Authorization to Proceed (ATP)
George Caddell Small Purchase
Abandoned Mine Land (AML) Reclamation Project
based on Finding of No Significant Impact (FONSI)
Whitley County, Kentucky

The Office of Surface Mining Reclamation and Enforcement (OSM) has completed a review of the March 2, 2011, request for ATP with construction activity on the George Caddell Small Purchase AML Reclamation project, prepared by the Division of Abandoned Mine Lands (DAML) of the Kentucky Department for Natural Resources. OSM found that the appropriate request documents were submitted and appear to support the need for the proposed construction activity. The information to update AMLIS Problem Area (PA) #KY-002117-SGA was submitted by DAML for OSM review and approval with the ATP request package. The AMLIS system is not operative at this time for input of new data by DAML or the OSM LFO. DAML noted that they will input this update data when the AMLIS is once again operative.

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. As a result, I have signed the Finding of No Significant Impact (FONSI) for this project.

Please ensure compliance with the following provisions in the ATP request documents noted here for emphasis:

- No tree removal is authorized for this project. The DAML ATP request letter and biological review memorandum note that if any tree removal is later found to be necessary between October 15 and March 31, a habitat assessment or mist-net survey will be required.

- DAML’s Design Branch personnel determined that a stream construction permit to “Construct Across or Along a Stream” will be required. DAML’s ATP request letter and EA note that they will apply for and obtain all necessary permits and construction will not start until they have been received.

Accordingly, pursuant to Section 5-11-20D.3 of the Federal Assistance Manual and my signature on this ATP notification document, DAML is authorized to proceed with 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
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

George Caddell Small Purchase
Abandoned Mine Lands (AML) Project
Whitley County, Kentucky

The Commonwealth of Kentucky submitted an Authorization to Proceed with Construction Activity (ATP) request for Federal AML grant funds to the Office of Surface Mining Reclamation and Enforcement (OSM) for this project. The ATP request consists of a request letter, Environmental Assessment (EA) with consultation correspondence, project description, location map, AML Inventory System (AM LIS) Problem Area (PA) Description forms, and other supporting enclosures. The project area may be centrally located on the Kentucky U.S.G.S. 7.5 minute Topographic Quadrangle map at 36° 40' 17" North Latitude and 84° 17' 12" West Longitude. The project location, AML problems to be addressed and proposed reclamation activity/cost are also available at http://www.osmre.gov in the AM LIS under PA#s KY-002117-SGA. The project involves reclamation of AML conditions consisting of replacement of a low water crossing installed in a previous AML reclamation project.

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

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

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

All appropriate government agencies were consulted or their review criteria applied by agreement. As a result, it was determined that the project area does not contain or significantly affect threatened or endangered species or their habitat, jurisdictional
wetlands, cultural or historic values, prime and unique farmland values, recreational resources, or Class I air quality regions. To reduce impacts from the project, the recommendations made by the agencies consulted were considered and, as appropriate, incorporated into the EA prepared by DAML and/or as an element of their request for ATP with construction submitted for OSM authorization. The responses from agencies consulted for the National Environmental Policy Act (NEPA) review include the following comments and/or recommendations:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) identified two known federally threatened/endangered fish and wildlife within a 10 mile radius of the project area and one candidate species for federal listing. They identified no records of state listed species of concern within 1 mile radius of the project area. KDFWR does not anticipate any significant impacts on wildlife. However, due to the nature of the project, KDFWR did not anticipate impacts to these species or their associated habitat, and recommended adhering to the erosion control measures note in the project request.

