Authorization to Proceed (ATP)

Big Branch
Abandoned Mine Land (AML) Water Supply Project
based on Environmental Assessment (EA)
Perry County, Kentucky

The Office of Surface Mining Reclamation and Enforcement (OSM) has completed a review of the August 17, 2011, request for ATP with construction activity on the Big Branch Abandoned Mine Land (AML) Water Supply Project prepared by the Kentucky Department for Natural Resources, Division of Abandoned Mine Lands (DAML).

OSM found that the appropriate request documents were submitted and appear to support the need for the proposed construction activity. OSM confirmed that the required information for this project has been included in the AML Inventory System (e-AMLIS) for Problem Areas (PA) # KY-004137-SGA. OSM has approved the PA # KY-004137-SGA on August 22, 2011.

OSM reviewed the EA prepared by DAML documenting the National Environmental Policy Act (NEPA) environmental review of this project. OSM determined that the EA adequately discusses the environmental issues and impacts associated with the construction of the project. Based on the analysis in the EA, I have determined that reclamation of this abandoned mine site would not have significant effects on the quality of the human environment. Therefore, I conclude that no environmental impact statement is necessary. As a result, I have signed the Finding of No Significant Impact (FONSI) for the Big Branch AML Water Supply Project. Please give special attention to the following recommendation(s).

- With the exception of trees directly impacted by the AML problem, there is no purposeful removal of standing trees larger than 5 inches diameter at breast height or standing snags with loose bark that are 9 inch or greater diameter at breast height and at least 10 feet in height, during the period of April 1 to November 15, and provided the activity does not occur in "Known Indiana Bat Habitat".

- A floodplain permit is required, no other permit or certifications will be needed because the directional boring method is being used for the waterline installation.

The KDFWR also recommends that work within a stream only take place during low-flow periods to reduce the impact of erosion and sedimentation.

Accordingly, pursuant to Section 5-11-20D.3 of the Federal Assistance Manual and my signature on this notification document, DAML is authorized to proceed with the construction activity for this project as described in the ATP request documents submitted by DAML for this project and further conditioned in this notification, and expend Federal funds in accordance with AML grant terms and conditions.

Joseph L. Blackburn, Field Office Director
OSM Lexington Field Office

Date 9/9/2011
Memorandum

Date: August 23, 2011

To: Big Branch Abandoned Mine Land (AML) Water Supply Project File
    SubAccount# 99.126040000

From: Corey Miller, Program Specialist
       Lexington Field Office (LFO), Program Support Branch (PSB)

Subject: Review of "Authorization to Proceed" (ATP) Request

The Branch recommends that the Field Office Director (FOD) authorize the State of Kentucky to proceed with the construction activity proposed on the Big Branch AML Water Supply Project. The Branch prepared an ATP letter, and Finding of No Significant Impact (FONSI) the FOD review. The Branch recommends that the FOD sign the FONSI, and ATP in the space provided on each document. The original signed ATP letter will be sent to the Division of Abandoned Mine Lands (DAML) Director, along with associated approval documents consisting of a copy of the LFO review memorandum and CX. A scanned copy of these authorization documents will be attached to an email to the Department for Natural Resources (DNR) Commissioner.

The Kentucky DAML ATP request dated August 17, 2011, was received at LFO attached to an email on August 17, 2011. The ATP was processed within 17 working days; therefore, the customer service target of 14 working days to process an ATP was not met. This was due to a concern that LFO raised with DAML on August 22, 2011, to address comments submitted from a consultation agency (State Office of Archaeology). It required DAML to contact the Kentucky Heritage Counsel/State Historic Preservation Officer (SHPO) to offer comments on the project, instead of utilizing the established Memorandum of Agreement that DAML has with the SHPO. The ATP was processed in 23 calendar days; therefore, the Federal employee performance appraisal standard of 30 calendar days to process an ATP was met.

