Authorization to Proceed (ATP)

West Kentucky Shafts III (Maintenance)
Abandoned Mine Land (AML) Reclamation Project
based on a previous Environmental Assessment (EA)
Hopkins County, Kentucky

The Office of Surface Mining Reclamation and Enforcement (OSM) has completed a review of the October 27, 2011, request for ATP with construction activity on the West Kentucky Shafts III Maintenance 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) #s KY-002260-SGA & KY-003739-SGA.

OSM reviewed the Environmental Assessment (EA) National Environmental Protection Act (NEPA) environmental review document prepared by the Division of Abandoned Mine Lands (DAML) for the previous AML reclamation project, which OSM accepted in a Finding of No Significant Impact (FONSI), signed on April 14, 2008. We have determined that the currently proposed maintenance activity requested is adequately considered in the previously approved EA and FONSI NEPA environmental review document. We recommend that appropriate consideration be given to the recommendations and comments provided in the response letters from the consultation agencies.

AML Accordingly, pursuant to Section 5-11-200D.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 11/16/11
Gentlemen,

Attached are documents for ATP to do maintenance on West Kentucky Shafts III.

Thanks,

Shannon
Memorandum

Date: November 14, 2011

To: West Kentucky Shafts III (Maint) Abandoned Mine Land (AML) Reclamation Project File SubAccount# 30.148410000

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 West Kentucky Shafts III Maintenance AML Reclamation Project. The Branch prepared an ATP letter for the FOD review. The Branch recommends that the FOD sign the ATP in the space provided.

The original signed ATP letter will be sent to the Division of Abandoned Mine Lands (DAML) Director. In addition, a scanned copy of this authorization document will be attached to a transmittal email to the DAML Director, along with a "cc" to the Department for Natural Resources (DNR) Commissioner.

The Kentucky DAML ATP request dated October 27, 2011, was actually received at LFO on November 9, 2011 via email. The ATP was processed within 4 working days and within 6 calendar days; therefore, the customer service target of 14 working days, as well as the Federal employee performance appraisal standard of 30 calendar days to process an ATP have been met.

DAML designated funding for the construction work under the State Subaccount # 30.148410000 Maintenance account, under the budget category entitled Project Costs (Non-Water Supply) of Kentucky's FY 2012 30th AML Annual Construction Grant (ACG). The project is located in Hopkins County.

The maintenance project addresses conditions on the Johnny Harrison AML Reclamation Project (State Subaccount# 27.218032700) authorized previously on April 14, 2008, of which a State final inspection was conducted on October 15, 2009.

An office review of the current maintenance ATP proposal and previously submitted and accepted ATP request documents was conducted. The documents consisted of: a project description and a location map; reference to a National Environmental Policy Act (NEPA) review documented in an Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the previous project, with agency consultation response letters attached; and reference to a previously processed Abandoned Mine Land Inventory System (AMLIS) Problem Area Description (PAD) summary and appropriate
Priority Documentation Forms for PA# KY-002260-SGA & KY-003739-SGA. Additionally, I have included a copy of the LFO review and recommendation memorandum, along with other environmental review analysis as part of the NEPA documentation for this maintenance project.

A pre-approval field inspection of the proposed project was deemed unnecessary, since the original project was previously authorized and 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 previously submitted for the construction activity at the site for the previously authorized project was reviewed and found to adequately evaluate the environmental concerns and impacts of the currently proposed maintenance 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 OSM accept the EA previously submitted by the Kentucky DAML and FONSI signed by OSM on April 14, 2008 as adequate NEPA consideration for the proposed maintenance activity. The responses from agencies consulted for the NEPA review are summarized in the file of the previously authorized project, a copy of which is also included in the current maintenance project file. The responses from agencies consulted for the NEPA review are summarized in the LFO review and recommendation memorandum dated April 10, 2008.

The comments from the Kentucky State Clearinghouse, Kentucky's "Single Point of Contact" (SPOC) pertaining to AML Non-Water Supply projects included no comments that affect this proposal. The information to update PA # KY-002260-SGA and KY-3739-SGA was directly input into the AMLIS by the DAML under the previous AML reclamation project and accepted by OSM. No new AML problems are to be addressed under this maintenance project.

The Area Office AML staff will be notified of this project authorization by cc'd copy of the email notifying DAML of this ATP or email of an updated State AML Project List after the authorization of this project and availability of the project documents on the LFO State AML reclamation project tracking database.
Joseph Blackburn, Director  
Lexington Field Office  
U.S. Office of Surface Mining  
2675 Regency Road  
Lexington, Kentucky 40503  

Re: West Kentucky Shafts III  
AML Reclamation Project  
Hopkins County, Kentucky  

Dear Mr. Blackburn:  

Please find enclosed a request for “Authorization to Proceed” with maintenance on the following previously approved reclamation project:  

West Kentucky Shafts III, AML Reclamation Project  

This site is on the approved Inventory (AMLIS). There is no need for additional environmental studies due to the fact that the construction activity proposed for this site has had previous NEPA review. The LFO Field Office Director signed the previous Finding of No Significant Impact prepared by DAML, in April, 2008.  

Completion of the project will not require the acquisition of any land and will not significantly affect potential recovery of residual coal reserves at the site. The principal benefit to be derived from the successful completion of the project is the continued success of the previously completed project.  

Should you have any questions or require further information regarding this site, please feel free to contact me at (502) 564-2141.

Sincerely,

Steve Hohmann  
Director
West Kentucky Shafts III AML Project
Hopkins County, Kentucky

**PROBLEM AREA NAME:** Ed Bevil Pits & Coiltown Mine

**PROBLEM AREA NUMBER:** Bevil Highwall-KY 3739
Coiltown Subsidence-KY 2260

**PREVIOUS PROJECT NAME:** West Kentucky Shafts III-Bevil Highwall & Coiltown Subsidence sites

**PREVIOUS PROJECT LOCATION:** Bevil Highwall site from Madisonville, Kentucky in Hopkins County, travel south via the Pennyrile Parkway to the Earlington exit. Turn west onto the connector road and cross US 41, then turn immediately left onto W. Highland Park. The site is approximately 50 feet on the right. The Coiltown Subsidence site is located in Coiltown, Kentucky in Hopkins County. From Coiltown travel approximately 3000 ft. south of the intersection of State Route 1034 and 502. Subsidence holes are located on both the east and west side of 502 at this location in addition to an abandoned airshaft located on the west side.

**PREVIOUS PROJECT DESCRIPTION & RECLAMATION PREFORMED:** The Bevil Highwall site access is directly off of W. Highland Park. It consisted of an approximate 30 ft. diameter x 20 ft. deep subsidence hole that was backfilled with Class II/III stone. Also, a pit was drained and the area was regarded to promote positive drainage. The highwall was backfilled and regarded as well. The area around the site was graded and was revegetated.

At the Coiltown Subsidence site reclamation consisted of nine subsidence/adits being closed with Class II/III rock and one abandoned airshaft closure. The abandoned airshaft contained water along with trash and debris that was removed prior to filling with Class II/III rock. A concrete monument was placed on the airshaft following reclamation. The disturbed areas were revegetated.

**PROBLEM:** On the Bevil Highwall site multiple rills have developed running down the graded highwall section to the 24’ culvert that drains this site. The rills have caused the culvert to fill with sediment and clog. This culvert also has been washing out around the ends of the culvert because of the high volume of drainage coming off the site. This volume of drainage is flooding the road.

On the Coiltown Subsidence site five shallow subsidence holes have developed. These holes have developed in an area that is frequently visited by people and poses a danger to them.

**PROPOSED MAINTENANCE LOCATION:** Bevil Highwall Site- 37° 17” 5.305 N & 87° 30’ 38.428” W  Coiltown Subsidence Site- 37° 20’ 47.42’”N & 87° 39’ 89” W
PROPOSED MAINTENANCE: On the Bevil Highwall site it is proposed that 0.5 Acre is regarded to promote positive drainage of the site. Also, reclamation will include the installation of a Class II/III ditch to prevent the site from developing rills. Also, to prevent erosion from occurring around the 24” culvert it will be armored with Class III rock. Approximately 0.5 Acre of this site will be seeded, limed and mulched. On the Coiltown Subsidence site five subsidence holes will be filled with Class II/III stone. The entry road into the site will be rocked with roadway stone and approximately 0.5 Acre will be re-vegetated.

TENTATIVE BID ADVERTISEMENT DATE: February 2012
TENTATIVE CONTRACT AWARD DATE: March 2012
TENTATIVE CONSTRUCTION COMPLETION DATE: April 2012
ESTIMATED COST: $18,000
United States Department of the Interior

OFFICE OF SURFACE MINING
Reclamation and Enforcement
2675 Regency Road
Lexington, KY 40503-2922

APR 03 2008

Finding of No Significant Impact (FONSI)
Authorization to Proceed (ATP)
West Kentucky Multishaft III
Abandoned Mine Land (AML) Reclamation Project
Henderson, Webster, Hopkins, McLean, Muhlenberg, and Ohio Counties, Kentucky

Ms. Susan C. Bush, Commissioner
Department for Natural Resources
#2 Hudson Hollow Complex
Frankfort, Kentucky 40601

Dear Ms. Bush:

The Office of Surface Mining Reclamation and Enforcement (OSM) has completed a review of your March 10, 2008, request for ATP with construction activity on the West Kentucky Multishaft III AML Reclamation project, prepared by the Division of Abandoned Mine Lands (DAML). Your request does not designate a funding source by assignment of a State Subaccount number for the construction work under the Project Costs (Non-Water Supply) of any of Kentucky's Annual AML Construction Grants. Please notify this office of the final funding source and State Subaccount number for our records.

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. A pre-approval field inspection of the proposed project was conducted on March 27, 2008, for field verification under the EY 2008 Performance Agreement. The proposal was recommended for approval with no concerns or recommendations identified.

We conducted National Environmental Policy Act (NEPA) coordination with the Kentucky Field Office of the U.S. Fish and Wildlife Service (USFWS) in Frankfort, Kentucky. After review of the ATP documents, we determined that formal consultation with the USFWS is not required because the proposed project will not adversely affect a federally listed species; however, we requested their comments and/or recommendations for the project. To date, the USFWS has not responded. If a response is received at a later date, a copy of their comments and any actions the USFWS finds required under the requirements of Section 7 of the Endangered Species Act will be forwarded to DAML for consideration.

TAKE PRIDE IN AMERICA
OSM thoroughly reviewed the environmental assessment (EA) prepared by DAML for 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. We recommend that appropriate consideration be given to the general recommendations and comments provided in the response from the consultation agencies. Please give special attention to and follow the mitigation procedures for the lark sparrow and the Indiana bat as documented in your ATP request letter and the EA that DAML prepared. Please send OSM copies of any additional applications for permits/certifications and approval documents needed for the construction of this project that were not submitted in your original ATP. This information is needed by OSM to perform oversight and monitor compliance with the NEPA.

I have signed a FONSI and will enclose a copy to Steve Hohmann, Director, DAML under copy of this letter. Accordingly, pursuant to Section 5-11-20D.3 of the Federal Assistance Manual, you are authorized to proceed with construction activity for this project and expend Federal funds in accordance with AML grant terms and conditions. If you have any questions concerning this ATP or the procedures, please contact Steve Cassel at 859-260-3912 or Gail Smith at (859) 260-3908.

Sincerely,

[Signature]

Joseph L. Blackburn
Acting Field Office Director

cc: Steve Hohmann, DAML
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

West Kentucky Multishaft III
Abandoned Mine Lands (AML) Project
Henderson, Webster, Hopkins, McLean, Muhlenberg, and Ohio Counties, 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 Dawson Springs, Kentucky U.S.G.S. 7.5 minute Topographic Quadrangle map at 37° 13' 15" North Latitude and 87° 40' 14" West Longitude. The project location, AML problems to be addressed, and proposed reclamation activity and cost are also available at http://www.osmre.gov in the AMLIS under PA#s KY-003917-SGA, KY-002658-SGA, KY-002660-SGA, KY-002260-SGA, KY-003614-SGA, KY-001193-SGA, KY-003740-SGA, KY-002168-SGA, KY-003739-SGA, KY-003701-SGA, KY-001106-SGA, and KY-001102-SGA. The project involves reclamation of AML conditions at 12 sites within six counties.

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 re-vegetation 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 has been 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, flood plains, 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 formal responses from agencies consulted for the NEPA review include the following comments and/or recommendations:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) identified two known federally threatened/endangered fish and wildlife in the western portion of the state, the Gray bat and Indiana bat. They recommended that coordination with the US Fish and Wildlife Service Kentucky Field Office be conducted. This coordination is routinely conducted as part of the LFO ATP environmental review process and is discussed later in this document.

The DAML staff biologist reviewed the Kentucky State Nature Preserves Commission's (KSNPC) BIOTICS database in lieu of formal consultation. The findings are noted in the ATP request letter and an attached twelve page memorandum. DAML found that KSNPC data indicated two federally listed threatened or endangered (T&E) species within a 10-mile radius and numerous species of State concern known to occur within a 1-mile radius of one or more of the project sites. DAML listed and discussed each species noted above in the biologist’s memorandum, the EA, and their ATP request letter.

