

U. S. DEPARTMENT OF THE INTERIOR
OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT
ENVIRONMENTAL ASSESSMENT
for
Abandoned Mine Land Project
Sites 1803 and 1804 – Gambill and Steep Lake Highwall Backfill
Sullivan County, Indiana

A. Description of the Proposed Action

This project is located just southeast of Dugger, Indiana, in Sullivan County and is located entirely within the Greene-Sullivan State Forest.

According to the Indiana Coal Mine Information System ([http://dnrmaps.dnr.in.gov/apps/cmis.htm](http://dnrmmaps.dnr.in.gov/apps/cmis.htm)), the Alva Coal Company operated the Airline #32 Mine as a surface operation in this location from 1959 to 1964 and several underground mining companies also operated a small underground mine in this area from 1899 to 1908.

This proposed project will backfill several dangerous highwalls and dangerous piles and embankments within the Greene-Sullivan State Forest. The project area is located on state-owned property. Surrounding land use is a managed state forest which includes public hunting, fishing, hiking, horse-back riding and other outdoor recreational activities. A location map is attached.

B. Need for the Proposed Action

The reclamation project submitted by the Indiana Abandoned Mine Land (AML) program proposes to reclaim AML Site 1803, Gambill Lake and AML Site 1804, Steep Lake. The Office of Surface Mining Reclamation and Enforcement (OSMRE) will decide whether or not to grant approval for this proposed project.

This action is necessary for the applicant to receive OSMRE Authorization to Proceed with the proposed project. The proposed project will remediate the impacts of the abandoned mine land on the quality of the human environment in accordance with AML program objectives.

C. Alternatives Considered

1) Alternative One: Grant Authorization to Proceed

Under this alternative, the OSMRE/Alton Field Division Director would grant the State of Indiana an Authorization to Proceed to implement the Abandoned Mine Land reclamation proposal described in the following.

Under this alternative, The Indiana Abandoned Mine Land program would conduct a highwall backfill project at these two sites. The goal of this project is to enhance public safety by eliminating dangerous highwalls and dangerous piles and embankments, constructing wetlands and improving drainage.

The project will consist of eliminating 5,532 linear feet of dangerous highwalls and 1.7 acres of dangerous piles and embankments at Site 1803. It will also eliminate 854 linear feet of dangerous

highwalls at Site 1804. The highwalls will be reclaimed by backfilling with adjacent spoil material, typically to a 4 to 1 slope. The dangerous piles and embankments will be reclaimed through regrading of adjacent spoil material. Approximately 72 acres of spoil area at Site 1803 and 15 acres of spoil area at Site 1804 will be cleared and regraded. Currently, there are approximately 21.6 acres of open water in three water bodies at Site 1803 and 3.8 acres of open water in two water bodies at Site 1804. Upon completion, there will be approximately 23.9 acres of open water at Site 1803 and 4.0 acres of open water at Site 1804, for a total net gain of 2.5 acres of open water. Ditches will be constructed for positive drainage; 2,182 linear feet of ditch will be constructed at Site 1803 and 1,031 linear feet of ditch will be constructed at Site 1804.

All areas to be revegetated will have lime and fertilizer incorporated as per laboratory-analyzed soil sample requirements. Seed mixtures to be incorporated will be compatible to the area of reclamation. Some species will be included for the specific purposes of erosion control and wildlife habitat. Upon seed incorporation, all areas will be mulched to help prevent erosion and aid in germination. Approximately 83 acres will be revegetated with a tree planting mix to facilitate future tree planting at this site.

2) Alternative 2: Do not grant Authorization to Proceed (No Action)

Under this alternative, the OSMRE/Alton Field Division Director would not grant the State of Indiana an Authorization to Proceed to implement the abandoned mine land reclamation proposal described above under Alternative 1. As a result, current conditions would continue, most growing worse. Further discussion of the "no action" alternative is included in Section D-2.