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

In a meeting held in February 2010 between the OSM Lexington Field Office (LFO), Kentucky Field Office (KFO) in Frankfort, Kentucky, of the U.S. Fish and Wildlife Service (USFWS) and DAML; Steve Hohmann, Director of DAML, offered to coordinate NEPA consultation with the KFO, utilizing the agreements in the September 18, 2009, Memorandum of Agreement (MOA) signed by the OSM, LFO and USFWS KFO. This document outlined the acceptable conditions that the projects potential impacts can have where the KFO will not need to be further contacted for comment. When the conditions within the agreement are present, processing of the ATP may proceed with the confidence that the biological environment is being protected and provisions of Section 7 of the Endangered Species Act have been fulfilled. It was agreed to by all parties, acknowledging that LFO would retain the final review to determine if the NEPA documentation is complete.
After review of the ATP documents for this project, which included consultation with the KDFWR, DAML determined that additional consultation with the USFWS was initially not required because the proposed project will not adversely affect a federally listed species (Federal Assistance Manual (FAM) Chapter 5-11-15, A. 3.) However, LFO noted that the project may be within the Upper Cumberland River, as defined by the KFO. Further consultation was conducted with the KFO, and is documented in two emails dated March 21, 2011, which were made part of the project ATP request package. This consultation is discussed further in the appropriate location below. The project activities meet the following conditions noted in the MOA to ensure protection of federally listed species; specifically the Indiana bat, Gray bat, and freshwater fishes and mussels:

- The project does not include the purposeful removal of standing trees larger than 5 inches diameter at breast height or standing snags with loose bark that are 9 inch or greater diameter at breast height and at least 10 feet in height, during the period of April 1 to October 15;

- The project activity does not occur in "Known Indiana Bat Habitat" identified on the map attached to the MOA and the GIS files provided by USFWS KFO on November 2, 2009, used to generate the map (a copy of a section of the MOA GIS layer map on which the project coordinates are located is attached to the DAML biological review memorandum as proof of this determination);

- No caves or clifflines will be disturbed;

- No mine portal/shaft closures are proposed, i.e. mine portal/shafts are to be left undisturbed or;

- No purposeful filling or crossing of streams using heavy equipment or the removal of riparian vegetation using heavy equipment is proposed within the Tradewater, lower Ohio, Green, and Licking River basins; however this activity is proposed in the upper Cumberland River basin as defined by the USFWS.

As required by the MOA direct consultation was conducted with the USFWS KFO and documented in an email dated March 21, 2011, from Steve Cassel to Keith Coleman, DAML, which is made part of this ATP project package. During a phone conversation documented in this email, the USFWS KFO determined that the project was within the Upper Cumberland River, as defined by KFO and that KFO determined there would be no impacts to federal T&E species due to the location and nature of the project construction activity, and approved the project with no mitigation measures beyond those described in the ATP request package from DAML.
In order to avoid/reduce indirect impacts, erosion and sediment control plans will be implemented and monitored until permanent vegetation has become established in the above listed watersheds and all other watersheds as may be appropriate.

The DAML ATP request letter and biological review memorandum also note that if any tree removal is later found to be necessary between October 15 and March 31, a habitat assessment or mist-net survey will be required.

With the specifics of the proposal meeting the criteria set out in the MOA, OSM agrees with DAML's determination that the proposed project would not adversely impact the species if these conditions are present. With this information, 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 area, no systematic archaeological survey has been conducted in the immediate project area, and past disturbance to the project area make it unlikely that archaeological sites will be preserved. In a consultation concerning this same site and construction activity with the Kentucky Heritage Council (KHC) and State Historic Preservation Officer (SHPO), the SHPO stamped the consultation letter indicating they “Concur, No Effect on Historic Properties.” The KHC and SHPO were not consulted further for the current construction activity, since this project activity falls under the provision in Programmatic Agreement that DAML signed on January 3, 2011, with the KHC of “exempt projects.” Exempt projects are “Routine and recurring projects whose impacts [under Section 106 of the Natural Historic Preservation Act] are “foreseeable and cause little or no ground disturbance or that have a low probability of affecting known or unknown historic properties...” Under the agreement KHC requires no consultation beyond DAML’s determination that the project is an exempt project.