They note that the Gray Bat, a US T&E species, will not be negatively impacted since construction activities will not disturb cave like structures and all vertical openings to be reclaimed are filled with water or debris, precluding access by bats. The American burying beetle is presumed extirpated from Kentucky. In addition, special provisions for the KSNPC threatened lark sparrow in Site 3 note that if work is necessary between April 15 and July 15, a check of the area will be performed to determine whether the species is present to prevent disturbance of their nesting activities. DAML determined that the remaining KSNPC concern 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 within 15 miles of the project sites by his and the KDFWR reviews, would not be disturbed by the project. This is based only on the fact that all underground mine openings to be addressed are either filled with water or earth or domestic debris, none of the subsidence openings offer acceptable access to underground mine workings and the project proposes to restrict all clearing of trees that may impact the Indiana bat are restricted to the period from October 15 through March 31.

The LFO coordinated NEPA consultation with the Kentucky Field Office (KFO) of the U.S. Fish and Wildlife Service (USFWS) in Frankfort, Kentucky. After review of the ATP documents, which include formal consultation with the KSNPC and the KDFWR, LFO determined that formal 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.). LFO sent the USFWS KFO an email on March 19, 2008, notifying them of this determination and requesting their comments or recommendations for the project prior to our ATP authorization target date of March 31, 2008.

The USFWS KFO responded in an email dated March 4, 2008. The USFWS found that the only federally listed threatened or endangered species known to occur within the vicinity of the proposed project areas are the endangered Indiana bat, gray bat, fanshell, catspaw, and the American burying beetle. The USFWS concurred with OSM’s determination that the proposed project, with the provision to clear trees from October 15 through March 31 to avoid impacts to Indiana bat summer roost trees, would not likely adversely impact the species. 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 not indicate any known archaeological sites directly in the project areas, no systematic archaeological survey has been conducted in the immediate project areas, and past disturbance to the project areas make it unlikely that archaeological sites will be preserved. The Kentucky Heritage Council and State Historic Preservation Officer (SHPO) determined, for all sites except Site 2, that the proposed project will not impact any National Register Properties or sites, no properties currently listed in the National Register of Historic Places are within the project areas, and an archaeological survey will not be necessary, since all reclamation activities are restricted to previously disturbed areas or areas with low site potential.

The SHPO did request that an archaeological survey be conducted for Site 2. The SHPO concurred with the survey finding that the mine site at this location is not eligible for listing in the National Register of Historic Places. The SHPO determined that this
fulfills the responsibility to consult with the SHPO under the Section 106 review process.

The Environmental and Public Protection Cabinet (EPPC) 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 of Natural Resources (DNR). DNR assigned this responsibility to their Division of Mine Permits (DMP). The DMP determined from the written description that the project does not impact a stream or wetland that requires a specific 401 Water Quality Certification or a 404 Clean Water Act (CWA) permit from the U.S. Army Corps of Engineers (COE).

Under a 2005 agreement with the Department of Water (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. DAML's Design Branch personnel researched these maps and have determined that the project is not within the base floodplain and no floodplain permits are required.

OSM Environmental Reviewer
AML Program Specialist

4-10-08
Date

Joseph L. Blackburn
Acting Field Office Director

4/14/08
Date
Memorandum

Date: April 10, 2008

To: West Kentucky Multishaft III Abandoned Mine Land (AML) Reclamation Project File

From: Steve Cassel, Sr., AML Program Specialist, Lexington Field Office (LFO), Program Support Branch (PSB)

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

The Branch recommends that the Acting Field Office Director (FOD) authorize the State of Kentucky to proceed with the construction activity proposed on the West Kentucky Multishaft III AML Reclamation Project. The Branch prepared an ATP letter and Finding of No Significant Impact (FONSI) for the Acting FOD review. The Branch recommends that the Acting FOD sign the FONSI and ATP in the space provided on each document. The original ATP letter will be sent to the Department for Natural Resources (DNR) Commissioner and copies of the ATP and FONSI will be sent to the Division of Abandoned Mine Lands (DAML) Director.

The Kentucky DAML ATP request dated March 10, 2008, was received at LFO on March 12, 2008. The ATP was processed within 17 working days; therefore, the customer service target of 14 working days to process an ATP was not met. The ATP was processed in 19 calendar days; therefore, the Federal employee performance appraisal standard of 30 calendar days to process an ATP has been met.

DAML did not designate a funding source under the budget category entitled Project Costs (Non-Water Supply of any of Kentucky's AML Annual Construction Grant's (ACG). In previous discussions, DNR indicated they would assign the project to a grant before it goes to construction. The temporary Subaccount# 99.080312001 was assigned to the project file for LFO tracking purposes until an actual subaccount number is assigned by DAML. No bid advertisement, bid opening, or construction completion dates were provided by DAML in the ATP request letter, therefore dates have been inserted into the database based on a recent phone conversation comment that these activities will occur as soon as possible "after the beginning of the States 2008 FY"; which begins on July 1, 2008. The proposed dates entered are as follows: Bid Advertisement Date was entered as July 15, 2008, Contract Award was entered as August 15, 2008, and Contract/Construction Completion was entered as March 1, 2009.

An office review of the request documents was conducted. The documents consisted of: a project description, a location map, 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 for PA#s KY-003917-SGA, KY-002658-SGA, KY-
A pre-approval field inspection of the proposed project was conducted on March 27, 2008, for field verification under the Evaluation Year (EY) 2008 Oversight Agreement. The proposal was recommended for approval with no concerns or recommendations identified. For additional information please refer to the report findings and photos in the LFO State AML Project Database.

The EA submitted for the construction activity at the sites of this project 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 formal responses from agencies consulted for the NEPA review and discussed appropriate resolution of all their concerns and recommendations. The formal 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 Non-Water Supply projects included no comments that affect this proposal. The information to update PA #'s KY-003917-SGA, KY-002658-SGA, KY-002660-SGA, KY-002260-SGA, KY-003614-SGA, KY-001193-SGA, KY-003740-SGA, KY-002168-SGA, KY-003739-SGA, KY-003701-SGA, KY-001106-SGA, and KY-001102-SGA was directly input into the AMLIS by the DAML. This information reflects the changes in units and costs based upon the design and classification of the funded category.

This was confirmed by LFO’s review of the AMLIS data and a PAD summary printout from the OSM HDQ AMLIS database. The PADs, except for PAD# KY-003917-SGA for Site 1, submitted for this ATP do not represent any "new Problem Area" after December 20, 2006, requiring FOD approval under OSM Directive AML-1-2 (signed June 22, 2007); therefore, no FOD approval forms were prepared for signature. A FOD approval form was signed by the FOD for PAD# KY-003917-SGA on January 23, 2008.
Dear Mr. Cassel:

The Frankfort, KY Field Office of the U.S. Fish and Wildlife Service has reviewed the subject project in accordance with the Endangered Species Act (ESA) and Fish and Wildlife Coordination Act (FWCA). The project occurs within the vicinity of the Indiana bat (Myotis sodalis), gray bat (Myotis grisescens), fanshell (Cyprogenia stegaria), catspaw (Epioblasma o. obliquata), and the American burying beetle (Nicrophorus americanus). The site will not impact potential habitat of the fanshell, catspaw, or gray bat. The American burying beetle is thought to be extirpated from the state of Kentucky, and is therefore unlikely to be negatively impacted by the project. No potential Indiana bat winter habitat occurs onsite and the closest known hibernacula are within 17.5 miles of the site. In order to avoid impacting potential summer roost trees, trees will only be cleared from October 15 through March 31.

Your staff has determined that the proposed project would not likely adversely affect any federally listed species, and our office agrees. With this information, we believe the requirements of Section 7 of the ESA have been fulfilled. However, obligations under Section 7 of the Act must be reconsidered if (1) new information reveals impacts of the proposed action may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

The comments provided above have been submitted electronically (e-mail) to expedite processing of the subject application(s). These comments have been discussed and approved by Mr. Virgil Lee Andrews, Jr., Field Supervisor and therefore should be considered the comments of the Service and Kentucky Field Office. We appreciate the opportunity to provide input on the proposed project(s). If you have any questions on this comment letter or its contents, please contact me at (502) 695-0468, Ext.116.

Carrie L. Lona
U.S. Fish and Wildlife Service
330 W. Broadway, Rm. 265
Frankfort, KY 40601
502-695-0468 ext. 116

"Be the change you wish to see in the world."
~M. Gandhi
Mr. Joseph J. Blackburn, Acting Director
U. S. Department of the Interior
Office of Surface Mining
Lexington Field Office
2675 Regency Road
Lexington, KY 40503

RE: West Kentucky Multishaft III AML Reclamation Project (Henderson, Webster, Hopkins, McLean, Muhlenberg, and Ohio 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 maps, and problem area description (PAD) priority documentation forms, including problem area descriptions and an engineer’s cost estimates, for the above referenced project. The PAD’s for problem area #’s KY 3917-SGA, KY 2658-SGA, KY 2660-SGA, KY 2260-SGA, KY 3614-SGA, KY 1193-SGA, KY 3740-SGA, KY 2168-SGA, KY 3739-SGA, KY 3701-SGA, KY 1106-SGA, KY 1102-SGA have been prepared and entered into the AMLIS by the division. FOD approval for entry into AMLIS of the problems associated with Site 1 was granted on January 23, 2008. All of the other problems associated with this project fall within existing problem areas; therefore, OSM FOD approval for entry of the problems associated with Sites 2-12 is not required. 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’s, the eligibility determination and agency consultations will be made available to you upon request.

Also enclosed is an Environmental Assessment with four agency consultation response documents attached. DAML employees searched the Kentucky State Nature Preserves Commission (KSNPC) BIOTICS database and a memo regarding these findings is enclosed. The findings of this search indicates the lark sparrow at site 3 (Providence Lake Refuse) may be negatively impacted should the proposed work be performed between April 15 through July 15. If work inside this time period is necessary, a check of the area will be required to determine whether the species is present. The US Fish and Wildlife Service has also determined the whole state of Kentucky to be habitat for the Indiana bat.
Therefore, any clearing of trees that may negatively impact the Indiana bat in the proposed project sites will be restricted to the period from October 15 through March 31. As described in the attached memo regarding the KSNPC BIOTICS database search, dated November 21, 2007, none of the other species of concern should be negatively impacted by construction of this project.

The Kentucky Heritage Council (KHC) requested that we perform an archaeological survey of Site 2 (Diamond Mines) prior to reclamation to document the remains of historical mining structures. An archaeological survey was performed on February 7, 2008 at this site by an archaeologist employed by the Division of Mine Reclamation and Enforcement (DMRE). The archaeologists completed the survey and recommended that no further investigation of site 2 should be required. As a result, KHC determined that there are no historic properties present within the undertaking's area of potential impact. KHC's findings are conditioned on the receipt of a complete archaeological report by May 3, 2008. A copy of the archaeological report will be sent to KHC.

The other consulted state agencies had no objections to the project. A WQC is not required, and according to our design branch staff (see attachment), no portion of the proposed project falls within a regulated floodplain.

Overall, the project is a Priority One. The project is estimated to cost $882,903.00, exclusive of "in-house" personnel costs associated with project administration. A breakdown of this estimate is as follows: $881,903.00 for construction and $1,000.00 for support, including bid activities. The principal benefits to be derived from the successful completion of the project are eliminating the danger posed to the public by 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

SH:BO:RH:tym

Enclosures
West Kentucky Multishaft III AML Reclamation Project
Henderson, Webster, Hopkins, McLean, Muhlenberg, Ohio Counties

Description

The proposed project consists of approximately 60.3 acres total, and includes 12 sites in 6 counties located in Western Kentucky. The majority of the reclamation involves backfilling and grading of mine pits and subsidence related depressions and holes. Additional work will address the reclamation of vertical shafts, adits, highwalls, refuse piles, drainage problems, and removal of domestic debris and mining structures.

Site 1, approximately 2.0 acres, is located in Henderson County approximately 2 miles northwest of the intersection of KY 60 and KY 1078 on the R.G. Harrison property. Reclamation at this site involves removal of domestic/mining debris from a water filled subsidence hole. The depression will then be backfilled with rock and capped with a shaft monument. A temporary low water crossing will be installed in order to cross an intermittent stream. Access to the project area is by existing roads, and residential maintained driveways and properties.

Site 2, approximately 4.0 acres, is located in Webster County approximately 0.4 mile north from the intersection of KY 85 and Bill Doris Road. Reclamation consists of the removal of concrete foundations and debris from a processing area and tipple. The roadside ditch along Bill Doris Road will have refuse material removed from it, and will be reconstructed. Approximately 4 acres of refuse and spoil will be buried onsite using underlying material excavated within the project area along with material from adjacent spoil ridges. Access to the project area is by existing roads.