The project area may be centrally located on the Vicco, Kentucky U.S.G.S. 7.5 minute Topographic Quadrangle map(s) at 37° 10' 34" North Latitude and 83° 02' 59" West Longitude near the community of Scuddy, Kentucky. The project location, AML problems to be addressed and proposed reclamation activity/cost are also available at https://eamlis.osmre.gov in the AMLIS under PA# KY-004137-SGA. The project involves reclamation of AML conditions consisting of polluted water/human consumption at 52 sites.

DAML did not designate a funding source under the budget category entitled Project Costs (Water Supply) of any of Kentucky’s AML Annual Construction Grants (ACG). In previous discussions, DNR indicated they would assign projects to a grant before they go to construction. Until a final AG and Location Code are assigned the LFO Project/Site ID # 99.126040000 was assigned to the project file for LFO tracking.
purposes until actual AG and Location Code numbers are assigned by DAML and can be inserted in the appropriate positions at the beginning and end of the LFO Project #. No bid advertisement, bid opening, or construction completion dates were provided by DAML in the ATP request letter, therefore I inserted dates in the database based on the ATP request letter stating that these activities will occur as soon as possible. The following proposed dates were assigned and entered by LFO for database tracking purposes: Bid Advertisement Date was entered as September 15, 2011, Contract Award was entered as October 1, 2011, and Contract/Construction Completion was entered as October 1, 2012.

An office review of the request documents was conducted. The documents consisted of; a project description, a location map, water quality sampling analysis, a National Environmental Policy Act (NEPA) review documented in an Environmental Assessment (EA) with agency consultation response letters attached; and an Abandoned Mine Land Inventory System (AMLIS) Problem Area Description (PAD) summary and appropriate Priority Documentation Forms, with engineer cost estimates and reference to a water supply study, for PA# KY-004137-SGA. A pre-approval field inspection of the proposed project was deemed unnecessary, since no unique characteristics warranting special field verification were noted and it wasn't selected for field verification under the EY 2012 Oversight Agreement.

The EA submitted for the construction activity at the site was reviewed and found to adequately document the environmental review of the construction activity within the current NEPA review guidance. No significant impacts have been reported to this office or identified by the Branch. The Branch recommends that the Office of Surface Mining Reclamation and Enforcement (OSM) accept the EA submitted by the Kentucky DAML.

The EA prepared by the State and the State's ATP request letter summarized the responses from agencies consulted for the NEPA review and discussed appropriate resolution of all their concerns and recommendations. The responses from agencies consulted for the NEPA review are summarized in the FONSI prepared by OSM for the EA:

The comments from the Kentucky State Clearinghouse, Kentucky's "Single Point of Contact" (SPOC) pertaining to AML Water Supply projects included no comments that affect this proposal. The information to update PA # KY-004137-SGA was directly input into the e-AMLIS by the DAML. PA # KY-004137-SGA was approved in the e-AMLIS on August 22, 2011.
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Big Branch AML
Abandoned Mine Lands (AML) Water Supply Project
Perry County, Kentucky

The Commonwealth of Kentucky submitted an Authorization to Proceed with Construction Activity (ATP) request for Federal AML grant funds to the Office of Surface Mining Reclamation and Enforcement (OSM) for this project. The ATP request consists of a request letter, Environmental Assessment (EA) with consultation correspondence, project description, location map, AML Inventory System (AMLIS) Problem Area (PA) Description forms, and other supporting enclosures. The project area may be centrally located on the Vicco, Kentucky U.S.G.S. 7.5 minute Topographic Quadrangle map(s) at 37° 10' 34" North Latitude and 83° 02' 59" West Longitude near the community of Scuddy, Kentucky. The project location, AML problems to be addressed, and proposed reclamation activity/cost are also available at http://www.osmre.gov in the AMLIS under PA# KY-004137-SGA.

The project involves reclamation of AML conditions consisting of polluted water/human consumption at 52 sites.

OSM has thoroughly reviewed the EA prepared for this project by the Kentucky Division of Abandoned Mine Lands (DAML) and determined that it adequately discusses the environmental issues and impacts as required by the National Environmental Policy Act (NEPA) for OSM abandoned mine lands reclamation grant construction activities for authorization purposes.