D. Environmental Impacts of the Proposed Action and Alternatives

1) Alternative One: Grant Authorization to Proceed

a) Resource Elements

Below is a list of resource elements that may be affected by this AML project. The proposed project site and immediately surrounding area has been reviewed to determine whether any of the resource elements may be affected by the activities of the proposed project. If a resource element is not present on site or will not be affected by the reclamation activities, it will be so identified. Any resource element that may be potentially impacted by the reclamation activities will also be identified along with the corresponding design features to mitigate those impacts. A discussion of the environmental consequences relating to AML projects is included in OSM-EIS-11, Sections 4.1 (Generic Analysis of Beneficial and Adverse Effects), 4.2 (General Impacts), and 4.3 (Impacts Associated with AMLR Projects). Definitions of terms relating to degrees of impact used in this section are located in Section D-3.

i) Cultural and Historic Resources

According to the State Historic Preservation Officer, there are no known historic, architectural, or archaeological sites that are eligible for the State or National registers that will be affected by this proposed project (see attached). However, as part of our agreement with the Division of Historic Preservation and Archaeology, if at any time during the reclamation project, historical or archaeological artifacts are discovered, all construction activities shall cease until the staff archaeologist can review the area and determine the proper course of action. Therefore, there

will be no adverse impacts to this resource.

ii) Water Quality

As a popular public fishing spot, water quality within Gambill Lake is very good. The other water bodies also exhibit good water quality and healthy fish populations. Therefore, it is not anticipated that any water treatment will be required in order to discharge water during the backfill operation. However, the reclamation contractor will be required to obtain an NPDES permit for this project and will monitor all water discharged to ensure water quality standards are met. The contractor will also adhere to best management practices to control erosion and sedimentation during the construction project. Therefore, water quality values will not be adversely affected by the proposed reclamation activities.

iii) Wetlands

There are five water bodies that will be impacted as part of this proposed project: Gambill Lake (16.4 acres), North Pit (2.3 acres), South Pit (2.9 acres) at Site 1803 and Steep Pit (2.3 acres) and an unnamed pit (1.5 acres) at Site 1804. As part of the backfilling operation, portions of all five impoundments will be backfilled. However, to mitigate these losses, all water acres lost will be replaced and additional water areas will be created for a total net gain of 2.5 acres of open water. In addition, portions of each new water body will have shallow water areas created for the sole purpose of enhancing fish habitat. Therefore, the disturbance to wetland values will be minor and short term in nature. Long term impacts will most likely be beneficial.

iv) Floodplains

Upon review by the staff Hydrogeologist, it has been determined that the proposed project is not within a floodway and that a Construction in a Floodway permit is not required (see attached). Therefore, floodplain values will not be adversely affected by the proposed reclamation activities.

v) Fish and Wildlife Resources

In order to avoid any disturbance to the Indiana bat and northern long-eared bat, all tree clearing activities will take place during the non-occupancy period of October 1 to March 31. This project has been reviewed and approved by the US Fish & Wildlife Service (see attached) which precludes the need for further consultation under Section 7 of the Endangered Species Act of 1973, as amended. Therefore, wildlife values will not be adversely affected by the proposed reclamation activities.

vi) Land Use

Due to the fact that the entire proposed project will be conducted on lands that have been disturbed by past surface mining activities, there are no known prime or unique farmlands, ecologically critical or significant areas, natural landmarks, wilderness areas or refuge lands that will be impacted by this project. Therefore, this resource will not be adversely affected by the proposed reclamation activities.

vii) Recreational Resources

This proposed project will take place entirely within a state forest. For safety reasons, the construction area will need to be closed to the public for the duration of the project. Gambill Lake is only one of over one hundred public fishing lakes within Greene-Sullivan State Forest. Therefore, disturbance to recreational values will be minor, short term in nature and restricted in size.

viii) Air Quality

There will be no permanent air emissions produced by this proposed project, however, as a result of the proposed construction activities, the potential for dust and airborne pollutants may increase. The increased particulate matter in the air will only last for the duration of the construction period and will be confined to the general area of the construction project. Dust suppression measures, such as sprinkling, will be required when needed as part of the construction contract. Motorized equipment will have proper working emission control devices to reduce abnormal exhaust pollutants. Therefore, the disturbance to air quality will be negligible, short term in nature and restricted in size.