Site 3, approximately 16.0 acres, is located in southwestern Webster County approximately 0.7 mile northeast from where Crittenden, Caldwell, and Webster Counties converge. Reclamation consists of grading and covering approximately 16 acres of spoil and refuse ridges with onsite material. Appropriate drainage control structures and limestone will also be added to provide for drainage controls and adjust pH levels. Access to the project area is by Jennings Cemetery Road.
Site 4, approximately 1.5 acres, is located in Hopkins County approximately 0.5 mile south of the intersection of KY 1034 and KY 502. Reclamation consists of capping a shaft entry with a shaft monument and filling approximately 6 subsidence depressions with rock. Access to the project area is by KY 502.

Site 5, approximately 30 acres, is located in Hopkins County approximately 0.8 mile south of the intersection of KY 70 and KY 109 in Beulah. Reclamation consists of the removal of domestic/mining debris and burying refuse onsite. The refuse will be buried and covered with an agricultural limestone barrier and then covered with material presently buried beneath the refuse. Access to the project area is by KY 109.

Site 6, approximately 2.0 acres, is located in Hopkins County approximately 2 miles northeast of the intersection of the Western Kentucky Parkway and KY 109. Reclamation consists of the removal of domestic/mining debris from 4 subsidence holes. The subsidence holes will then be filled with rock and capped with spoil material. Access to the project area is by KY 109, and residential maintained driveways and properties.

Site 7, approximately 25.0 acres, is located in Hopkins County and has two separate sites located approximately 1000' from each other. The southern site is Melton Lake, which is approximately 0.8 mile northeast from the intersection of KY 62 and KY 112. Reclamation at the lake consists of adding limestone rock and limestone sand to two existing natural drains that enter Melton Lake. Agricultural limestone will also be blown across the lake to neutralize acidity. Reclamation on the northern section of the site consists of using spoil ridges adjacent to existing highwall pits to cover an exposed coal seam, which generates acid water, and to promote positive drainage from the pits into existing natural drains. The highwalls will be partially backfilled in the process of filling the pits. Several existing natural drains, along with several silt trap structures to be built, will be lined with limestone rock and/or limestone sand. A new culvert will also be installed under the county road, and the existing drainage channel to Coppers Creek will be cleaned and lined with limestone rock. No work will occur within the creek. Access to the project area is by existing roads, and residential maintained driveways and properties.
Sites 8, approximately 5.0 acres, and 9, approximately 1.0 acre, are located in Hopkins County within approximately 600' from each other, and are shown as being in the same project limits. Site 8, which is the northern section of the project area, is approximately 1.25 miles south of the intersection of KY 336 and KY 41A. This area is immediately south of the new KY 2171, which is not shown on the attached topographic map. Reclamation for this section consists of draining an existing pit and backfilling and/or grading the pit with onsite spoil material to prevent future water impoundment. A culvert will be installed under KY 2171. The existing highwall will be partially backfilled with a chain-link safety fence installed along the top of the highwall for safety. A subsidence depression located to the east of the water filled pit will be backfilled with rock and capped with spoil material and a shaft monument. Reclamation at site 9 consists of the removal of domestic/mining debris from a subsidence depression. The depression will then be filled with rock and capped with onsite spoil material. Access to the project areas is by existing roads, and residential maintained driveways and properties.

Site 10, approximately 0.5 acre, is located in McLean County approximately 0.75 mile east of the intersection of KY 85 and KY 891. Reclamation consists of installing appropriate drainage ditches with limestone sand to add alkalinity to the water and cleaning out and/or replacing existing culverts. Access to the site is by Fox Hollow Road, and residential maintained driveways and properties.

Site 11, approximately 0.3 acre, is located in Muhlenberg County approximately 1.1 miles northwest of the intersection of KY 2107 and KY 70/US 431. Reclamation consists of the removal of domestic/mining debris from a subsidence depression. The subsidence depression will then be filled with rock and capped with a shaft monument. Access to the project area is by existing roads, and residential maintained driveways and properties.

Site 12, which has no acreage, is located in Ohio County approximately 800' south of the intersection of KY 2670 and KY 1245. Reclamation consists of replacing bars on two previously closed mine openings. Access to the project area is by existing roads, and residential maintained driveways and properties.

A stringently formulated sediment and erosion control program, consisting of such measures as hay-bale silt checks and prompt re-vegetation using agricultural
limestone, fertilizer, seed, mulch, and netting as required will be implemented on all areas disturbed by this project. No off-site waste/borrow area is required. No disturbance of a perennial stream or floodplain is planned. Only site 1 will encroach upon an “intermittent blue stream.” Access to most of the project areas is by existing roads, and residential maintained driveways and properties. Any possible clearing of trees from the project sites will be restricted to the period from October 15 through March 31. All mining and domestic debris found within the project sites will be appropriately disposed of in an approved landfill. All areas to be disturbed by this project have been previously disturbed by coal mining, residential activities, or road construction.
ENVIRONMENTAL ASSESSMENT

West Kentucky Multishaft III AML Reclamation Project
Henderson, Webster, Hopkins, McLean, Muhlenberg, Ohio Counties, Kentucky

A. Description of the Proposed Action:

The proposed project (approximately 60.3 acres total) includes 12 sites in 6 counties located in Western Kentucky. The majority of the reclamation involves backfilling and grading of mine pits and subsidence related depressions and holes. Additional work will address the reclamation of vertical shafts, adits, highwalls, refuse piles, drainage problems, and removal of domestic debris and mining structures. All impacts associated with this reclamation project stem from AML eligible coal mining operations. The sites can be found on the following Kentucky 7.5' USGS quadrangles:

- Site 1 (R. G. Harrison): Henderson Quadrangle
- Site 2 (Diamond Mines Refuse): Providence Quadrangle
- Site 3 (Providence Lake): Providence Quadrangle
- Site 4 (Coiltown Subsidence): Coiltown Quadrangle
- Site 5 (Newbury Refuse): Coiltown Quadrangle
- Site 6 (Hendrix Subsidence): Dawson Springs Quadrangle
- Site 7 (Alma Melton Highwalls): St. Charles Quadrangle
- Site 8 (Bevil Highwall): Madisonville West Quadrangle
- Site 9 (Kerlick Subsidence): Madisonville West Quadrangle
- Site 10 (Baldwin Drainage): Livermore Quadrangle
- Site 11 (Houle Shaft): Drakesboro Quadrangle
- Site 12 (Chinn Portal): Hartford Quadrangle

B. Need for the Proposed Action

Mining, which occurred before May 18, 1982, created all problems associated with this project. These problems include:

- Hazards to public health, safety, and welfare created from multiple subsidence depressions, mine openings, dilapidated structures, domestic and mining debris, impoundments, acid mine drainage, sedimentation, and spoil and refuse piles.

The problems are further described in the following descriptions for National AML Inventory Problem Areas: KY 3917-SGA (Site 1), KY 2658-SGA (Site 2), KY 2660-SGA (Site 3), KY 2260-SGA (Site 4), KY 3614-SGA (Site 4), KY 1193-SGA (Site 5), KY 3740-SGA (Site 6), KY 2168-SGA (Site 7), KY 3739-SGA (Site 8 and Site 9), KY 3701-SGA (Site 10), KY 1106-SGA (Site 11), and KY 1102-SGA (Site 12).

C. Alternatives Considered:

The following alternatives were considered for reclamation of the project sites.
• Removal of domestic/mining debris and mining structures from the sites.
• Fill and cap subsidence depressions with methods involving items such as rock, spoil materials, agricultural limestone, underlying materials, and/or a shaft monument.
• Backfill pit impoundments and highwalls.
• Excavation and burial of coal refuse and spoil piles onsite.
• Drainage ditch construction and/or repair.
• Add limestone to drainage ditches and water bodies to neutralize acidity.
• Culvert replacement and/or construction.
• Install a safety fence above a partially-backfilled highwall.
• Replace bars on two previously closed mine openings.

Or:

• Take no corrective action at this time.

C.1. Preferred Alternative:

In this project, the Kentucky Division of Abandoned Mine Lands proposes to take the following actions:

At site 1 (R.G. Harrison):
• Removal of domestic/mining debris from a water filled subsidence hole.
• Backfill the subsidence hole with rock and cap with a shaft monument.

At site 2 (Diamond Mines):
• Removal of concrete foundations and debris from a processing area and tipple.
• Removal of refuse from a roadside ditch along Bill Doris Road.
• Reconstruction of the roadside ditch along Bill Doris Road.
• Onsite excavation and burial of coal refuse and spoil using underlying materials within the project limits.

At site 3 (Providence Lake):
• Grade and cover approximately 16 acres of spoil and refuse ridges with onsite material.
• Construction of drainage control structures and the use of limestone to provide drainage controls and adjust pH levels.

At site 4 (Coiltown Subsidence):
• Backfill approximately 6 subsidence depressions with rock.
• Cap a shaft entry with a shaft monument.

At site 5 (Newbury Refuse):
• Remove domestic/mining debris.
• Bury and cover refuse onsite with an agricultural limestone barrier and material presently buried onsite.
At site 6 (Hendrix Subsidence):
- Removal of domestic/mining debris from 4 subsidence depressions.
- Backfill the subsidence holes with rock and cap with spoil material.

At site 7 (Alma Melton Highwalls):
- Agricultural limestone will be blown across Melton Lake to neutralize acidity.
- Backfill highwall pits with spoil ridges to cover an exposed acid producing coal seam, and promote positive drainage from the pits into existing natural drains.
- Construct silt trap structures and line several existing natural drains with limestone rock and/or limestone sand.
- Construct a culvert under the county road.

At site 8 (Bevil Highwall):
- Drain an existing pit and backfill and/or grade the pit with onsite spoil material.
- Construct a new culvert under KY 2171.
- Install a chain-link safety fence at the top of a partially backfilled highwall.
- Backfill a subsidence depression with rock and cap with spoil material and a shaft monument.

At site 9 (Kerlick Subsidence):
- Removal of domestic/mining debris from a subsidence depression.
- Fill the subsidence depression with rock and cap with spoil material.

At site 10 (Baldwin Drainage):
- Install appropriate drainage ditches with limestone sand.
- Clean out and/or replace existing culverts.

At site 11 (Houle Shaft):
- Removal of domestic/mining debris from a subsidence depression.
- Fill the subsidence depression with rock and cap with a shaft monument.

At site 12 (Chinn Portal):
- Replace bars on two previously closed mine openings.

At all sites:
- Ditches and subdrains will be installed to capture and control drainage as necessary.
- All areas disturbed by construction will be graded to a smooth, naturally draining contour and revegetated, as soon as practical, using agricultural limestone, fertilizer, seed, mulch, and netting as needed.
C.2. No Action:

Should the Commonwealth of Kentucky take no corrective action, the previously described problems will likely result in further property damage, environmental degradation and risk of bodily injury or loss of life.

D. Affected Environment:

D.1. General Setting:

At site 1 (R.G. Harrison):
- The R.G. Harrison project site, approximately 2.0 acres, is located in Henderson County approximately 2 miles northwest of the intersection of KY 60 and KY 1078.
- A water and trash filled depression associated with a shaft entry is located next to a railroad track and farm field.
- A temporary low water crossing will have to be installed to cross the intermittent stream.
- The site can be accessed using existing roads, residually-maintained driveways and properties, and the above mentioned temporary low water crossing.

At site 2 (Diamond Mines Refuse):
- The Diamond Mines Refuse project site, approximately 4.0 acres, is located in Webster County approximately 0.4 mile north of the intersection of KY 85 and Bill Doris Road.
- Concrete foundations and debris from a processing area and tipple exist at the site.
- Coal refuse material scattered throughout the project site will be buried onsite.
- Coal refuse in the roadside ditch will be removed and the ditch will be reconstructed as necessary.
- Access to the project site is by Bill Doris Road.

At site 3 (Providence Lake):
- The Providence Lake project site, approximately 16.0 acres, is located in Webster County approximately 0.7 mile northeast from where Crittenden, Caldwell, and Webster counties converge.
- Spoil and coal refuse ridges extend through the site.
- Appropriate drainage control structures and limestone will be added onsite to control runoff that enters Providence Lake and a post-law mine pond.
- Access to the project site is by Jennings Cemetery Road.

At site 4 (Coiltown Subsidence):
- The Coiltown Subsidence project site, approximately 1.5 acres, is located in Hopkins County approximately 0.5 mile south of the intersection of KY 1034 and KY 502.
- A shaft entry to be sealed and capped with a shaft monument is located in the northern section of the project site.
- At least 6 subsidence depressions exist in close proximity to KY 502.
- Access to the project site is by KY 502 and residually-maintained properties.
At site 5 (Newbury Refuse):
- The Newbury Refuse project site, approximately 30 acres, is located in Hopkins County approximately 0.8 mile south of the intersection of KY 70 and KY 109 in Beulah.
- Dilapidated structures and other mining/domestic debris exist throughout the site.
- Large barren acidic areas will be buried and covered with agricultural limestone and a layer of material currently buried onsite.
- Access to the project site is by KY 109 and residentially-maintained properties.