Based on the analysis in the EA, I find that the construction activity performed under this project will not have significant impacts on the quality of the human environment. Therefore, I conclude that a detailed Environmental Impact Statement is unnecessary. My specific reasons are as follows:

The alternative to not fund the project would result in no favorable impacts and the adverse impacts would continue unabated. The long-term beneficial impact of the proposed action will result in the protection of the health, safety, general welfare, and property of the local citizens and other persons who may come in contact with these AML conditions. No long-term adverse impacts are anticipated. Short-term environmental impacts are limited to sedimentation, noise, and inconvenience to the local residents while the project is constructed. Sedimentation will be controlled by using silt control and prompt revegetation of the disturbed area. Noise, dust, and other inconveniences to local residents are unavoidable impacts related to construction activities.

All appropriate government agencies were consulted or their review criteria applied by agreement. As a result, it was determined that the project area does not contain or significantly affect threatened or endangered species or their habitat, jurisdictional wetlands, cultural or historic values, prime and unique farmland values, recreational resources, or Class I air quality regions. To reduce impacts from the project, the recommendations made by the agencies consulted were considered and, as appropriate, incorporated into the EA prepared by DAML and/or as an element of their request for ATP with construction submitted for OSM authorization. The responses from agencies consulted for the National Environmental Policy Act (NEPA) review include the following comments and/or recommendations:
The Kentucky Department of Fish and Wildlife Resources (KDFWR) identified no known Federally threatened/endangered fish and wildlife within a 10 mile radius of the project area. They also identified no records of state listed species of concern within 1 mile radius of the project area. They recommended that the erosion control measures will need to be installed prior to construction and should be inspected and repaired as needed.

The DAML staff biologist reviewed the Kentucky State Nature Preserves Commission's (KSNPC) BIOTICS database in lieu of further consultation. The findings are noted in the ATP request letter and an attached memorandum. DAML found that KSNPC data indicated one federally listed threatened or endangered species within a 10-mile radius and one species of State within a 1-mile radius of the project. DAML discussed each species in the biologist's memorandum, the EA, and their ATP request letter, finding that the noted species will not be impacted, since the project will not result in a significant negative impact to their critical habitat and/or suitable habitat does not exist within the project area to support the species. No reason was identified to dispute their determination.

The DAML Biologist also noted that the federally listed endangered Indiana bat, although not indicated to exist in the project vicinity; by his and the KDFWR reviews, would not be disturbed by the project. This is based on the fact that the project proposes to disturb no mine portals, cliffs, or caves, and proposes no disturbance of forested areas that could be utilized as roosting sites other than that area impacted by the AML problem that is creating a threat to the public; and in the event that any trees that represent potential Indiana bat habitat need to be removed, removal will only occur between October 15 and March 31, to avoid potential impacts to the Indiana bat. In the event that tree removal becomes necessary, a habitat assessment or presence-absence survey will be required and performed by a certified biologist.

In a meeting held in February 2010 between LFO, USFWS Kentucky Field Office (KFO) and DAML; Steve Hohmann, Director of DAML, offered to coordinate NEPA consultation with the KFO of the USFWS in Frankfort, Kentucky, utilizing the agreements in the September 18, 2009, Memorandum of Agreement (MOA) signed by the OSM, LFO and USFWS, KFO. This document outlined the acceptable conditions that the projects potential impacts can have where the KFO will not need to be further consulted for comment. When the conditions within the agreement are present, processing of the ATP may proceed with the confidence that the biological environment is being protected. It was agreed to by all parties, acknowledging that LFO would retain the final review to determine if the NEPA documentation is complete.

After review of the ATP documents for this project, which included consultation with the KSNPC and the KDFWR, DAML determined that additional consultation with the USFWS is not required because the proposed project will not adversely affect a federally listed species (Federal Assistance Manual (FAM) Chapter 5-11-15, A. 3.)