Environmental and Public Protection Cabinet (EPPC) (changed to the Environment and Energy Cabinet (EEC) in July 2008) Secretary order dated December 12, 2006, transferred authority for issuance of Clean Water Act (CWA) Section 401 Water Quality Certifications (WQC) associated with surface coal mine operations, to include any reclamation projects proposed by the DAML, to the Kentucky Department for Natural Resources (DNR). DNR assigned this responsibility to the DAML Design Branch. In a meeting held in February 2010 between the OSM Lexington Field Office (LFO), Kentucky Field Office (KFO) in Frankfort, Kentucky, of the U.S. Fish and Wildlife Service (USFWS) and DAML to primarily discuss fish and wildlife issues; Steve Hohmann, Director of DAML, offered to coordinate NEPA consultation with the U.S. Army Corps of Engineers (COE) to assess the need for and compliance with the permit requirements of Section 404 of the Clean Water Act (CWA) by application of criteria provided by the COE. This was beneficial to both offices since these issues are inter-related. The DAML
Design Branch determined that neither a 401 WQC nor a 404 CWA permit are needed for the project as proposed.

Under a 2005 agreement with the Kentucky Division 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 low water crossing is located within the base floodplain. Therefore a stream construction permit to "Construct Across or Along a Stream" will be required. DAML's ATP request letter and EA note that they will apply for and obtain all necessary permits and construction will not start until they have been received.

[Signatures]

OSM Environmental Reviewer
AML Program Specialist

Joseph L. Blackburn
Field Office Director

Date

Date
Memorandum

Date: March 23, 2011

To: George Caddell Small Purchase Abandoned Mine Land (AML) Reclamation Project File ID# 99.09603000

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 Field Office Director (FOD) authorize the State of Kentucky to proceed with the construction activity proposed on George Caddell Small Purchase AML Reclamation Project. The Branch prepared an ATP notice and Finding of No Significant Impact (FONSI) for the FOD review. The Branch recommends that the FOD sign the FONSI and ATP notice in the space provided on each document. The original signed ATP notice will be filed in the LFO AML project construction files and a copy will be sent to the Division of Abandoned Mine Lands (DAML) Director attached to a transmittal email, with an attachment of associated approval documents, consisting of a copy of the LFO review memorandum and FONSI. Additionally, the transmittal email will be copied to the Department for Natural Resources (DNR) Commissioner.

The Kentucky DAML ATP request dated March 2, 2011, was received at LFO March 2, 2011. The ATP was processed within 15 working days; therefore, the customer service target of 14 working days to process an ATP was not met. The ATP was processed in 21 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 for the construction work under the budget category entitled Project Costs (Non-Water Supply) of any of Kentucky’s AML Annual Construction Grants (AG). In previous discussions, DNR indicated they would assign projects to a grant before they go to construction. The LFO Project/Site ID # 99.096030000 was assigned to the project file for LFO tracking purposes until actual AG and Location Code numbers are assigned by DAML and can be inserted in the appropriate positions at the beginning and end of the LFO Project #. No specific bid advertisement, bid opening, or construction completion dates were provided by DAML in the ATP request letter, therefore I inserted dates in the database based on the ATP request letter stating that these activities will occur as soon as possible. The following proposed dates were assigned and entered by LFO for database tracking purposes: Bid Advertisement Date was entered as April 1, 2011, Contract Award was entered as May 1, 2011, and Contract/Construction Completion was entered as December 1, 2011.

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...
George Caddell Small Purchase AML Reclamation Project March 23, 2011

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# KY-002117-SGA.

A pre-approval field inspection of the proposed project was deemed unnecessary, since the original project was previously authorized, no unique characteristics warranting special field verification were noted and it wasn't selected for field verification under the EY 2011 Oversight Agreement.

The EA submitted for the construction activity at the site was reviewed and found to adequately document the environmental review of the construction activity within the current NEPA review guidance. No significant impacts have been reported to this office or identified by the Branch. The Branch recommends that the Office of Surface Mining Reclamation and Enforcement (OSM) accept the EA submitted by the Kentucky DAML. The EA prepared by the State and the State's ATP request letter and attachments summarized the responses from agencies consulted for the NEPA review and discussed appropriate resolution of all their concerns and recommendations. The responses from agencies consulted for the NEPA review are summarized in the FONSI prepared by OSM for the EA.