At site 6 (Hendrix Subsidence):
- The Hendrix Subsidence project site, approximately 2.0 acres, is located in Hopkins County approximately 2 miles northeast of the intersection of the Western KY Parkway and KY 109.
- Four subsidence depressions filled with domestic/mining debris exist within close proximity to multiple houses along KY 109.
- Access to the project site is KY 109 and residentially-maintained properties and driveways.

At site 7 (Alma Melton Highwalls):
- The Alma Melton Highwalls site, approximately 25.0 acres, is located in Hopkins County and has two separate sites located approximately 1000’ from each other.
- The southern portion of this site is Melton Lake, which is approximately 0.8 mile northeast form the intersection of KY 62 and KY 112.
- Two existing natural drains entering Melton Lake will have limestone rock and limestone sand added to neutralize acidity.
- Melton Lake will also have agricultural limestone blown across the lake to help neutralize acidity.
- The northern section of the project site has existing spoil ridges that will be used to backfill several highwall impoundments.
- Backfilling will cover the exposed coal seam in the highwall that generates acid mine drainage, and promote positive drainage from the pits into existing natural drains.
- Several existing natural drains, along with several silt trap structures to be built, will be lined with limestone rock and/or limestone sand.
- A new culvert will be constructed under the county road.
- Access to the project site is by existing roads, residentially-maintained properties and driveways, and coal access roads.

At site 8 (Bevil Highwall):
- The Bevil Highwall project site, approximately 5.0 acres, is located in Hopkins County within approximately 1.25 miles south of the intersection of KY 336 and KY 41 A.
- The Bevil Highwall project site is immediately south of the new KY 2171.
- An abandoned flooded mine pit covering approximately 0.4 acre will be drained, backfilled, and/or graded with spoil material to prevent future water impoundment.
- Approximately 300’ of highwall will be partially backfilled with spoil material.
- A chain-link safety fence will be installed at the top of the highwall.
- A culvert will be constructed under the county road.
• A subsidence depression will be backfilled with rock and capped with surrounding spoil material and a shaft monument.
• Access to the project site is by KY 2171, KY 41 A, residentially-maintained properties and driveways, and coal access roads.

At site 9 (Kerlick Subsidence):
• The Kerlick Subsidence project site, approximately 1.0 acre, is located in Hopkins County approximately 600’ south of site 8.
• A domestic/mining-debris-filled subsidence depression is located approximately 40’ west of KY 41A.
• The subsidence depression is located in close proximity to multiple residences located to the west.
• Trash will be removed from the depression and will be filled with rock and capped with onsite spoil material.
• Access to the project site is by KY 41 A, and residentially-maintained properties and driveways.

At site 10 (Baldwin Drainage):
• The Baldwin Drainage project site, approximately 0.5 acre, is located in McLean County approximately 0.75 mile east of the intersection of KY 85 and KY 891.
• An approximately 300’ drainage ditch will be constructed to control drainage away from two residences located nearby that have flooded in the past.
• Culverts at the project site will be cleaned out or replaced as necessary.
• Access to the project site is by Fox Hollow Road, and residentially-maintained properties and driveways.

At site 11 (Houle Shaft):
• The Houle Shaft project site, approximately 0.3 acre, is located in Muhlenberg County approximately 1.1 miles northwest of the intersection of KY 2107 and KY 70/US 431.
• One residence is located within close proximity to the subsidence depression.
• Domestic/mining debris will be removed from the subsidence depression.
• Evidence suggests some of the debris within the depression has burnt in the past.
• The subsidence depression will be filled with rock and capped with a shaft monument.
• Access to the project site is by KY 2107, residentially-maintained properties and driveways, and existing access roads.

At site 12 (Chinn Portal):
• The Chinn Portal project site is located in Ohio County approximately 800’ south of the intersection of KY 2670 and KY 1245 in the city of McHenry.
• Two previously closed mine openings will have missing bars replaced to properly close the entrance.
• Access to the project site is by KY 1245, and residentially-maintained properties and driveways.
At all sites:
- Primary land use includes forest, farm, residential and coal mining.
- Mining disturbed all project areas.

D.2. Affected Resources:

The following agencies and databases were consulted to identify resources that occur in the project vicinity. Replies from the agencies are attached.

- Kentucky Heritage Council (KHC)
- Office of State Archaeology (OSA)
- Kentucky Division of Mine Reclamation and Enforcement (DMRE)
- Kentucky Department of Fish and Wildlife Resources (KDFWR)
- Kentucky State Nature Preserves Commission (KSNPC) BIOTICS database.

E. Environmental Impacts of the Proposed Alternatives:

E.1. Preferred Alternative:

The following resources will not sustain significant adverse impacts by the preferred reclamation alternative: historic/cultural, vegetation, soils, recreation, air quality, noise, topography, and other (socioeconomic or political). This project will not adversely impact low income or minority persons. Hydrology will be discussed, due to the use of a temporary low water crossing at site 1. Fish and Wildlife will be discussed due to the results of the search of the BIOTICS database maintained by the KSNPC, and comments made by the Kentucky Department of Fish and Wildlife. Due to concerns from the Office of State Archaeology, archaeological resources will also be discussed.

E.1.a. Hydrology:

The Kentucky Division of Abandoned Mine Lands (DAML) - Design Branch personnel, reviewed information concerning the proposed project sites, and determined that no floodplains or perennial streams will be disturbed. The Division of Mine Permits reviewed the proposed project sites and determined that a Water Quality Certification will not be required. A temporary low water crossing will encroach upon an intermittent blue line stream at site 1; however, this impact will be much less than the threshold required to notify the USACE by pre-construction notice, and is well under the threshold of the associated NW-14. In addition, all areas to be disturbed by this project will be protected from erosion and sedimentation by the implementation of a formulated erosion and sediment control program including, but not limited to, hay-bale silt checks, erosion control fence, and prompt vegetation of all disturbed areas. Therefore, the proposed project will cause no negative impacts to hydrologic resources.
E.1.b. Fish and Wildlife:

A search of the Kentucky State Nature Preserves Commission (KSNPC) BIOTICS database was performed to determine if any federally listed threatened or endangered species are known to exist within a ten mile radius of the proposed project sites, and if any species of state concern occur within one mile of the proposed project sites. The attached memo from November 21, 2007 lists the species identified during the search, and how the proposed work at each of the project sites may affect these species. An electronic version has also been attached below.

The findings of the search indicates the lark sparrow at site 3 (Providence Lake Refuse) may be negatively impacted should the proposed work be performed between April 15 through July 15 time period. If work inside this time period is necessary, a check of the area will be needed to determine whether the species is present.

The US Fish and Wildlife Service has determined the whole state of Kentucky to be habitat for the Indiana bat (USESA Endangered). Therefore, any clearing of trees that may negatively impact the Indiana bat in the proposed project sites will be restricted to the period from October 15 through March 31.

The US Fish and Wildlife Service indicated the federally protected gray bat, *Myotis grisescens*, also occurs within this portion of the state. This bat is discussed in the attached database search memo, and does not appear to be negatively impacted from proposed project work.

No other species appears to have negative impacts from the proposed project.

E.1.c Archaeological Resources:

Site 2 (Diamond Mines Refuse) contains concrete foundations and debris associated with a coal processing area and tipple that are greater than 50 years of age (last mining in 1954). At the request of the Kentucky Heritage Council (KHC), an archaeological survey was performed on February 7, 2008 by an archaeologist employed by the Division of Mine Reclamation and Enforcement (DMRE). The remains of the tipple for the Diamond Coal Company Mine No. 1 were recorded during this survey, and no other remains associated with this mining were observed. Because of the fragmented nature of the remains and recent disturbance, this site was not considered to be eligible for listing in the National Register of Historic Places. DMRE’s archaeologist recommended that no further investigation of the proposed permit area should be required. This information was provided to KHC. As a result, KHC determined that there are no historic properties present within the undertaking’s area of potential impact. KHC’s findings are conditioned on the receipt of a complete archaeological report by May 3, 2008. A copy of the archaeological report will be sent to KHC.
E.1.d Cumulative Environmental Impacts:

Previous reclamation was performed by this division in the watershed of site 3 (Providence Lake). Approximately 7.5 acres of clogged stream land (CSL) was reclaimed during the Providence Coal Yard and Shafts Reclamation Project in the Commonwealth’s 18th Annual AML Grant (PA# KY 2660). Proposed reclamation associated with the proposed project consists of grading and covering spoil and refuse ridges, which are susceptible to erosion and sedimentation problems which may generate acidic water.

Previous reclamation was performed by this division in the watershed of site 4 (Coiltown Subsidence). Approximately 67.6 acres of clogged stream lands were reclaimed during the Coiltown Mines/Pits AML Reclamation Project in the Commonwealth’s 20th Annual AML Grant (PA# KY 2260). One vertical opening was reclaimed as Coiltown Site 1 in the Multisite West Kentucky Shafts-II Reclamation Project in the 22nd Annual AML Grant (PA# KY 3614). The proposed reclamation involves filling approximately six subsidence depressions and one shaft entry.

Previous reclamation was performed by this division in the watershed of site 5 (Newbury Refuse). Two areas containing abandoned hazardous equipment, 74 acres of clogged stream lands, and one mine opening were reclaimed during the Clear Creek Reclamation Project-Phase II in the 4th Annual AML Construction Grant (PA# KY 1193). Proposed reclamation work involves burying refuse material that degrades the environment and is susceptible to causing sedimentation problems.

Previous reclamation was performed by this division in the watershed of site 7 (Alma Melton Highwalls). Two portal entries were reclaimed under the Commonwealth's 6th Annual AML Construction Grant "Russell Ridge" Reclamation Project. The Crabtree Mine Reclamation Project in the 7th Annual AML Construction Grant is reported to have reclaimed 81.9 acres of clogged stream land and one site with hazardous equipment. The Multisite West Kentucky Shafts Reclamation Project in the 12th Annual AML Grant reclaimed eight portal entries. The Ilsley Highwall-II Reclamation Project in the 13th Annual AML Grant is reported to have reclaimed two hazardous water bodies, a vertical opening, and 0.3 acres of subsidence. Hazardous equipment was also reclaimed south of the previously mentioned hazardous equipment during the Ilsley Coke Ovens Reclamation Project in the 18th Annual AML Grant. Information concerning the above mentioned problems can be found in PA# KY 2168.

Proposed project work will enhance environmental conditions by eliminating acid mine drainage, controlling drainage, and cleaning out sedimentation within existing drains.

Previous reclamation was performed by this division in the watershed of site 11 (Houle Shaft). The Pond Creek Reclamation Project-Phase II in the 3rd Annual AML Construction Grant (PA# KY 1106) is reported to have reclaimed approximately 102 miles of clogged stream, 33 acres of subsidence, and two vertical openings. The proposed work involves reclaiming a subsidence depression.
Previous reclamation was performed by this division at site 12 (Chinn Portal). The proposed reclamation at this site involves replacing bars at the entrance to two portals previously closed during the McHenry-Phase I Reclamation Project in the 3rd Annual Grant (PA# KY 1102.)

None of the remaining sites have any previous AML or OSM projects or ongoing projects within the watersheds. Previous AML work at the areas mentioned above did not produce a negative environmental impact within their associated watersheds and the proposed work of our planned West Kentucky Multishift III AML Reclamation Project should not produce negative environmental impacts. In fact, environmental conditions should improve in the associated watersheds as a result of our proposed project. As a result, the preferred alternative should not contribute to any adverse cumulative environmental impacts from completed AML or OSM projects. Successful reclamation of the AML features to be addressed under the preferred alternative should reduce the continuing cumulative environmental impacts to the associated watersheds caused by improperly reclaimed or unreclaimed pre-law coal mining.

E.2. No Action Alternative:

E.2.a. Hydrology:

Should the commonwealth take no action, existing hydrologic conditions could be affected due to acid mine drainage and the continued sedimentation caused by the drainage problems.

E.2.b. Fish and Wildlife:

The no action alternative could cause a negative impact to species due to acid mine drainage and continued sedimentation.

E.2.c. Heritage:

Should the commonwealth take no action, the concrete foundations will continue to be a hazard to anyone that may visit or ride ATV vehicles in the area.

E.2.d. Cumulative Environmental Impacts:

The Kentucky Division of Abandoned Mine Lands has no other planned or ongoing projects in the vicinity of the proposed project sites in the West Kentucky Multishift III AML Reclamation Project. The no action alternative would result in the continued hazards to human health and safety caused by the multiple subsidence depressions, mine openings, dilapidated structures, domestic and mining debris, impoundments, acid mine drainage, sedimentation, and spoil and refuse piles.

F. Summary:

The Commonwealth considered two reclamation options:

- Removal of domestic/mining debris and mining structures from the sites.
• Fill and cap subsidence depressions with methods involving items such as rock, spoil materials, agricultural limestone, underlying materials, and/or a shaft monument.
• Backfill pit impoundments and highwalls.
• Excavation and burial of coal refuse and spoil piles onsite.
• Drainage ditch construction and/or repair.
• Add limestone to drainage ditches and water bodies to neutralize acidity.
• Culvert replacement and/or construction.
• Install a safety fence above a partially-backfilled highwall.
• Replace bars on two previously closed mine openings.

