as possible. Should you have any questions regarding this information, please contact us at 502/564-2141.

Sincerely,

Steve Hohmann

Steve Hohmann, Director
Division of Abandoned Mine Lands

SH:BO:RH:vr

Enclosures

Treadway Ridge
AML Water Supply Project

Lee and Owsley Counties – Sturgeon Quad.

Project Description

Groundwater in the Treadway Ridge Road area of Lee and Owsley Counties has been damaged by pre-law coal mining operations. Therefore, this area is eligible for an AML-funded waterline extension project to abate the problems. The project ties into an existing waterline located on the Sturgeon 7.5' United States Geological Survey (USGS) quadrangle at Latitude 37 ° 29' 37.9" and Longitude 83° 47' 19.4" (see the attached map). The entire project work area slated for any excavation has been previously disturbed by any or all of the following: coal mining operations, including mine drainage, timber operations, gas/oil well development, residential development, road construction, and/or high velocity water flows associated with heavy rain events. These disturbances consist of significant upheaval, mixing, and removal of earthen material from deep excavation, grading, sub-surface drilling, fill material placement, and erosion. There should be no undisturbed earthen material to a depth of several feet at the areas slated for significant project-related construction activities.

A total of approximately 5,500 linear feet of new water supply pipe is proposed for the project. The pipe diameter is 3". Approximately 4 new water meters will be installed. Waterlines will be installed in previously disturbed ditches and shoulders of public road right-of-ways or at cleared private roads, and in mowed residential yards.

Installation and maintenance of hay-bale silt checks and erosion control netting will minimize sedimentation at any critical areas. No creek crossings are required. All construction disturbances will be kept to a minimum and vegetated as soon as practical. Consulting engineering companies retained for this project submitted design plans for this water supply project to the Kentucky Division of Water (DOW) for their review and approval. This approval process includes the identification and notice, to the party submitting the design plans, of all necessary permits, including any floodplain permits and 401 WQC permits required. The engineers and/or contractors retained for this project are required to obtain all necessary permits. This Division will not fund this project until all required permits and authorizations are issued.

Hwy 476 AML Waterline Supply Project

Breathitt County

Environmental Assessment

A. Description of the Proposed Action:

The Kentucky Division of Abandoned Mine Lands (AML) proposes to provide 4 residences with a public water supply, by constructing approximately 5,500' of new water service lines that stretch from Lee County into Owsley County in the Sturgeon, Kentucky 7.5' United States Geological Survey (USGS) quadrangle. The waterline will connect to an existing line at 37° 29' 37.9" north latitude, 83° 47' 19.4" west longitude. The federal Office of Surface Mining (OSM) has requested that all water supply project proposals include an environmental assessment.

B. Need for the Proposed Action:

Poor quality well water threatens the health of anyone who drinks it. The problems proposed to be mitigated by this project are rated as Priority 2. The problems are further described in the priority documentation form for national AML inventory problem area KY 4128-SGA.

C. Alternatives Considered:

1. Extend existing public waterlines, to replace groundwater wells contaminated or destroyed by previous mining.
2. Drill wells and/or provide and maintain cisterns.
3. Take no action, allowing the human health hazards to continue.

C.1. Preferred Alternative:

An AML-funded ground water study for several areas in Lee and Owsley Counties (see the attached map) has shown that groundwater in portions of the area are degraded primarily due to pre-law coal mine operations. As a result, portions of the study areas are eligible for AML expenditures to abate the problems.

The project consists of providing full municipal water service to approximately 4 residences. Approximately 5,500' of water-supply pipe will be installed, with a diameter of 3". Pipes will be installed in previously disturbed ditches and shoulders of public road rights-of-way. Meters and service lines will primarily be located in residential yards. All of the project areas have no forest areas to be cleared.

C.2. Drilled Wells:

Should the Commonwealth drill wells and/or provide and maintain cisterns, the cost would be prohibitive, and encountering a good water source by drilling in an area already disturbed by mining is unlikely.