ix) Socioeconomic Factors

It is estimated that this project could employ as many as twenty five workers for a nine month anticipated project duration. This project will depend heavily on the local economy for construction materials, food, fuel, lodging, etc. No other socioeconomic impacts are anticipated. Therefore, there will be no socioeconomic factors that will be adversely impacted by the proposed reclamation activities. If any, there will be short-term, local, minor beneficial impacts.

x) Environmental Justice

Due to the fact that the entire proposed project will be conducted within the Greene-Sullivan State Forest, it is not expected that any minority or low-income populations will incur any adverse human health or environmental effects as a result of this proposed project. Therefore, this resource will not be adversely affected.

b) Cumulative Impacts

Reclamation activities may adversely affect wetlands, recreational and air quality; however these impacts will be local, negligible or minor and short-term in nature. It is anticipated that most long-term benefits will be beneficial

Cumulative impacts are also discussed and evaluated in OSM-EIS-11, Section 4.4 (Analysis of Cumulative Impacts).

2) Alternative Two: Do not grant Authorization to Proceed

Under this "no action" alternative, the existing public health and safety conditions would continue and most likely worsen. The public would continue to be exposed to dangerous highwalls and dangerous piles and embankments as they are visiting the Greene-Sullivan State Forest.

3) Degrees of Impact

Intensity

Negligible = at lower levels of detection

Minor = detectable, but slight

Moderate = readily apparent environmental impact

Potential to become major = potentially severe adverse impact

Major = severe adverse impact

Context - Defined by specific issue and concern

Regional = area that project is a part of

Local = project site

Duration

Short term = construction period

Long term = after completion of construction

E. Summary

If Authorization to Proceed is granted, this proposed highwall backfill project would enhance public safety by eliminating the safety hazards associated with dangerous highwalls and dangerous piles and embankments at this state forest. If Authorization to Proceed is not granted, the existing features would continue to pose safety hazards to the local population and general public as they visit this state property.

F. Consultations

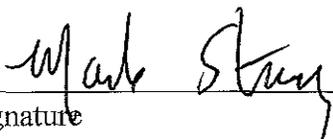
Kit Turpin, Project Management Supervisor
Chris Hostetler, Project Engineer
Division of Reclamation
Indiana Department of Natural Resources
Jasonville, Indiana

G. References

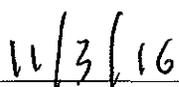
Dennis, Matt. Agency Letter, October 18, 2016.
Pearson, Ron. Division Memorandum, May 27, 2016.
Pruitt, Scott E. Agency Letter, September 29, 2016.
Wright, Timothy. Department Letter, June 21, 2016.

H. Preparer

Mark Stacy, CEP
Environmental Specialist
Division of Reclamation
Indiana Department of Natural Resources
Jasonville, Indiana



Signature



Date



United States Department of the Interior



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Alton Field Division
William L. Beatty Federal Building
501 Belle Street, Suite 216
Alton, Illinois 62002

November 7, 2016

Mr. Mark Stacy
Restoration Program, Division of Reclamation
Indiana Department of Natural Resources
14619 W State Road 48
Jasonville, Indiana 47438-9517

Dear Mr. Stacy:

The Office of Surface Mining Reclamation and Enforcement (OSMRE) completed a review of the November 3, 2016, request for an Authorization to Proceed for the Gambill Lake Site 1803 and Steep Lake Site 1804 Abandoned Mine Land Reclamation Projects by the Indiana Division of Reclamation (DOR).

OSMRE's evaluation of the Environmental Assessment prepared by the DOR finds that all environmental issues and impacts associated with the project have been adequately discussed. Based on these findings, OSMRE has determined that reclamation of these abandoned mine sites would not have significant effects on the quality of the human environment and therefore conclude that no Environmental Impact Statement is necessary. Accordingly, pursuant to Section 4-160-50 D.3 of the Federal Assistance Manual, you are authorized to proceed with these projects and expend Federal funds in accordance with AML grant terms and conditions.