The comments from the Kentucky State Clearinghouse, Kentucky's "Single Point of Contact" (SPOC) pertaining to AML Non-Water Supply projects included no comments that affect this proposal. The information to update PA #KY-002117-SGA was prepared by DAML for OSM review with the ATP request. Currently the AMLIS is not operational for data input. DAML states in their ATP request letter that they will input this information at a later date in the future when the AMLIS is once again operational. This information reflects the changes in units and costs based upon the design and classification of the funded category. The PAD submitted for this ATP does not represent a "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 FOD signature.

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.

Attachments:

Two emails dated 3-21-2011 documenting further consultation with the USFWS KFO concerning the Upper Cumberland River.
George Caddell Small Purchase
Abandoned Mine Lands (AML) Reclamation Project
ENVIRONMENTAL ASSESSMENT

A. Description of the Proposed Action:

The Kentucky Division of Abandoned Mine Lands (AML) proposes to reclaim 1.0 acres to control drainage at the George Caddell site, in Whitley County. The site is located at N36° 40' 20", W84° 17' 13". This environmental assessment is required because the project requires a floodplain permit. Two state agencies and two state agency databases were consulted; their response letters/emails and one memorandum regarding the KSNPC database search results are enclosed. The KHC was not contacted, as this project falls under the Programmatic Agreement between KHC and AML, due to the previous disturbance in the work area by the Jellico Creek AML Reclamation Project. Previous consultation with KHC also indicated that no archaeological resources should be negatively impacted by reclamation work at the site.

B. Need for the Proposed Action:

The property owner has complained about drainage problems created from malfunctioning culverts installed by AML during the Jellico Creek AML Reclamation Project. Water has backed up and created a swamp above the low water crossing. As part of the Jellico Creek AML Reclamation Project constructed from 2002 to 2004, AML installed three 36" HDPE pipes to provide access to George Caddell’s property. Impounded water is now flowing over concrete crossing eroding the lower side; it also appears during large rainfall events water also flows around the low water crossing eroding the bank beside the culverts. At this time due to the erosion and water depth the road is impassable. Also, it is an environmental threat and source of stream pollution in Jellico Creek.

The proposed project will mitigate problems rated as Priority 2. The problems are further described in the description for national AML inventory problem area # KY 2117 SGA.

C. Alternatives Considered:

- Reclaim the environmental damages and hazards to human safety, caused by pre-law mining features.

- Take no action, allowing the human health hazards to continue.

C.1. Preferred Alternative:

The proposed project (1.0 acres total) consists of reclaiming a low-water crossing that was part of the Jellico Creek AML Reclamation Project constructed from 2002 to
2004. The project plans to construct an access to the site from Route 979, which will serve as a staging area and waste area. A 400 linear foot (L.F.) sub-drain will be installed along with a 400 L.F. Class II rock ditch above the sub-drain. The armor will protect the hillside from moving and keep the Class II ditch free from debris. All yard fences will be removed during the construction phase and will be replaced at the end of the project. Some utilities will need to be rerouted, including two water lines and an active gas line; before work may begin.

No off-site borrow or waste areas are proposed. Construction disturbances will be kept to a minimum, topsoiled (or alternate topsoiled), seeded and mulched as soon as practical.

C.2. No Action:

There are no off-site borrow or waste areas proposed. Construction disturbances will be kept to a minimum, topsoiled (or alternate topsoiled), seeded and mulched as soon as practical.

D. Affected Environment:

D.1. General Setting:

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

D.2. Affected Resources:

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

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

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

- Kentucky Department of Fish and Wildlife Resources (KDFWR)
- Kentucky Division of Water (DOW) – floodplain database
E. Environmental Impacts of the Proposed Alternative:

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

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

The proposed project will not adversely impact low income or minority persons.