C.3. No Action:

Should the Commonwealth take no action, people drinking well water contaminated by pre-law mining, or drinking contaminated water from other sources after their well was destroyed by pre-law mining, could suffer from health problems.

D. Affected Environment:

D.1. General Setting:

The predominant land uses in the vicinity are residential, commercial (small businesses), agricultural, and forestland. Second growth, unmanaged upland hardwood forest and coal mines are on the steep slopes.

D.2. Affected Resources:

Resources that could, but will not, be negatively affected by the proposed project include:

- Historic/Cultural
- Fish and Wildlife/Plants
- Soils
- Agricultural
- Recreation
- Small Business Use
- Air Quality
- Noise
- Topography
- Other (Socioeconomic or Political)

The following agencies and databases were consulted to identify resources that may occur in the project vicinity:

- Kentucky Department of Fish and Wildlife Resources (KDFWR)
- Kentucky Division of Mine Permits (KDMP) floodplain database
- Kentucky Heritage Council (KHC) – exempt under Programmatic Agreement
- Kentucky Office of State Archaeology (OSA)
- Kentucky State Nature Preserves Commission (KSNPC) BIOTICS database

Replies from these agencies and a memo addressing the KSNPC database search are attached.

E. Environmental Impacts of the Proposed Alternative:

The following resources will not be significantly impacted by reclamation activities using the preferred alternative:

- Historic/Cultural Resources
- Fish and Wildlife/Plants
- Soils
- Agricultural
- Recreation
- Small Business Use
- Air Quality
- Noise
- Topography
- Other (Socioeconomic or Political)

The proposed project will not adversely impact low income or minority persons. Development of an area for residential and business uses usually increases after a public water supply is available, especially for locations with existing poor quality and quantity well water, which may result in more jobs available. Due to the proposed disturbances to install water lines in drainage ditches and right-of-way property along roads, and in residential yards, hydrology will be discussed. Due to the possible occurrence of seven species monitored by the Kentucky State Nature Preserves Commission (KSNPC), fish and wildlife/plants will be discussed. Because the project was not sent to KHC for comment, archaeology will be discussed.

E.1.a. Hydrology:

A formulated erosion, sediment, and drainage control plan will be implemented during construction, to minimize sedimentation of receiving streams. This plan includes hay-bale silt checks and silt fences maintained throughout the life of the project, and prompt vegetation of disturbed areas. The completed project will provide non-eroding drainage controls and a vigorous, complete cover of perennial vegetation, which will result in the same or less stream sedimentation after project construction. The disturbance of sediments and resulting turbidity in streams will be limited to those found during heavy storm events. Therefore, the hydrology of the project areas and downstream areas should not suffer long-term negative impacts due to construction of this project.

As indicated in the attached email dated April 13, 2011, no floodplain permit, WQC or COE permits will be required. The engineers and/or contractors retained

for this project are required to obtain all necessary permits. This Division will not fund this project until all required permits and authorizations are received.

E.1.b. Fish and Wildlife/Plants:

AML personnel searched the KSNPC BIOTICS database in order to determine if any species that are monitored by the KSNPC are known to occur within the near vicinity (a 1-mile radius) of the project site, and if any federally-listed threatened and endangered species are known to occur within the general area (a 10-mile radius) of the project site. This search revealed seven species of state concern monitored by the KSNPC are known to occur within one mile of the project site and one species listed as Threatened and Endangered under the United States Endangered Species Act (USESA) are known to exist within ten miles of the project site. The species noted in the search are:

KSNPC species found within 1 mile from the project sites:

- Kentucky Arrow Darter (*Etheostoma sagitta spilotum*)
- Little Spectaclecase (*Villosa lienosa*)
- Kentucky Lady's-Slipper (*Cypripedium kentuckiense)*
- Eastern Hellbender (*Cryptobranchus alleganiensis alleganiensis)*
- Indiana Bat (*Myotis sodalist*)

USESA listed species found within 10 miles from the project site:

- Indiana Bat (*Myotis sodalist*)
- Virginia Big-eared Bat (*Corynorhinus townsendii)*

The attached memorandum by Keith B. Coleman, dated April 25, 2011, indicates that none of these species should be negatively impacted. Since tree clearing is not anticipated within the water supply project area, none of the listed bat species should be negatively impacted regardless of the timing of the construction. See the attached KSNPC database search summary for more information.