The conditions in the MOA are met because:

- There will be no purposeful removal of standing trees larger than 5 inches diameter at breast height or standing snags with loose bark that are 9 inch or greater diameter at breast height and at least 10 feet in height, during the period of April 1 to October 14, and the proposed activity does not occur in "Known Indiana Bat Habitat".
- No caves or cliffs will be disturbed;
- The project proposes to reclaim no open mine portals/shafts.
- No purposeful filling or crossing of streams using heavy equipment or the removal of riparian vegetation using heavy equipment within the Tradewater, lower Ohio, Upper Cumberland, Green, and Licking River basins.
- In order to avoid/reduce indirect impacts, erosion and sediment control plans will be implemented and monitored until permanent vegetation has become established in the above listed watersheds and all other watersheds as may be appropriate.

With the specifics of the proposal meeting the criteria set out in the MOA, OSM agrees with DAML's determination that the proposed project would not adversely impact the species if these conditions are present. With this information, they found the requirements of Section 7 of the Endangered Species Act have been fulfilled.

The Office of State Archaeology found that their records did indicate three archaeological sites have been recorded in the project area, and will likely be impacted by this project. They recommended coordination with the State Historic Preservation Officer (SHPO) before beginning construction activities to determine the appropriate course of action.

The Kentucky Heritage Council and State Historic Preservation Officer (SHPO) were contacted for this project, although the proposal did meet most of the criteria for exempt projects outlined in the MOA signed on January 3, 2011. The SHPO was contacted based on the recommendation of the Office of State Archaeology. The Kentucky Heritage Council (KHC)/State Historic Preservation Officer (SHPO) responded in a letter dated September 6, 2011, stating that the proposed project area has been significantly disturbed and that the three previously identified archaeological sites will not be impacted. Therefore, their finding is that there will be No Historic Properties Affected within the undertaking's area of potential impact. They did recommend that DAML notify their office immediately if the construction plans should change or if any artifacts are discovered during construction. This fulfills the responsibility to consult with the SHPO under the Section 106 review process. Neither agency recommended conducting archeological surveys/investigations or mitigation measures.

Environmental and Public Protection Cabinet (EPPC) (changed to the Environment and Energy Cabinet (EEC) in July 2008) Secretary order dated December 12, 2006, transferred authority for issuance of Clean Water Act (CWA) Section 401 Water Quality Certifications (WQC) associated with surface coal mine operations, to include any reclamation projects proposed by the DAML, to the Kentucky Department for Natural Resources (DNR) DNR. DNR assigned this responsibility to their Division of Mine Permits (DMP). The DMP further delegated this responsibility to DAML, with consultation as needed on a case by case basis. In addition, the DAML Director in a meeting held in February 2010, offered and agreed to coordinate consultation with the U.S. Army Corps of Engineers (COE) concerning CWA 404 (CWA) permits, as DAML had been doing without an agreement in the past. OSM LFO accepted DAML's offer to conduct this consultation.

Under a 2005 agreement with the DOW Floodplain Management Section (FMS) of the Water Resources Branch, DOW authorized DAML to apply DOW floodplain standards in lieu of a DOW review. In this agreement, DAML will directly consult with DOW if it appears a permit may be required. DAML has acquired a set of Federal Emergency Management Agency (FEMA) floodplain maps that include the project area.
As a result, DAML applies each responsible agency's criteria by agreement or physically consults with the DMP and DOW concerning CWA 401 WQC and floodplain permits to "Construct Across or Along a Stream", and with the COE concerning CWA 404 permits. This review has been centralized with DAML's Design Branch, whose staff has previous experience in this area and with the Kentucky DOW. DAML determined from the written description that the project does not impact a stream or wetland that requires a 401 WQC or a 404 CWA permit. However, there is a potential for the floodplain to be impacted, therefore; a DOW floodplain permit is required for this project. DAML further notes in their ATP letter that they will request a copy of all necessary permits prior to expending AML funds.

[Signatures and dates]
ATP Request Package for Big Branch AML Water Supply Project (Perry County)

Bill Overman <kyaml2008@gmail.com>
To: scasselsr <scasselsr@gmail.com>, ctmsbc <ctmsbc@gmail.com>, osmlorenestes@gmail.com

Please see attached ATP request package for Big Branch AML Water Supply Project. Respond accordingly.

If you have any questions or concerns ref. this package, please contact Bill Overman or Ryan Howell.