Or:

• Take no corrective action at this time.

DAML selected the action alternative. It is the only option of those considered that may eliminate the continuing threats to health, safety, and the environment posed by the various problems associated with the project sites.

G. Consultations:

Agencies and databases consulted prior to the preparation of this document were:

• Kentucky Heritage Council (KHC)
• Office of State Archaeology (OSA)
• Kentucky Division of Mine Reclamation and Enforcement (DMRE)
• Kentucky Department of Fish and Wildlife Resources (KDFWR)
• Kentucky State Nature Preserves Commission (KSNPC) BIOTICS database.

H. Preparers/Reviewers:

Kentucky Division of Abandoned Mine Lands Personnel

Ryan Howell, Environmental Technologist III
Edwin A. Boone Jr., Environmental Technologist III, DAML Staff Biologist
Bill Overman, Environmental Control Supervisor
Carl B. Hays, Program Development Branch Manager

[Signature]
Steve Hohmann, Director

3/10/08
Date
MEMORANDUM

To: West Kentucky Shafts - III AML Water Supply Project file

From: Edwin A. Boone, Jr., Environmental Technologist III, Staff Biologist

Through: Carl B. Hays, Branch Manager, Program Development Branch

Re: Results of Kentucky State Nature Preserves Commission (KSNPC) database search

Date: November 21, 2007

On Monday, November 19, 2007, I conducted eleven searches of the KSNPC database in order to determine if any federally listed threatened and endangered species are known to occur within the general area (a 10 mile radius) of the twelve construction sites proposed for work under this project. These searches revealed that numerous species monitored by the KSNPC within one mile or listed as Threatened or Endangered under the United States Endangered Species Act (USESA) are known to exist within ten miles of project sites. These sites, with the exception of sites 8 and 9 (Bevil Highwall and Kerlick Subsidence) are each relatively widely spaced from one another. Therefore, eleven separate searches were conducted, and each will be detailed below.

Site 1 (R.G. Harrison Subsidence):

- Sheepnose (*Plethobasus cyphyus* – KSNPC Endangered/USESA Candidate)
- Rose turtlehead (*Chelone oblique var. speciosa* – KSNPC Special Concern)
- Blue scorpion-weed (*Phacelia ranunculacea* – KSNPC Special Concern)
- American burying beetle (*Nicrophorus americanus* – USESA Endangered – Extirpated)
- Indiana bat (*Myotis sodalis* – USESA Endangered)

Reclamation activities at this site include clearing debris from and then backfilling a water filled hole, which resulted from underground mine subsidence. Construction of a low water crossing over a channelized intermittent stream will be needed in order to provide heavy equipment access to the site.

The sheepnose is a unionid mussel of large rivers. Construction activities at this site will not impact any perennial streams, and the use of a stringently formulated sediment and erosion control plan including such measures as hay-bale silt checks and prompt revegetation of all disturbed areas will prevent sediments resulting from construction related disturbances from
reaching area streams. Therefore, the sheepnose will not suffer a negative impact due to project-related construction activities.

The rose turtlehead is a plant of floodplain and alluvial forest, swamps and sloughs. The site is located in a very small woodlot at the edge of an agricultural field. Tree cover surrounding the hole consists of a relatively thin stand of mostly pole-sized trees. It appears that this site had been cleared until relatively recently. While the area remains damp due to the presence of the water-filled hole, this site does not approximate the conditions of its preferred habitat. Therefore, construction at this site will not negatively impact this species.

The blue scorpion-weed is an understory plant of forests on alluvial soils and on floodplains. This site, as described above, does not approximate the high quality habitat preferred by this species. Therefore, the blue scorpion-weed should not be impacted by project-related construction.

The American burying beetle is a carnivorous beetle that feeds upon carrion. The limiting factor for this species does not appear to be any particular type of habitat, but rather the availability of its food source. This species is also presumed to be extirpated from Kentucky, with its last known occurrence near this proposed project site being in 1921. Due to these considerations, it is highly unlikely that any of the proposed activities at this site could potentially have a significant negative impact upon this species.

Site 2 (Diamond Mines Refuse):

- Dukes' skipper (*Euphyes dukesi* – KSNPC Special Concern)
- Gray bat (*Myotis grisescens* – USESA Threatened)

Reclamation activities at this site include the removal of an abandoned tipple structure, and theRegarding and covering of approximately 4 acres of mine refuse. The cover material will be harvested from native soils in place beneath the refuse and from surrounding mine spoil ridges.

The dukes' skipper is a member of the order Lepidoptera (butterflies, skippers, and moths). Its preferred habitat consists of tupelo swamps, though it will utilize shaded marshes and ditches, particularly in the Midwest, where tupelo swamps are absent. The rather stringent habitat requirements of this species cause it to be highly restricted in its current range. This proposed project construction site consists of barren coal spoils and coal mine spoil ridges that are covered
with thin, scrubby trees. Neither of the habitat types available at this site approximates the preferred habitat of this species. Therefore, construction activities at this site will not negatively impact this species.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. As construction activities at this site will not impact any cave-like structures, negative impact to this species will not occur as a result.

Site 3 (Providence Lake Refuse):

- Dukes' slipper (*Euphyes dukesi* — KSNPC Special Concern)
- Copperbelly water snake (*Nerodia erythrogaster neglecta* — KSNPC Special Concern)
- Lark Sparrow (*Chondestes grammacus* — KSNPC Threatened)
- Gray bat (*Myotis grisescens* — USESA Threatened)

Proposed reclamation activities at this site consist of grading and covering approximately 16 acres of mine spoils and refuse, and the installation of appropriate drainage control structures. Soil material utilized for covering the coal waste is to be harvested on site.

The dukes' skipper is a member of the order Lepidoptera (butterflies, skippers, and moths). Its preferred habitat consists of tupelo swamps, though it will utilize shaded marshes and ditches, particularly in the Midwest, where tupelo swamps are absent. The rather stringent habitat requirements of this species cause it to be highly restricted in its current range. Neither of the habitat types available at this site approximates the preferred habitat of this species. Therefore, construction activities at this site will not negatively impact this species.

The copperbelly water snake is a subspecies of the red-bellied water snake that prefers floodplain sloughs, swamps, and adjacent uplands. It has been noted to strongly avoid acidic areas. While a number of ponds and small lakes are very near to the proposed project site, a relatively large proportion of the site is covered by barren, acidic mine wastes and spoils. The remainder of the site consists of mine spoil ridges that are thinly forested. This site does not appear to approximate the habitat conditions preferred by the copperbelly water snake. Therefore, this species should not suffer a negative impact as a result of project-related construction activities at this site.
The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This site does contain a thinly vegetated area of mine spoils and coal waste, which may approximate the preferred habitat of this species. Other portions of the site are covered with sparse shrubs and trees. This species begins nesting in the last half of April, and normally raises one brood, with most clutches complete in early June. Some pairs rear two broods, however, with late clutches completed in early July. Clearing and working this site outside of an April 15 through July 15 time period should prevent any negative impact to this species. If work inside this time period is necessary, a check of the area will be needed in order to determine whether the species is present.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. As construction activities at this site will not impact any cave-like structures, negative impact to this species will not occur as a result.

**Site 4 (Coiltown Subsidence):**

- Bachman’s sparrow (*Aimophila aestivalis* - KSNPC Endangered)
- Lark sparrow (*Chondestes grammacus* - KSNPC Threatened)
- Gray bat (*Myotis grisescens* - USESA Threatened)

Construction activities at this site consist of closure of an underground mine shaft and the filling of several underground mine subsidence depressions with heavy stone. The site is largely vegetated in shrubs and brush, though a few trees are present. The area of the subsided underground mine air shaft is an open field.

Bachman’s sparrow is a ground-nesting bird with relatively rigid habitat requirements. It prefers a combination of hillsides with some bare ground, some native grasses and forbs, patches of blackberries and scattered trees, typically evergreens. This proposed construction site does not contain this type of habitat, and this species is thought to be possibly extirpated from the state. It has not been noted in the vicinity of the complaint site since 1965 and, as of the publication of the Kentucky Breeding Bird Atlas in 1996, it had not been noted in the state since the summer of 1989. However, as the preferred habitat of this species is not present at this site,
construction activities will not negatively impact this species, even if it is still extant within the state.

The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This site does not approximate the preferred habitat of this species. Therefore, construction at this site will not negatively impact this species.

The gray bat is a troglobiotic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. None of the subsidence holes offer acceptable access to the underground mine workings for usage by bats. The underground mine air shaft to be addressed at this site was previously backfilled, but the fill material has subsided. Therefore, it does not offer access to the underground mine workings, either. Therefore, construction at this site will not negatively impact the gray bat.

Site 5 (Newbury Refuse):

- Bird-voiced treefrog (*Hyla avivoca* – KSNPC Special Concern)
- Bachman’s sparrow (*Aimophila aestivalis* – KSNPC Endangered)
- Lark sparrow (*Chondestes grammacus* – KSNPC Threatened)
- Sedge wren (*Cistothorus platensis* – KSNPC Special Concern)
- Gray bat (*Myotis grisescens* – USESA Threatened)

Construction activities at this site are to consist of the regrading and covering of an area of largely barren coal waste, which is liberally strewn with residential debris. The debris will be removed, and the coal waste will be excavated, and the native soil material that is buried beneath it will be harvested and used to cover the waste, when it is replaced.

The bird-voiced treefrog is an amphibian of floodplain wetlands. This site does not meet the habitat requirements of this species. Therefore, construction activities at this site will not negatively impact the bird-voiced treefrog.

Bachman’s sparrow is a ground-nesting bird with relatively rigid habitat requirements. It prefers a combination of hillsides with some bare ground, some native grasses and forbs, patches of blackberries and scattered trees, typically evergreens. This proposed construction site does
not contain this type of habitat, and this species is thought to be possibly extirpated from the state. It has not been noted in the vicinity of the complaint site since 1965 and, as of the publication of the Kentucky Breeding Bird Atlas in 1996, it had not been noted in the state since the summer of 1989. However, as the preferred habitat of this species is not present at this site, construction activities will not negatively impact this species, even if it is still extant within the state.

The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This barren site does not approximate the preferred habitat of this species. Therefore, construction at this site will not negatively impact this species.

Within the greater portion of its range, the sedge wren typically nests in moist meadows and along the grassy margins of marshes and bogs. However, in Kentucky, where these habitats are near absent, it is known from hayfields, overgrown pastures, and fallow fields, with a preference for more wet habitats, though they avoid marshes. Thick herbaceous cover is a strict requirement. As this site does not remotely approximate the preferred habitat of this species, the sedge wren will not suffer a negative impact due to construction activities at this site.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. No caves or similar structures, such as underground mines, will be affected by construction of this project. Therefore, construction at this site will not negatively impact the gray bat.

Site 6 (Hendrix Subsidence):

- Tall bush-clover (Lespedeza stuevei – KSNPC Special concern)
- Bachman’s sparrow (Aimophila aestivalis – KSNPC Endangered)
- Lark sparrow (Chondestes grammacus – KSNPC Threatened)
- Gray bat (Myotis grisescens – USESA Threatened)

Proposed construction activities at this site consist of the filling of four underground mine subsidence holes with heavy stone, following the removal of quantities of domestic debris from the holes. These subsidence structures do not offer access to underground mine workings.
The tall bush-clover is known from dry woodlands. This site consists of grassy areas interspersed with areas of trees. The frequent traffic at this site and the presence of large amounts of domestic debris, as well as the low-lying conditions make it unlikely that the tall bush-clover would be present at this site. Therefore, construction activities at this site should not negatively impact this species.

Bachman’s sparrow is a ground-nesting bird with relatively rigid habitat requirements. It prefers a combination of hillsides with some bare ground, some native grasses and forbs, patches of blackberries and scattered trees, typically evergreens. This proposed construction site does not contain this type of habitat, and this species is thought to be possibly extirpated from the state. It has not been noted in the vicinity of the complaint site since 1965 and, as of the publication of the Kentucky Breeding Bird Atlas in 1996, it had not been noted in the state since the summer of 1989. However, as the preferred habitat of this species is not present at this site, construction activities will not negatively impact this species, even if it is still extant within the state.

The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This site does not approximate the preferred habitat of this species. Therefore, construction at this site will not negatively impact this species.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. No caves or similar structures, such as underground mines, will be affected by construction of this project. Therefore, construction at this site will not negatively impact the gray bat.

Site 7 (Alma Melton Highwalls):

- Tall bush-clover (*Lespedeza stuevei* – KSNPC Special concern)
- Bachman’s sparrow (*Aimophila aestivalis* – KSNPC Endangered)
- Lark sparrow (*Chondestes grammacus* – KSNPC Threatened)
- Gray bat (*Myotis grisescens* – USESA Threatened)
Construction activities at this site are planned to consist of the placement of lime within the water body of Melton Lake, and within drainways leading into the lake, in order to neutralize existing acidic conditions and to attempt to prevent a return to an acidified state. Also, a nearby surface mine pit will be backfilled with spoils, and the adjacent spoil ridge areas will be reduced and regarded in order to rectify the current interrupted drainage pattern. Positive drainage of this area will be established and drainways will be lined with limestone rock in order to neutralize acidic water that has been flowing from the site.