Treadway Ridge - KSNPC response 4.25.11.pdf

E.1.c. Archaeology:

The project has been determined to be exempt under the Programmatic Agreement between KHC and AML, as the road-side ditch has been previously disturbed during road construction.

E.1.d. Cumulative Environmental Impact:

No significant environmental impacts should occur as a result of construction of the preferred alternative in the watersheds where the proposed construction sites are located. No previous AML projects have been found to significantly negatively impact the environment- the projects are designed to reclaim human safety problems where the land has been disturbed by abandoned coal mining, with insignificant negative environmental impacts during and after these reclamation projects. Therefore, as neither previous projects, nor the proposed alternative, will have any significant impact upon the environment within these watersheds, there will be no cumulative negative impact as a result of the construction of this proposed AML project.

E.2. Drilling Wells Alternative:

E.2.a. Hydrology:

Drilling wells and/or providing and maintaining cisterns is unlikely to significantly change existing hydrologic conditions.

E.2.b. Fish and Wildlife/Plants:

Drilling wells and/or providing and maintaining cisterns is unlikely to significantly change the habitats for existing plant and animal species.

E.2.c. Archaeology:

Drilling wells and/or providing and maintaining cisterns is unlikely to disturb archaeological resources.

E.3. No Action Option:

E.3.a. Hydrology:

If the Commonwealth takes no action, existing hydrologic conditions would remain unchanged.

E.3.b. Fish and Wildlife/Plants:

If the Commonwealth takes no action, existing plant and animal species would remain unchanged.

E.3.c. Archaeology:

If the Commonwealth takes no action, any archaeological resources would remain undisturbed.

F. Summary:

The Commonwealth considered three options:

1. Extend public waterlines to replace wells damaged by pre-law mining.
2. Drill wells and/or provide and maintain cisterns.
3. Take no action.

The first option was selected due to its overall advantages.

G. Consultations:

The following agencies and databases were consulted prior to preparation of this document:

- Kentucky Department of Fish and Wildlife Resources (KDFWR)
- Kentucky Division of Mine Permits (KDMP) floodplain database
- Kentucky Heritage Council (KHC) – exempt under the Programmatic Agreement
- Kentucky Office of State Archaeology (OSA)
- Kentucky State Nature Preserves Commission (KSNPC) BIOTICS database

H. Preparers/Reviewers:

Kentucky Division of Abandoned Mine Lands Personnel:

- Jeff Ruebens, Environmental Technologist III
- Keith Coleman, Environmental Technician III
- Ryan Howell, Environmental Control Supervisor
- Bill Overman, Program Development Branch Manager

Steve Hohmann 5/3/11

- Steve Hohmann, Director Date

UNIVERSITY OF KENTUCKY

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April 20, 2011

Mr. Steve Hohmann, Director
Energy and Environment Cabinet
Department for Natural Resources
Division of Abandoned Mine Lands
2521 Lawrenceburg Road
Frankfort, KY 40601

RE: Treadway Ridge AML Water Supply Project (Lee and Owsley County)

Dear Mr. Hohmann:

Concerning the above referenced project, I have reviewed the Office of State Archaeology files to determine if any prehistoric or historic sites are located in proximity to the proposed AML project. The following information is provided to assist in your decision to proceed with an Environmental Assessment or a Categorical Exclusion Determination for the project.

Our records indicate that no surveys or sites have been recorded in the project areas. However, the proposed lines pass through areas that have potential for archaeological sites. We do not have sufficient information to determine whether archaeological sites will be impacted by the project. It is my recommendation that you consult with the State Historic Preservation Office to determine whether an archaeological survey is required.