Thanks,

Vanna
AML-Frankfort

Big Branch Vicco WSP - ATP Request 8.17.11.pdf

11311K
August 17, 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: Big Branch AML Water Supply Project (Perry County)

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 4137 SGA has been prepared, entered into the e-AMLIS by the division, and is pending OSM approval. 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 waterlines will be placed within the roadside ditch and residentially maintained yards, which have been previously disturbed during houseseat and 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 one species of state concern, monitored by the KSNPC, is known to occur within one mile of the project site, and that one species listed as threatened or endangered, under the United States Endangered Species Act (USESA), is 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:
• Elusive Clubtail (Stylurus notatus)

USESA listed species found within 10 miles from the project site:
• Indiana Bat (Myotis sodalis)
According to the memorandum by Keith B. Coleman, dated July 19, 2011, neither 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, since no trees over 5” DBH will need to be removed and no cave-like structures will be closed, 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 a floodplain permit would be required, but no WQC or COE permits will be required as long as the work performed is subsurface (directional boring method). 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 $635,895.00, 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, Director
Division of Abandoned Mine Lands
Big Branch
AML Water Supply Project

Perry County – Vicco Quad.

Project Description

Groundwater in the Big Branch area of Perry County 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 is centrally located on the Vicco 7.5’ United States Geological Survey (USGS) quadrangle at Latitude 37° 10’ 34” and Longitude 83° 02’ 59” (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 and flooding. 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 20,500 linear feet of new water supply pipe is proposed for the project. The pipe diameters will range from 3/4” to 6”. Approximately 52 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 creek crossings and other critical areas. Creek crossings will be constructed quickly and with as little intrusion of equipment into streams as possible, thereby limiting the disturbance of sediments and resulting turbidity to those found during heavy storm events. All construction disturbances will be kept to a minimum and vegetated as soon as practical. Construction of this project will require stream crossings, likely within floodplains. 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 floodplain permits and 401 WQC permits. 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.
Big Branch AML Waterline Supply Project
Perry County

Environmental Assessment

A. Description of the Proposed Action:

The Kentucky Division of Abandoned Mine Lands (AML) proposes to provide 52 residences with a public water supply, by constructing approximately 20,500’ of new water service lines that is centrally located in the Vicco, Kentucky 7.5’ United States Geological Survey (USGS) quadrangle. The waterline will connect to an existing line at 37°11’4” north latitude, 83°2’13” west longitude and at 37°10’33” north latitude, 83°4’11” 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 4137-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 Perry County (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 52 residences. Approximately 20,500’ of water-supply pipe will be installed, with pipe diameters ranging from 3/4” to 6”. 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. No forested areas will have to be cleared in any of the project areas.
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, with stream crossings, and right-of-way property along roads and in residential yards, hydrology will be discussed. Due to the possible occurrence of two species monitored by the Kentucky State Nature Preserves Commission (KSNPC), fish and wildlife/plants will be discussed. Because the project was commented on by the Office of State Archaeology (OSA), and 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 July 18, 2011, a floodplain permit will be required. Because the waterlines will be installed using directional boring for any
stream crossing, no 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 three species of state concern monitored by the KSNPC are known to occur within one mile of the project site and two 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:

- Elusive Clubtail (*Stylurus notatus*)

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

- Indiana Bat (*Myotis sodalis*)

The attached memorandum by Keith B. Coleman, dated July 19, 2011, indicates that none of these species should be negatively impacted. Since tree clearing is not anticipated within the water supply project area and no cave-like structures area proposed to be closed, the Indiana Bat should not be negatively impacted regardless of the timing of the construction.

E.1.c. Archaeology:

Although, the OSA indicates three sites have been recorded in the project area, the project has been determined to be exempt under the Programmatic Agreement between KHC and AML, as the placement of the waterlines within the road-side ditch and residential yards are in an area that has been previously disturbed by road construction and houseseat 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

[Signature]

8/17/11

- Steve Hohmann, Director

Date
Floodplain/Stream Construction Permit
A floodplain permit will be required.