E.1.a. Hydrology:

A formulated erosion, sediment, and drainage control plan will be implemented during construction, to minimize sedimentation of receiving streams. This plan includes hay-bale silt checks, silt fences, road culverts, surface ditches and prompt revegetation of disturbed areas. The completed project will provide non-eroding drainage controls. The project will also provide a complete cover of perennial vegetation, which will result in less stream sedimentation after project construction. All drainage controls will be implemented throughout the life of the project. Therefore, the hydrology of the project areas and downstream areas will suffer no long-term negative impacts due to construction of this project.

The Kentucky Division of Abandoned Mine Lands (DAML), Design Branch, reviewed information concerning the proposed project site, and determined that, although a WQC will not be required, a floodplain permit will be required. This division is applying for all necessary permits and construction will not start until they have been received.

E.1.b. Fish and Wildlife/Plants
The KSNPC database researched by AML staff revealed two species of state concern, monitored by the KSNPC, are known to occur within one mile, and four species listed as threatened or endangered under the United States Endangered Species Act (USESA) are known to occur within ten miles of the project site. The species noted in the search are the:

- Spiked Hoary-pea (*Tephrosia spicata* – KSNPC Endangered, Pre-1938 Historical Record)
- Elfin Skimmer (*Nannothemis bella* – KSNPC Endangered, Pre-1970 Historical Record)
- Cumberland Elktoe (*Alasmidonta atropurpurea* – USESA Endangered)
- Blackside Dace (*Chrosomus cumberlandensis* – USESA Threatened)
- Virginia Spiraea (*Spiraea virginiana* – USESA Threatened)
- Indiana bat (*Myotis sodalis* – USESA Endangered)

The Spiked Hoary-pea is a member of the Fabaceae family; it inhabits sandy fields, open woods, and barrens. It is a perennial herb and the record of this species includes the entirety of Whitley and McCreary counties. Since project-related disturbances are limited to the replacement of a low-water crossing, and will be controlled through the implementation of AML sediment and erosion control standards, impacts to the Spiked Hoary-pea should be negligible. The Elfin Skimmer is a dragonfly and their larva inhabits small pools and puddles, away from the water’s edge, in the sphagnum of fens and bogs. Since project-related disturbances are limited to the replacement of a low-water crossing, and will be controlled through the implementation of AML sediment and erosion control standards, impacts to the Elfin Skimmer should be negligible. The Cumberland Elktoe is a mussel that inhabits low to moderate gradient, high quality streams. The Blackside Dace inhabits small, upland streams, usually in pools that are shaded by dense riparian vegetation. Since neither of these species have been documented within the project watershed, and since project-related sediment and/or turbidity will be controlled and monitored as described within AML’s sediment and erosion control plan, impacts to either of these species are not anticipated as a result of this project. The Virginia Spiraea has also been determined to be highly unlikely at the project site location, and since project-related disturbances are limited to the replacement of the a low-water crossing, and will be controlled through the implementation of AML sediment and erosion control standards, and since the project area is limited to the currently impacted stream crossing, impacts to the Virginia Spiraea is highly unlikely.

The United States Fish and Wildlife Service (USFWS) has declared the whole state of Kentucky to be the habitat of the Indiana Bat. The 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. Since no records of hibernacula are within ten miles of the project area and no maternity area records are within five miles from the project area, and since no maternity colonies or non-maternity records are within 2.5 miles from the project area, no special conditions would apply to the accepted tree removal period, a time at which the bats are secure within their hibernacula (October 15 – March 31). However, since no trees or cave-like structures are associated within the project, no impacts should result due to project related construction, regardless of the time of construction.
Kentucky State Nature Preserves Commission (KSNPC) database

H. Preparers/Reviewers:

Kentucky Division of Abandoned Mine Lands Personnel:

- Jesse K. Moore, Environmental Technologist III
- Keith Coleman, Staff Biologist
- Ryan Howell, Environmental Control Supervisor
- Bill Overman, Program Development Branch Manager

Steve Hohmann, Director Date 3/2/11