Sincerely,

(Christina Pappas for)
George M. Crothers, Ph.D.
Director

Howell, Ryan (EEC)

From: Hall, Samantha (EEC)
Sent: Wednesday, April 13, 2011 8:06 AM
To: Rickwa, Vanna (EEC)
Cc: Ruebens, Jeff (EEC); Howell, Ryan (EEC); Overman, Bill (EEC)
Subject: RE: Request for floodplain and WQC review for Treadway Ridge AML WSP

After reviewing the map and description for the Treadway Ridge AML WSP, I have determined that no WQC, COE or floodplain permits will be required.

From: Rickwa, Vanna (EEC)
Sent: Tuesday, April 12, 2011 3:54 PM
To: Hall, Samantha (EEC)
Cc: Ruebens, Jeff (EEC); Howell, Ryan (EEC)
Subject: Request for floodplain and WQC review for Treadway Ridge AML WSP

Attached are the project description and map for the Treadway Ridge AML Water Supply Project.

Please do a review for floodplain and WQC to determine if there would be any issues reference this project.

Please notify Bill Overman, Ryan Howell, Jeff Ruebens, and myself of your response.

Thanks,

Vanna Rickwa
Administrative Specialist III
Energy and Environment Cabinet
Department for Natural Resources
Division of Abandoned Mine Lands
2521 Lawrenceburg Road
Frankfort, Kentucky 40601
502/564-2141, Ext. 130

KENTUCKY DEPARTMENT OF FISH & WILDLIFE RESOURCES
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Steven L. Beshear
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Marcheta Sparrow
Secretary

Dr. Jonathan W. Gassett
Commissioner

18 April 2011

Steve Hohmann, Director
Division of Abandoned Mine Lands
2521 Lawrenceburg Road
Frankfort, KY 40601

RE: Treadway Ridge AML Water Supply Project (Lee and Owsley Counties)

Dear Mr. Hohmann:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) has received your request for information pertaining to the subject project. The Kentucky Fish and Wildlife Information System indicates that the federally-listed Indiana bat *(Myotis sodalis)* is known to occur within close proximity to the project site. Specifically, the project site falls within known maternity summer habitat of Indiana bat habitat. This species use trees (dead, dying, or alive) as summer roosting habitat, with larger trees containing sloughing bark being the most suitable. If tree removal is deemed necessary for this project, I recommend contacting the US Fish and Wildlife Service Kentucky Field Office (502-695-0468). Please be aware that our database system is a dynamic one that only represents our current knowledge of various species distributions.

Erosion control measures, as mentioned in the project description, will need to be installed prior to construction and should be inspected and repaired regularly as needed. I hope this information is helpful to you, and if you have questions or require additional information, please call me at (502) 564-7109 extension 4453.

Sincerely,

Dan Stoelb
Wildlife Biologist

Cc: Environmental Section File

Memorandum

To: Treadway Ridge

AML Water Supply Project

From: *Keith B. Coleman* Keith B Coleman 4-25-11

Environmental Technician, AML Program Development Branch

Through: *Bill Overman* Bill Overman 4/25/11

Manager, AML Program Development Branch

RE: Results of Kentucky State Nature Preserves Commission (KSNPC) BIOTICS Database Search

Date: April 25, 2011

On April 25, 2011, I conducted a search of the KSNPC database in order to determine if any species which are monitored by the KSNPC are known to occur within the near vicinity (1 mile radius) of the site to be disturbed by this project, and if any federally listed threatened or endangered species are known to occur within the general vicinity (10 mile radius) of the project site. This search revealed that 5 species of state concern, monitored by the KSNPC, are known to occur within one mile, and that 2 species listed as threatened or endangered, under the United States Endangered Species Act (USESA), are known to occur within ten miles of the project site.

This project (5,500 linear feet total) consists of the abatement of contaminated well water supplies through the installation of water lines which will supply coal field residents with treated water. The waterlines will be installed in previously disturbed ditches and shoulders of public road right-of-ways, or along cleared private roads and within residential yards. Previous disturbances consist of significant upheaval, mixing, and removal of earthen material from deep excavation, grading, sub-surface drilling, fill material placement, and erosion. There should be no undisturbed earthen material to a depth of several feet at the areas slated for significant project-related construction activities.