The tall bush-clover is known from dry woodlands. This highly disturbed site does not approximate the preferred conditions of this species. Therefore, construction activities at this site should not negatively impact this species.

Bachman’s sparrow is a ground-nesting bird with relatively rigid habitat requirements. It prefers a combination of hillsides with some bare ground, some native grasses and forbs, patches of blackberries and scattered trees, typically evergreens. This proposed construction site does not contain this type of habitat, and this species is thought to be possibly extirpated from the state. It has not been noted in the vicinity of the complaint site since 1965 and, as of the publication of the Kentucky Breeding Bird Atlas in 1996, it had not been noted in the state since the summer of 1989. However, as the preferred habitat of this species is not present at this site, construction activities will not negatively impact this species, even if it is still extant within the state.

The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This site does not approximate the preferred habitat of this species. Therefore, construction at this site will not negatively impact this species.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. No caves or similar structures, such as underground mines, will be affected by construction of this project. Therefore, construction at this site will not negatively impact the gray bat.
Sites 8 & 9 (Bevil Highwall and Subsidence & Kerlick Subsidence):

- Bachman’s sparrow (Aimophila aestivalis – KSNPC Endangered)
- American bittern (Botaurus lentiginosus – KSNPC Historical Record)
- Lark sparrow (Chondestes grammacus – KSNPC Threatened)
- Gray bat (Myotis grisescens – USESA Threatened)

Construction at this site will consist of grading and draining a currently water-filled pit, the clearing of domestic debris from and backfilling of two subsidence holes, and the construction of a safety fence along the top of a remnant strip mine highwall. The area is vegetated with trees.

Bachman’s sparrow is a ground-nesting bird with relatively rigid habitat requirements. It prefers a combination of hillsides with some bare ground, some native grasses and forbs, patches of blackberries and scattered trees, typically evergreens. This proposed construction site does not contain this type of habitat, and this species is thought to be possibly extirpated from the state. It has not been noted in the vicinity of the complaint site since 1965 and, as of the publication of the Kentucky Breeding Bird Atlas in 1996, it had not been noted in the state since the summer of 1989. However, as the preferred habitat of this species is not present at this site, construction activities will not negatively impact this species, even if it is still extant within the state.

The American bittern is a wading bird, most commonly found in densely vegetated wetlands. This species is not known to be a breeding bird within Kentucky, and is today only known as a transient migrant. Though, there were reports of young too immature to fly being observed within scattered portions of Hopkins County between 1914 and 1943. The location near this site, Loch Mary in Earlington, was last noted as being a possible nesting site in 1914. As the Commonwealth is outside of the breeding range for this species, construction activities will not adversely affect the American bittern, even if it were found to be nesting in the region.

The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This site does not approximate the preferred habitat of this species. Therefore, construction at this site will not negatively impact this species.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for
maternity colonies. No caves or similar structures, such as underground mines, will be affected by construction of this project. Therefore, construction at this site will not negatively impact the gray bat.

**Site 10 (Baldwin Drainage):**

- Pallid shiner (*Hybopsis amnis* – KSNPC Endangered)
- Eastern blue-star (*Amsonia tabernaemontana var gattingeri* – KSNPC Endangered)

Construction activities at this proposed project site are to consist of establishing proper drainage with added limestone sand in order to reduce the acidity of the water. Existing culverts will also be cleared or replaced, as needed, on a residential property.

Construction at this site will not intrude upon any intermittent or perennial streams, and the general best management practice of establishing a stringent sediment and erosion control plan, including such measures as hay-bale silt fences and prompt revegetation of all areas disturbed by project-related construction activities, will prevent sediments from entering area streams. As this project will neither directly nor indirectly impact area streams, the pallid shiner will not suffer a negative impact.

The eastern blue-star is a plant of wet meadows, fields and ditches, and is also known from floodplain forests and moist forested slopes. While this proposed project construction site is moist, it consists of a residential yard containing a number of trees. Most of the yard areas between the trees are grassy lawns, which are regularly mowed. Drainage channels through the yard are heavily contaminated by iron-rich mine drainage of near-neutral pH. This site does not appear to meet the habitat requirements for the eastern blue-star. Therefore, construction at this site should not create a negative impact to this species.

**Site 11 (Houle Shaft):**

- Pyramid pigtoe (*Pleurobema rubrum* – KSNPC Endangered)
- Elusive clubtail (*Stylurus notatus* – KSNPC Endangered)
- Least bittern (*Ixobrychus exilis* – KSNPC Threatened)
- Fanshell (*Cyprogenia stegaria* – USESA Endangered)
- Catspaw (*Epioblasma obliquata obliquata* – USESA Endangered – Nonessential Experimental Population)
Construction activities at this site are to consist of clearing domestic debris from a subsidence hole, which will then be backfilled with heavy stone. This site is relatively well vegetated in trees.

Construction activities at this site will not directly impact any intermittent or perennial streams, and the previously described best management practices will prevent significant amounts of sediments from this construction site from entering area streams. Therefore, none of the aquatic species listed above (pyramid pigtoe, fanshell, catspaw, and elusive clubtail) will suffer a negative effect as a result of project-related disturbances at this site.

The American bittern is a wading bird, most commonly found in densely vegetated wetlands. This species is not known to be a breeding bird within Kentucky, and is today only known as a transient migrant. Though, there were reports of young too immature to fly being observed within scattered portions of Hopkins County between 1914 and 1943. The location near this site, Loch Mary in Earlington, was last noted as being a possible nesting site in 1914. As the Commonwealth is outside of the breeding range for this species, construction activities will not adversely affect the American bittern, even if it were found to be nesting in the region.

Site 12 (Chinn Portal):

- Buffalo Clover (*Trifolium reflexum* – KSNPC Endangered)

Project related construction efforts at this site are proposed to consist of replacing the bars in previously placed shaft closures. The current closures, which are designed to allow the outflow of a large quantity of underground mine drainage, will not otherwise be altered. This site exists at the margin of a residential yard.

The buffalo clover is a prairie species that also opportunistically occurs in disturbed forest openings, alongside roads, or at the margins of sandy woodlands. These areas are typically well-drained. The proposed action at this site will have very limited associated disturbance, and the site, as a result of the heavy flow of drainage from the shafts, does not exhibit a well-drained character. Therefore, as this site does not approximate the preferred habitat of this species, the buffalo clover will not suffer a negative impact as a result of project-related activities.
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. No records of Indiana bats were shown in the database within 10 miles of any site under the proposed project. No maternity colonies are known within 20 miles of any project site. The nearest known hibernacula are located at two caves in Christian county, no nearer than 17.5 miles to any of the project sites. These hibernacula are within 20 miles of only three of the above sites: 7, 8/9, and 11. These sites are not within the normal 15 mile radius around a hibernaculum that would restrict the clearing of trees to a shorter portion of the year. All underground mine openings to be addressed by this project are either filled with water or earth or domestic debris. None of the subsidence openings to be addressed by this project offer acceptable access to underground mine workings. Therefore, if the clearing of trees from the above sites is restricted to the period from October 15 through March 31, this project should not have any negative impact upon the Indiana bat.
January 14, 2008

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

RE: West Kentucky Multishift III AML Reclamation Project (Henderson, Webster, Hopkins, McLean, Muhlenberg, and Ohio Counties)

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 reclamation 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 two of the twelve project areas (Sites 1 and 6) have archaeological sites located immediately adjacent to or in close proximity to these two project areas. However, no archaeological sites are recorded directly in the two project areas. Therefore, as long as construction activities are confined to the project boundaries of Site 1 and Site 6, I do not anticipate any impacts to sites in the vicinity. There are no archaeological sites or surveys recorded within the immediate vicinity of the remaining ten project areas. While our records indicate that the project areas have not been previously surveyed for archaeological sites, past disturbances to these areas make it unlikely that archaeological sites will be preserved.

Sincerely,

George M. Crothers, Ph.D.
Director
Ms. Susan Wind, Supervisor  
Critical Resources Review Section  
DSMRE/Division of Permits  
#2 Hudson Hollow Complex  
U.S. 127 South  
Frankfort, Kentucky 40601

Dear Ms. Wind:

The State Historic Preservation Office has received for review and approval a Management Summary entitled "Archaeological Survey of Site 2, Diamond Mines, West Kentucky Multi-shafts III AML Reclamation Project in Webster County, Kentucky" by Rose G. Moore. The survey documented coal mine remains associated with the Diamond Coal Company Mine No. 1 which operated between 1907 and 1945. Based on the lack of associated structures and recent disturbances, the author feels that the mine site is not eligible for listing in the National Register of Historic Places. I concur with the author’s findings for the proposed Abandoned Mine Lands Reclamation project. In accordance with 36CFR Part 800.4 (d) of the Advisory Council’s revised regulations our finding is that there are No Historic Properties Present within the undertaking’s area of potential impact. Therefore, we have no further comments and the Agency Official’s responsibility to consult with the Kentucky State Historic Preservation Officer under the Section 106 review process is fulfilled. My findings are conditioned on the receipt of a complete archaeological report within 60 days. Should you have any questions, feel free to contact Charles Hockensmith of my staff at (502) 564-7005.

Sincerely,

Donna M. Neary, Executive Director  
and State Historic Preservation Officer

DMN:cdh  
cc: Mr. Steve Hohmann

KentuckyUnbridledSpirit.com  
An Equal Opportunity Employer M/F/D
RE: West Kentucky Multishaft III AML Reclamation Project
USAGE #: N/A
Henderson, Webster, Hopkins, McLean, Muhlenburg & Ohio Counties, KY

Dear Mr. Hohmann:

Please be advised that the proposed project will not require a Water Quality Certification from the Kentucky Division of Mine Permits (KOMP).

The provided description of the project reflects that the only stream impact will be a temporary low water crossing. This impact is much less than the threshold required to notify the USACE by pre-construction notice, and is well under the threshold of the associated NW-14.

Be advised should the USACE require a 404 permit, the applicant will have to submit a 401 application requesting coverage under the NW-14. This application should be sent to KOMP.

All future correspondence on this project should reference West Kentucky Multishaft II AML Reclamation Project. If you should have any questions concerning this letter, please contact Susan Wind at (502) 564-2320.

Sincerely,

Susan Wind, Supervisor
CRRS/SOAP/401 WQC
Division of Mine Permits

c:

USACE#: N/A
Susan Wind (e)
The West KY Multishaft III Project is located in six (6) western KY counties: Henderson, Webster, Hopkins, McLean, Muhlenberg, and Ohio. The project encompasses 12 reclamation sites. The proposed reclamation activities will directly affect approximately 60 acres.

The primary reclamation activities consist of backfilling and grading of mining pits and subsidence related depressions and holes. The remainder of the work addresses the reclamation of vertical shafts, adits, highwalls, and refuse piles, and removal of domestic debris and mining structures. Reclamation work will also include the construction of rock lined and/or grass lined ditches as needed. Most sites have existing access. Only Site 1 will encroach upon an “intermittent blue line” stream. No floodplains or perennial streams will be disturbed.

Site 1- R.G. Harrison Subsidence (Henderson Co.) consists of a water and trash filled depression associated with a shaft. Debris will be removed from the depression and backfilled with class II/III rock and capped with a shaft monument. A temporary low water crossing will be installed to cross the channelized intermittent stream. The stream has approximately 170-acre watershed above the proposed crossing point.

Site 2- Diamond Mines Refuse (Webster Co.) comprises 4 acres of refuse, spoil, and concrete foundations from a processing area and tipple. The refuse materials will be buried onsite using underlying materials excavated within the project area and materials from adjacent spoil ridges. Refuse materials will be removed from the adjacent county road ditch and buried. The concrete foundations and other debris will be removed.

Site 3- Providence Lake (Hopkins Co.) consists of 16 acres of spoil and refuse ridges. Drainage from the site flows into a nearby post-law pond and into Providence Lake negatively impacting the water quality. The area will be graded and covered with onsite materials and then vegetated. Appropriate drainage control structures will be added to provide erosion control and additional alkalinity additions.

Site 4- Coiltown Subsidence (Hopkins Co.) includes one shaft and multiple (>6) subsidence depressions near Coiltown. The shaft will be capped with a shaft monument and all areas will be filled with class II/III rock.

Site 5- Newberry Refuse (Hopkins Co.) is barren, acidic refuse and domestic mining debris that will be reclaimed. This site will involve the “flip and cover” reclamation technique. The domestic and mining debris will be removed and cover material will be excavated from under the existing refuse. The refuse material will subsequently be buried and covered with an agricultural limestone barrier and the excavated cover material and revegetated.