OSMRE has confirmed that the required project information has been included in the Abandoned Mine Land Inventory System (e-AMLIS) for Problem Area(s) IN-1803 and IN-1804.

Any significant changes to the nature or scope of the projects will require reevaluation of the environmental issues and impacts associated with the projects. OSMRE's authorization to proceed for the Gambill Lake Site 1803 and Steep Lake Site 1804 Abandoned Mine Land Reclamation Projects will expire on November 8, 2018. Construction must begin on the project sites prior to that date.

If you have any questions, please contact Adam Hardesty at 618-463-6463 ext. 5145, or e-mail at chardesty@osmre.gov.

Sincerely,

Len Meier, Chief,
Alton Field Division

Enclosure - FONSI



United States Department of the Interior

OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT
Alton Field Division
William L. Beatty Federal Building
501 Belle Street, Suite 216
Alton, Illinois 62002



FINDING OF NO SIGNIFICANT IMPACTS

November 8, 2016

Gambill Lake and Steep Lake
Abandoned Mine Land Reclamation Projects
Project Numbers: IN-1803 and IN-1804
Sullivan County, Indiana

OSMRE has thoroughly reviewed the attached environmental assessment, prepared by the Indiana Division of Reclamation. OSMRE has determined that it adequately discusses the environmental issues and impacts of abandoned mine lands reclamation construction activities for authorization purposes.

Based on the analysis in this environmental assessment, I find that reclamation of these abandoned mine sites would not have significant effects on the quality of the human environment. I therefore conclude that no detailed statement (EIS) is necessary.

My specific reasons are as follows:

1. The following resource values are either not present at the project site, or if present, will not be affected by project activities: cultural or historical resource; water quality; floodplain; prime and unique farmland values; threatened or endangered species and other wildlife values; political factors (land use).
2. The following resource values will be impacted with an explanation of the outcome:
 - a. Air quality values - A short-term, non-permanent increase in air and noise pollution will occur during the estimated nine (9) months duration of construction activity and will be minimized through dust suppression measures and confined to the general area.
 - b. Socioeconomic factors - The proposed project will have no permanent adverse human health and /or environmental effects nor direct or indirect impacts on minority or low-income populations. The proposed project would depend heavily on the local economy for construction materials, food, fuel, lodging, etc. This effect will be temporary through the approximate nine (9) month life of the project. Therefore, there will be no socioeconomic factors that will be adversely impacted by the proposed project;

however, there may be short-term, local, minor beneficial impacts as the project could employ as many as 25 workers.

c. Wetlands - There are five water bodies that will be impacted as part of this proposed project: Gambill Lake (16.4 acres), North Pit (2.3 acres), South Pit (2.9 acres) at Site 1803 and Steep Pit (2.3 acres) and an unnamed pit (1.5 acres) at Site 1804. As part of the backfilling operation, portions of all five impoundments will be backfilled. However, to mitigate these losses, all water acres lost will be replaced and additional water areas will be created for a total net gain of 2.5 acres of open water. In addition, portions of each new water body will have shallow water areas created for the sole purpose of enhancing fish habitat. Therefore, the disturbance to wetland values will be minor and short term in nature. Long term impacts will most likely be beneficial.

d. Recreational Resources - The proposed project will take place entirely within a state forest. For safety reasons, the construction area will need to be closed to the public for the duration of the project. Gambill Lake is only one of over one hundred public fishing lakes within Greene-Sullivan State Forest. Therefore, disturbance to recreational values will be minor, short term in nature and restricted in size.

3. Cumulative Impacts. All impacts of the project described above are local, negligible and short-term in nature, and will have no cumulative effect.



OSMRE Preparer
Charles Adam Hardesty

Date: 11/7/2016



Len Meier, Chief
Alton Field Division

Date: 11/8/16