Installation and maintenance of hay-bale silt checks and erosion control netting will minimize sedimentation at any critical areas. No creek crossings are required. All construction disturbances will be kept to a minimum and vegetated as soon as practical. Consulting engineering companies retained for this project submitted design plans for this water supply project to the Kentucky Division of Water (DOW) for their review and approval. This approval process includes the identification and notice, to the party submitting the design plans, of all necessary permits, including any floodplain permits and 401 WQC permits required. The engineers and/or contractors retained for this project are required to obtain all necessary permits. This Division will not fund this project until all required permits and authorizations are issued. No disturbances to trees or cave-like structures have been described within project documentation. No clearing for pumps, booster stations, or water tanks has been described within project documentation.

The 5 KSNPC species found within 1 mile from the project site are:

Little Spectaclecase *(Villosa lienosa)*

Kentucky Arrow Darter *(Etheostoma sagitta spilotum)*

Kentucky Lady's-Slipper *(Cypripedium kentuckiense)*

Eastern Hellbender *(Cryptobranchus alleganiensis alleganiensis)*

Indiana Bat *(Myotis sodalis)*

The 2 USESA listed species within 10 miles from the project site are:

Virginia Big-eared Bat *(Corynorhinus townsendii)*

Indiana Bat *(Myotis sodalis)*

The **Little Spectaclecase** is a mussel which inhabits small streams to medium-sized rivers, usually within shallow sections with a substrate composed of sand, mud, or detritus. The **Kentucky Arrow Darter** is also an aquatic species which inhabits medium-sized, upland streams with clean bedrock, boulder, or coarse gravel substrates. The **Eastern Hellbender** is an amphibian, fully-aquatic salamander, which is confined to well-oxygenated, running waters of fairly large streams and rivers. Since this project will not require any stream crossings or work within stream channels, and since the AML sediment and erosion control plan will be implemented and monitored during construction, no negative impacts to aquatic species should result due to project related construction.

The **Kentucky Lady's Slipper** is an orchid which inhabits damp, low-lying areas near springs and/or within floodplains in acidic, sandy, well-drained soils. Since this project runs along a ridge top and is contained within disturbed areas such as residential yards and along roadside shoulders, it is very unlikely that any negative impacts should result upon this species due to project-related construction.

The **Virginia Big-eared Bat** is a cave-dwelling species which has very rarely been reported to have been found roosting within buildings during summer months. Foraging habitat is near tree and shrub foliage, and banded individuals have rarely been recovered more than 20 miles from the banding site. Nine records document this species within 10 miles from the project site. Nearly all of the records are of hibernacula sites. Since no disturbances to cave-like structures are anticipated within construction plans, and since no disturbances to foraging-type habitat are anticipated, no negative impacts should result upon this species due to project-related construction.

The US Fish and Wildlife Service (USFWS) has declared the whole of the state of Kentucky to be the habitat of the **Indiana Bat** (*Myotis sodalis* – USESA Endangered). This species day roosts and establishes maternity colonies in trees with exfoliating bark or splits in their trunks and larger limbs, and hibernates in caves and other similar underground cavities. The above search of the KSNPC BIOTICS database revealed 7 records of this species within 10 miles of the project site. 6 of the 7 records document hibernacula captures within 10 miles from the project site, and 1 record is a "summer mist-net record". Additionally, 27 records document the presence of the Indiana Bat within 10-20 miles from the project site. 25 of the 27 records within 10-20 miles from the project site are records of hibernacula captures. The project site does fall within USFWS buffered, known habitat areas.

Since no disturbances to potential roost sites, including trees and/or cave-like structures, are planned as part of project-related construction, no negative impacts should result upon the Indiana Bat, regardless of the timing of construction. Tree removal within the USFWS buffered known habitat areas will not be allowed, at any time, unless the trees which represent potential Indiana Bat habitat are unstable due to direct impacts associated with an AML problem area. A habitat assessment, performed by a qualified biologist, may be required in order to determine if trees represent potential bat habitat if tree removal should become necessary.