Site 6- Jessie Hendrix Subsidence (Hopkins Co.) consists of four subsidence depressions. Debris will be removed and the depressions will be filled with class II and capped with spoil materials.
Site 7- Alma Melton (Hopkins Co.) is comprised of a long mining pit-highwall with exposed acid generating fireclay seams and water filled pits. Drainage from this site flows into the nearby Melton Lake. Spoil ridges adjacent to the highwall pits will be used to cover the fireclay seams and promote positive drainage from the pits into existing natural drains. The highwalls will be partially backfilled in the process of filling the pits. Existing natural drains leading from the upper highwall area will be lined with class II/III stone and limestone sand to add alkalinity to the water. Several silt trap structures will be built within the project area and filled with class II/III limestone upon completion of reclamation. At the intersection of the limestone ditch and the county road a new culvert will be installed under the road and an existing drainage channel to Copperas Creek will be cleaned and lined with limestone rock to further provide additional alkalinity that will benefit the acid mine drainage impacted creek. No work will occur within the creek.

Two natural drains into Melton Lake will be lined with class II/III limestone rock with limestone sand to boost alkalinity into the lake while producing the least disturbance between the nearby pits and the lake. Agricultural limestone will be blown across the lake in sufficient quantities to neutralize the acid and metals from the nearby pre-reclamation pits.

8- Bevil Highwall & Subsidence (Hopkins Co.) located at the intersection of KY – and US 41-A contains an abandoned flooded mine pit covering approximately 0.4 acres and 300’ of highwall. The pit will be drained, backfilled, and/or graded to prevent future water impoundment with spoil materials found in the proximity. A 24” diameter culvert will be installed under the roadway. The existing highwall will be partially backfilled. A chain-link safety fence will be installed along the top near the future residence. A subsidence depression possibly associated with a shaft will be backfilled with class II rock and capped with surrounding available spoil material and a shaft monument.

Site 9- Kerlick Subsidence (Hopkins Co.) consists of a subsidence depression. Debris will be removed and the depression will be filled with class II and capped with spoil materials.

Site 10- Ruby Baldwin Drainage (McLean Co.) consists of installing appropriate drainage ditches with limestone sand to add alkalinity to the mine water.

Site 11- Houle Shaft (Muhlenberg Co.) consist of a mineshaft and depression. The shaft will be cleared of debris, filled with class II rock, and capped with a shaft monument.

Site 12- The Chinn Adit (Ohio Co.) consists of replacing metal bars on two portal closures constructed during a previous AML project.
January 3, 2008

Dear Mr. Hohmann:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) have received your request for the above-referenced information. The Kentucky Fish and Wildlife Information System (KFWIS) indicates that the federally protected gray bat, Myotis grisescens and Indiana bat, Myotis sodalis occurs within this portion of the state. We recommend that you coordinate the proposed project with the U. S. Fish & Wildlife Service Kentucky Field Office at 502-695-0468 concerning federally threatened/endangered species. Please be aware that our database system is a dynamic one that only represents our current knowledge of the various species distributions.

I hope this information proves helpful to you. If you have any questions or require additional information, please call me at (800) 852-0942 Extension 366.

Sincerely,

Doug Dawson
Wildlife Biologist III

Cc: Environmental Section File
MEMORANDUM

To: West Kentucky Shafts - III AML Water Supply Project file
From: Edwin A. Boone, Jr., Environmental Technologist III, Staff Biologist
Through: Carl B. Hays, Branch Manager, Program Development Branch
Re: Results of Kentucky State Nature Preserves Commission (KSNPC) database search
Date: November 21, 2007

On Monday, November 19, 2007, I conducted eleven searches of the KSNPC database in order to determine if any federally listed threatened and endangered species are known to occur within the general area (a 10 mile radius) of the twelve construction sites proposed for work under this project. These searches revealed that numerous species monitored by the KSNPC within one mile or listed as Threatened or Endangered under the United States Endangered Species Act (USESA) are known to exist within ten miles of project sites. These sites, with the exception of sites 8 and 9 (Bevil Highwall and Kerlick Subsidence) are each relatively widely spaced from one another. Therefore, eleven separate searches were conducted, and each will be detailed below.

Site 1 (R.G. Harrison Subsidence):

- Sheepnose (Plethobasus cyphyus – KSNPC Endangered/USESA Candidate)
- Rose turtlehead (Chelone oblique var. speciosa – KSNPC Special Concern)
- Blue scorpion-weed (Phacelia ranunculacea – KSNPC Special Concern)
- American burying beetle (Nicrophorus americanus – USESA Endangered – Extirpated)
- Indiana bat (Myotis sodalis – USESA Endangered)

Reclamation activities at this site include clearing debris from and then backfilling a water filled hole, which resulted from underground mine subsidence. Construction of a low water crossing over a channelized intermittent stream will be needed in order to provide heavy equipment access to the site.

The sheepnose is a unionid mussel of large rivers. Construction activities at this site will not impact any perennial streams, and the use of a stringently formulated sediment and erosion control plan including such measures as hay-bale silt checks and prompt revegetation of all disturbed areas will prevent sediments resulting from construction related disturbances from
reaching area streams. Therefore, the sheepnose will not suffer a negative impact due to project-related construction activities.

The rose turtlehead is a plant of floodplain and alluvial forest, swamps and sloughs. The site is located in a very small woodlot at the edge of an agricultural field. Tree cover surrounding the hole consists of a relatively thin stand of mostly pole-sized trees. It appears that this site had been cleared until relatively recently. While the area remains damp due to the presence of the water-filled hole, this site does not approximate the conditions of its preferred habitat. Therefore, construction at this site will not negatively impact this species.

The blue scorpion-weed is an understory plant of forests on alluvial soils and on floodplains. This site, as described above, does not approximate the high quality habitat preferred by this species. Therefore, the blue scorpion-weed should not be impacted by project-related construction.

The American burying beetle is a carnivorous beetle that feeds upon carrion. The limiting factor for this species does not appear to be any particular type of habitat, but rather the availability of its food source. This species is also presumed to be extirpated from Kentucky, with its last known occurrence near this proposed project site being in 1921. Due to these considerations, it is highly unlikely that any of the proposed activities at this site could potentially have a significant negative impact upon this species.

Site 2 (Diamond Mines Refuse):

- Dukes’ skipper (Euphyes dukesi – KSNPC Special Concern)
- Gray bat (Myotis grisescens – USESA Threatened)

Reclamation activities at this site include the removal of an abandoned tipple structure, and the regarding and covering of approximately 4 acres of mine refuse. The cover material will be harvested from native soils in place beneath the refuse and from surrounding mine spoil ridges.

The dukes’ skipper is a member of the order Lepidoptera (butterflies, skippers, and moths). Its preferred habitat consists of tupelo swamps, though it will utilize shaded marshes and ditches, particularly in the Midwest, where tupelo swamps are absent. The rather stringent habitat requirements of this species cause it to be highly restricted in its current range. This proposed project construction site consists of barren coal spoils and coal mine spoil ridges that are covered
with thin, scrubby trees. Neither of the habitat types available at this site approximates the preferred habitat of this species. Therefore, construction activities at this site will not negatively impact this species.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. As construction activities at this site will not impact any cave-like structures, negative impact to this species will not occur as a result.

Site 3 (Providence Lake Refuse):

- Dukes’ slipper (*Euphyes dukesi* – KSNPC Special Concern)
- Copperbelly water snake (*Nerodia erythrogaster neglecta* – KSNPC Special Concern)
- Lark Sparrow (*Chondestes grammacus* – KSNPC Threatened)
- Gray bat (*Myotis grisescens* – USESA Threatened)

Proposed reclamation activities at this site consist of grading and covering approximately 16 acres of mine spoils and refuse, and the installation of appropriate drainage control structures. Soil material utilized for covering the coal waste is to be harvested on site.

The dukes’ skipper is a member of the order Lepidoptera (butterflies, skippers, and moths). Its preferred habitat consists of tupelo swamps, though it will utilize shaded marshes and ditches, particularly in the Midwest, where tupelo swamps are absent. The rather stringent habitat requirements of this species cause it to be highly restricted in its current range. Neither of the habitat types available at this site approximates the preferred habitat of this species. Therefore, construction activities at this site will not negatively impact this species.

The copperbelly water snake is a subspecies of the red-bellied water snake that prefers floodplain sloughs, swamps, and adjacent uplands. It has been noted to strongly avoid acidic areas. While a number of ponds and small lakes are very near to the proposed project site, a relatively large proportion of the site is covered by barren, acidic mine wastes and spoils. The remainder of the site consists of mine spoil ridges that are thinly forested. This site does not appear to approximate the habitat conditions preferred by the copperbelly water snake. Therefore, this species should not suffer a negative impact as a result of project-related construction activities at this site.
The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This site does contain a thinly vegetated area of mine spoils and coal waste, which may approximate the preferred habitat of this species. Other portions of the site are covered with sparse shrubs and trees. This species begins nesting in the last half of April, and normally raises one brood, with most clutches complete in early June. Some pairs rear two broods, however, with late clutches completed in early July. Clearing and working this site outside of an April 15 through July 15 time period should prevent any negative impact to this species. If work inside this time period is necessary, a check of the area will be needed in order to determine whether the species is present.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. As construction activities at this site will not impact any cave-like structures, negative impact to this species will not occur as a result.

Site 4 (Coiltown Subsidence):

- Bachman’s sparrow (Aimophila aestivalis – KSNPC Endangered)
- Lark sparrow (*Chondestes grammacus* – KSNPC Threatened)
- Gray bat (*Myotis grisescens* – USESA Threatened)

Construction activities at this site consist of closure of an underground mine shaft and the filling of several underground mine subsidence depressions with heavy stone. The site is largely vegetated in shrubs and brush, though a few trees are present. The area of the subsided underground mine air shaft is an open field.

Bachman’s sparrow is a ground-nesting bird with relatively rigid habitat requirements. It prefers a combination of hillsides with some bare ground, some native grasses and forbs, patches of blackberries and scattered trees, typically evergreens. This proposed construction site does not contain this type of habitat, and this species is thought to be possibly extirpated from the state. It has not been noted in the vicinity of the complaint site since 1965 and, as of the publication of the Kentucky Breeding Bird Atlas in 1996, it had not been noted in the state since the summer of 1989. However, as the preferred habitat of this species is not present at this site,
construction activities will not negatively impact this species, even if it is still extant within the state.

The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This site does not approximate the preferred habitat of this species. Therefore, construction at this site will not negatively impact this species.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. None of the subsidence holes offer acceptable access to the underground mine workings for usage by bats. The underground mine air shaft to be addressed at this site was previously backfilled, but the fill material has subsided. Therefore, it does not offer access to the underground mine workings, either. Therefore, construction at this site will not negatively impact the gray bat.

Site 5 (Newbury Refuse):

- Bird-voiced treefrog (*Hyla avivoca* - KSNPC Special Concern)
- Bachman's sparrow (*Aimophila aestivalis* - KSNPC Endangered)
- Lark sparrow (*Chondestes grammacus* - KSNPC Threatened)
- Sedge wren (*Cistothorus platensis* - KSNPC Special Concern)
- Gray bat (*Myotis grisescens* - USESA Threatened)

Construction activities at this site are to consist of the regrading and covering of an area of largely barren coal waste, which is liberally strewn with residential debris. The debris will be removed, and the coal waste will be excavated, and the native soil material that is buried beneath it will be harvested and used to cover the waste, when it is replaced.

The bird-voiced treefrog is an amphibian of floodplain wetlands. This site does not meet the habitat requirements of this species. Therefore, construction activities at this site will not negatively impact the bird-voiced treefrog.

Bachman's sparrow is a ground-nesting bird with relatively rigid habitat requirements. It prefers a combination of hillsides with some bare ground, some native grasses and forbs, patches of blackberries and scattered trees, typically evergreens. This proposed construction site does
not contain this type of habitat, and this species is thought to be possibly extirpated from the state. It has not been noted in the vicinity of the complaint site since 1965 and, as of the publication of the Kentucky Breeding Bird Atlas in 1996, it had not been noted in the state since the summer of 1989. However, as the preferred habitat of this species is not present at this site, construction activities will not negatively impact this species, even if it is still extant within the state.

The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This barren site does not approximate the preferred habitat of this species. Therefore, construction at this site will not negatively impact this species.

Within the greater portion of its range, the sedge wren typically nests in moist meadows and along the grassy margins of marshes and bogs. However, in Kentucky, where these habitats are near absent, it is known from hayfields, overgrown pastures, and fallow fields, with a preference for more wet habitats, though they avoid marshes. Thick herbaceous cover is a strict requirement. As this site does not remotely approximate the preferred habitat of this species, the sedge wren will not suffer a negative impact due to construction activities at this site.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. No caves or similar structures, such as underground mines, will be affected by construction of this project. Therefore, construction at this site will not negatively impact the gray bat.