US Army Corps of Engineers Permit (ACOE)
No permit is necessary as long as the work performed is using the directional boring method.

Water Quality Certification
No permit is necessary as long as the work performed is using the directional boring method.

Attached please find the project description and map for Big Branch WSP.

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
502/664-2141, Ext. 130
August 4, 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: Big Branch AML Water Supply Project (Perry 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 there are three archaeological sites recorded in the project area that will likely be impacted by this project. Currently, the National Register status of these sites has not been determined. It is my recommendation that you consult with the State Historic Preservation Office to determine the appropriate course of action.

Sincerely,

(Christina A. Pappas for)
George M. Crothers, Ph.D.
Director
18 July 2011

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

RE: Big Branch AML Water Supply Project (Perry County)

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 no federally or state-threatened/endangered species are known to occur within close proximity to the project site. 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. The KDFWR also recommends work within a stream only take place during low-flow periods to reduce the impact of erosion and sedimentation. 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: Big Branch
AML Water Supply Project

From: Keith B. Coleman
Environmental Technician, AML Program Development Branch

Through: Bill Overman
Manager, AML Program Development Branch

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

Date: July 19, 2011

On July 19, 2011, I conducted a search of the KSNPC database in order to determine if any species of state concern (which are monitored by 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 one species of state concern, monitored by KSNPC, is known to occur within one mile, and that one species currently listed as threatened or endangered under the United States Endangered Species Act (USESA) is known to occur within ten miles of the project site.

This project (3.9 miles total) consists of the installation of approximately 3.9 miles of new water lines, and 52 service meters. The water lines will be installed within roadside right-of-ways, residential yards, and along cleared private access roads. No booster pump stations or water tanks have been proposed as part of this project. Creek crossings will be constructed quickly, and with as little intrusion into streams as possible, and the AML sediment and erosion control plan will ensure that turbidity levels associated with project construction are limited to levels observed during typical storm events. Disturbed areas will be vegetated as soon as is practical, in order to provide additional subsequent erosion control.
The KSNPC species found within 1 mile from the project site is:

**Elusive Clubtail**  
 (*Stylurus notatus*, KSNPC Endangered, pre-1970 record)

The USESA endangered species found within 10 miles from the project site is:

**Indiana Bat**  
 (*Myotis sodalis*, USESA Endangered, 2005 “summer mist-net” record, 7.9 mi S-SE)

The Elusive Clubtail is a dragonfly, the larvae of which inhabit large river systems. Since the AML sediment and erosion control plan will be implemented and monitored during the construction process, no negative impacts should result upon this species due to project-related construction. No work is planned within any large river channels.

The US Fish and Wildlife Service (USFWS) has declared the whole of the state of Kentucky to be the potential 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 search of the KSNPC BIOTICS database revealed one “summer mist-net” record of this species within 10 miles of the project site (9.9 mi SE). Twenty-two additional records document the species within 10-20 miles from the project site. Of the twenty-two additional records, 7 are “summer mist-net” records, 6 are “hibernacula” records, 3 are “maternity area” records, 1 is a “roost site”, and 1 is a “breeding” record, 1 is a “transient mist-net” record, 1 is a “foraging area” record, 1 is an “undetermined” record, and 1 is an “anabat call” record.

Since no records of hibernacula are within 10 miles of the project area and no maternity area records are within 5 miles from the project area, and since no maternity colonies or non-maternity records are within 2.5 miles from the project area, no special conditions would apply to the accepted tree removal period, a time at which bats are secured within their hibernacula (October 15 – March 31).

However, since the water line installation areas are within cleared roadside right-of-ways, residential yards, and private roads, construction should not negatively impact the Indiana Bat, regardless of the construction timing. Should the clearing of trees which are over 5” DBH (and also display characteristics such as shaggy, exfoliating bark, or crevices and hollowed-out cavities within their trunks and larger limbs) become
necessary, a habitat assessment or presence-absence survey may be required. Lastly, the project does not fall within “known habitat” of the Indiana Bat, as described by USFWS. Adherence to these best management practices should prevent any negative impacts upon the Indiana Bat. (Map attached.)