**Site 6 (Hendrix Subsidence):**

- Tall bush-clover (*Lespedeza stuevei* – KSNPC Special concern)
- Bachman’s sparrow (*Aimophila aestivalis* – KSNPC Endangered)
- Lark sparrow (*Chondestes grammacus* – KSNPC Threatened)
- Gray bat (*Myotis grisescens* – USESA Threatened)

Proposed construction activities at this site consist of the filling of four underground mine subsidence holes with heavy stone, following the removal of quantities of domestic debris from the holes. These subsidence structures do not offer access to underground mine workings.
The tall bush-clover is known from dry woodlands. This site consists of grassy areas interspersed with areas of trees. The frequent traffic at this site and the presence of large amounts of domestic debris, as well as the low-lying conditions make it unlikely that the tall bush-clover would be present at this site. Therefore, construction activities at this site should not negatively impact this species.

Bachman’s sparrow is a ground-nesting bird with relatively rigid habitat requirements. It prefers a combination of hillsides with some bare ground, some native grasses and forbs, patches of blackberries and scattered trees, typically evergreens. This proposed construction site does not contain this type of habitat, and this species is thought to be possibly extirpated from the state. It has not been noted in the vicinity of the complaint site since 1965 and, as of the publication of the Kentucky Breeding Bird Atlas in 1996, it had not been noted in the state since the summer of 1989. However, as the preferred habitat of this species is not present at this site, construction activities will not negatively impact this species, even if it is still extant within the state.

The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This site does not approximate the preferred habitat of this species. Therefore, construction at this site will not negatively impact this species.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. No caves or similar structures, such as underground mines, will be affected by construction of this project. Therefore, construction at this site will not negatively impact the gray bat.

**Site 7 (Alma Melton Highwalls):**

- Tall bush-clover (*Lespedeza stuevei* – KSNPC Special concern)
- Bachman’s sparrow (*Aimophila aestivalis* – KSNPC Endangered)
- Lark sparrow (*Chondestes grammacus* – KSNPC Threatened)
- Gray bat (*Myotis grisescens* – USESA Threatened)
Construction activities at this site are planned to consist of the placement of lime within the water body of Melton Lake, and within drainways leading into the lake, in order to neutralize existing acidic conditions and to attempt to prevent a return to an acidified state. Also, a nearby surface mine pit will be backfilled with spoils, and the adjacent spoil ridge areas will be reduced and regarded in order to rectify the current interrupted drainage pattern. Positive drainage of this area will be established and drainways will be lined with limestone rock in order to neutralize acidic water that has been flowing from the site.

The tall bush-clover is known from dry woodlands. This highly disturbed site does not approximate the preferred conditions of this species. Therefore, construction activities at this site should not negatively impact this species.

Bachman’s sparrow is a ground-nesting bird with relatively rigid habitat requirements. It prefers a combination of hillsides with some bare ground, some native grasses and forbs, patches of blackberries and scattered trees, typically evergreens. This proposed construction site does not contain this type of habitat, and this species is thought to be possibly extirpated from the state. It has not been noted in the vicinity of the complaint site since 1965 and, as of the publication of the Kentucky Breeding Bird Atlas in 1996, it had not been noted in the state since the summer of 1989. However, as the preferred habitat of this species is not present at this site, construction activities will not negatively impact this species, even if it is still extant within the state.

The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This site does not approximate the preferred habitat of this species. Therefore, construction at this site will not negatively impact this species.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for maternity colonies. No caves or similar structures, such as underground mines, will be affected by construction of this project. Therefore, construction at this site will not negatively impact the gray bat.
Sites 8 & 9 (Bevil Highwall and Subsidence & Kerlick Subsidence):

- Bachman's sparrow (*Aimophila aestivalis* - KSNPC Endangered)
- American bittern (*Botaurus lentiginosus* - KSNPC Historical Record)
- Lark sparrow (*Chondestes grammacus* - KSNPC Threatened)
- Gray bat (*Myotis grisescens* - USESA Threatened)

Construction at this site will consist of grading and draining a currently water-filled pit, the clearing of domestic debris from and backfilling of two subsidence holes, and the construction of a safety fence along the top of a remnant strip mine highwall. The area is vegetated with trees.

Bachman's sparrow is a ground-nesting bird with relatively rigid habitat requirements. It prefers a combination of hillsides with some bare ground, some native grasses and forbs, patches of blackberries and scattered trees, typically evergreens. This proposed construction site does not contain this type of habitat, and this species is thought to be possibly extirpated from the state. It has not been noted in the vicinity of the complaint site since 1965 and, as of the publication of the Kentucky Breeding Bird Atlas in 1996, it had not been noted in the state since the summer of 1989. However, as the preferred habitat of this species is not present at this site, construction activities will not negatively impact this species, even if it is still extant within the state.

The American bittern is a wading bird, most commonly found in densely vegetated wetlands. This species is not known to be a breeding bird within Kentucky, and is today only known as a transient migrant. Though, there were reports of young too immature to fly being observed within scattered portions of Hopkins County between 1914 and 1943. The location near this site, Loch Mary in Earlington, was last noted as being a possible nesting site in 1914. As the Commonwealth is outside of the breeding range for this species, construction activities will not adversely affect the American bittern, even if it were found to be nesting in the region.

The lark sparrow typically nests in areas of sparse vegetation, where it constructs its nest in a shallow depression beneath a clump of grass. However, it has been known to nest low to the ground in shrubs or scrubby trees. This site does not approximate the preferred habitat of this species. Therefore, construction at this site will not negatively impact this species.

The gray bat is a troglobitic species of bat, which prefers to utilize caves and other cave-like structures (rock-houses, underground mines, etc) for hibernating, roosting, and as locations for
maternity colonies. No caves or similar structures, such as underground mines, will be affected by construction of this project. Therefore, construction at this site will not negatively impact the gray bat.

Site 10 (Baldwin Drainage):

- Pallid shiner (*Hybopsis amnis* – KSNPC Endangered)
- Eastern blue-star (*Amsonia tabernaemontana var gattingeri* – KSNPC Endangered)

Construction activities at this proposed project site are to consist of establishing proper drainage with added limestone sand in order to reduce the acidity of the water. Existing culverts will also be cleared or replaced, as needed, on a residential property.

Construction at this site will not intrude upon any intermittent or perennial streams, and the general best management practice of establishing a stringent sediment and erosion control plan, including such measures as hay-bale silt fences and prompt revegetation of all areas disturbed by project-related construction activities, will prevent sediments from entering area streams. As this project will neither directly nor indirectly impact area streams, the pallid shiner will not suffer a negative impact.

The eastern blue-star is a plant of wet meadows, fields and ditches, and is also known from floodplain forests and moist forested slopes. While this proposed project construction site is moist, it consists of a residential yard containing a number of trees. Most of the yard areas between the trees are grassy lawns, which are regularly mowed. Drainage channels through the yard are heavily contaminated by iron-rich mine drainage of near-neutral pH. This site does not appear to meet the habitat requirements for the eastern blue-star. Therefore, construction at this site should not create a negative impact to this species.

Site 11 (Houle Shaft):

- Pyramid pigtoe (*Pleurobema rubrum* – KSNPC Endangered)
- Elusive clubtail (*Stylurus notatus* – KSNPC Endangered)
- Least bittern (*Ixobrychus exilis* – KSNPC Threatened)
- Fanshell (*Cyprogenia stegaria* – USESA Endangered)
- Catspaw (*Epioblasma obliquata obliquata* – USESA Endangered – Nonessential Experimental Population)
Construction activities at this site are to consist of clearing domestic debris from a subsidence hole, which will then be backfilled with heavy stone. This site is relatively well vegetated in trees.

Construction activities at this site will not directly impact any intermittent or perennial streams, and the previously described best management practices will prevent significant amounts of sediments from this construction site from entering area streams. Therefore, none of the aquatic species listed above (pyramid pigtoe, fanshell, catspaw, and elusive clubtail) will suffer a negative effect as a result of project-related disturbances at this site.

The American bittern is a wading bird, most commonly found in densely vegetated wetlands. This species is not known to be a breeding bird within Kentucky, and is today only known as a transient migrant. Though, there were reports of young too immature to fly being observed within scattered portions of Hopkins County between 1914 and 1943. The location near this site, Loch Mary in Earlington, was last noted as being a possible nesting site in 1914. As the Commonwealth is outside of the breeding range for this species, construction activities will not adversely affect the American bittern, even if it were found to be nesting in the region.

Site 12 (Chinn Portal):

- Buffalo Clover (*Trifolium reflexum* – KSNPC Endangered)

Project related construction efforts at this site are proposed to consist of replacing the bars in previously placed shaft closures. The current closures, which are designed to allow the outflow of a large quantity of underground mine drainage, will not otherwise be altered. This site exists at the margin of a residential yard.

The buffalo clover is a prairie species that also opportunistically occurs in disturbed forest openings, alongside roads, or at the margins of sandy woodlands. These areas are typically well-drained. The proposed action at this site will have very limited associated disturbance, and the site, as a result of the heavy flow of drainage from the shafts, does not exhibit a well-drained character. Therefore, as this site does not approximate the preferred habitat of this species, the buffalo clover will not suffer a negative impact as a result of project-related activities.
OTHER:

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. No records of Indiana bats were shown in the database within 10 miles of any site under the proposed project. No maternity colonies are known within 20 miles of any project site. The nearest known hibernacula are located at two caves in Christian county, no nearer than 17.5 miles to any of the project sites. These hibernacula are within 20 miles of only three of the above sites: 7, 8/9, and 11. These sites are not within the normal 15 mile radius around a hibernaculum that would restrict the clearing of trees to a shorter portion of the year. All underground mine openings to be addressed by this project are either filled with water or earth or domestic debris. None of the subsidence openings to be addressed by this project offer acceptable access to underground mine workings. Therefore, if the clearing of trees from the above sites is restricted to the period from October 15 through March 31, this project should not have any negative impact upon the Indiana bat.
Please accept this email as notification that this office received an "authorization to proceed with construction" (ATP) request from the Kentucky Division of Abandoned Mine Lands (DAML) for the West Kentucky Multishaft III AML Reclamation Project located in Henderson, Webster, Hopkins, McLean, Muhlenberg, and Ohio Counties. The ATP package is very large, a 38 MB pdf file, so I have dropped a copy in the mail to your office under a copy of this email.

I have conducted an office review of the request documents. The ATP documents consist of a request letter, project description, AML Inventory Problem Description forms, a National Environmental Policy Act (NEPA) review documented in a Categorical Exclusion Determination with agency consultation response letters attached, which includes the findings of their staff biologist's review of the Kentucky State Nature Preserves Commission (KSNPC) database and formal consultation with Kentucky Department of Fish and Wildlife Resources (KDFWR).

The OSM Lexington Field Office is responsible for conducting State AML project NEPA coordination with your Kentucky Field Office of the U.S. Fish and Wildlife Service (USFWS) located in Frankfort, KY. After review of the ATP documents, we determined that formal consultation with the USFWS is not necessary because we have identified no evidence that the proposed project has the potential to adversely affect a federally listed species (OSM Directive GMT-10 “Federal Assistance Manual” (FAM) Chapter 5-11-15, A. 3.) or wetlands.

If you disagree with our determination and feel that formal consultation is necessary, please notify this office and provide your reasons by phone or email prior to March 5, 2008, so your comments may be considered prior to our authorization of the project on March 31, 2008.

If you have any non-statutory (i.e. BMP's, general wildlife habitat considerations, reclamation species recommendations, etc.) comments or recommendations for consideration on the project, please forward them to this office at any time.

Thank you
Dear Mr. Cassel:

The Frankfort, KY Field Office of the U.S. Fish and Wildlife Service has reviewed the subject project in accordance with the Endangered Species Act (ESA) and Fish and Wildlife Coordination Act (FWCA). The project occurs within the vicinity of the Indiana bat (Myotis sodalis), gray bat (Myotis grisescens), fanshell (Cyprogenia stegaria), catspaw (Epioblasma o. obliquata), and the American burying beetle (Nicrophorus americanus). The site will not impact potential habitat of the fanshell, catspaw, or gray bat. The American burying beetle is thought to extirpated from the state of Kentucky, and is therefore unlikely to be negatively impacted by the project. No potential Indiana bat winter habitat occurs onsite and the closest known hibernacula are within 17.5 miles of the site. In order to avoid impacting potential summer roost trees, trees will only be cleared from October 15 through March 31.

Your staff has determined that the proposed project would not likely adversely affect any federally listed species, and our office agrees. With this information, we believe the requirements of Section 7 of the ESA have been fulfilled. However, obligations under Section 7 of the Act must be reconsidered if (1) new information reveals impacts of the proposed action may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

The comments provided above have been submitted electronically (e-mail) to expedite processing of the subject application(s). These comments have been discussed and approved by Mr. Virgil Lee Andrews, Jr., Field Supervisor and therefore should be considered the comments of the Service and Kentucky Field Office. We appreciate the opportunity to provide input on the proposed project(s). If you have any questions on this comment letter or its contents, please contact me at (502) 695-0468, Ext.116.

Carrie L. Lona
U.S. Fish and Wildlife Service
330 W. Broadway, Rm. 265
Frankfort, KY 40601
502-695-0468 ext. 116

"Be the change you wish to see in the world."
~M. Gandhi