IEPA Log No.: **C-0067-11**
CoE appl. #: **2010-991**

Public Notice Beginning Date: **January 18, 2012**
Public Notice Ending Date: **February 17, 2012**

Section 401 of the Federal Water Pollution Control Act
Amendments of 1972

Section 401 Water Quality Certification to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water
Facility Evaluation Unit
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-3362

Name and Address of Discharger: The American Coal Company, Galatia Mine, 9085 Highway 34 North, Galatia, IL 62935

Discharge Location: Sections 17 & 18, T8S, R6E of the 3rd P.M. in Saline County near Galatia

Name of Receiving Water: Unnamed Tributaries to Middle Fork Saline River and Unnamed Wetlands

Project Description: Galatia Mine Bunkhouse Refuse Disposal Area

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge into the waters of the state associated with a Section 404 permit application received by the U.S. Army Corps of Engineers. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their names and addresses along with comments on the certification application. Commenters may include a request for public hearing. The certification and notice number(s) must appear on each comment page.

The attached Fact Sheet provides a description of the project and the antidegradation assessment.

The application, Public Notice/Fact Sheet, comments received, and other documents are available for inspection and may be copied at the IEPA at the address shown above between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please call Thaddeus Faught at 217/782-3362.

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Fact Sheet for Antidegradation Assessment
American Coal Company – Unnamed Tributaries to Middle Fork Saline River and Unnamed Wetlands – Saline County
IEPA Log #C-0067-11
COE Log # 2010-991
Contact: Scott Twait; 217/558-2012
January 18, 2012

The applicant has applied for Section 401 water quality certification for impacts associated with their proposed addition of a coal refuse slurry impoundment, located approximately 1.5 miles east of the town of Galatia. The proposed project would disturb approximately 185 total acres. Construction of the slurry impoundment would utilize the downstream construction technique. The course refuse embankment would have three horizontal to one vertical slope for both the upstream and downstream faces. The maximum crest of the embankment would be at elevation 530 feet, with a minimum crest width of 40 feet. Completion of this project would provide approximately 4.6 years of fine coal refuse storage.

Impacts would include 1,868 linear feet of ephemeral streams, 3,136 linear feet of intermittent stream, impacts to 1.07 acres of farmed wetland (PEMf), impacts to 0.27 acres of emergent wetland (PEM), impacts to 0.08 acres of scrub/shrub wetland (PSS), and impacts to 0.16 acres of forested wetland (PFO).

The applicant proposes to mitigate unavoidable losses to streams by restoring and/or enhancing 5,000 linear feet of stream channel off-site. This would involve the creation of a stream channel with a natural stream pattern, an appropriately sized channel, and a forested riparian buffer of at least 100 feet on each side of the stream channel. Additionally, the applicant has proposed to mitigate unavoidable impacts to jurisdictional wetlands through the creation of 2.49 acres of off-site wetland mitigation. PEMf wetland would be replaced with PEM wetlands at a 1:1 ration, PEM wetlands would be replaced at a 2:1 ratio, PSS wetland would be replaced at a 3:1 ratio, and PFO wetlands would be replaced at a 4:1 ratio. This would result in creation of 1.61 acres of PEM wetland, 0.24 acres of PSS wetland, and 0.64 acres of PFO wetland.

The proposed mitigation plan will restore and/or enhance at least 5,000 linear feet of stream channel. A 1:1 ratio is deemed sufficient because of the poor quality of the impacted streams. The impacted streams are considered poor quality because they are incised, channelized, and have very little riparian buffer habitat. The stream mitigation plan will involve the creation of a stream channel with a natural stream pattern, an appropriately sized channel, and a riparian buffer of at least 100 feet on each side of the stream channel. At a 1:1 ratio, the mitigation stream is expected to provide functions and values that greatly exceed those provided by the impacted streams.

The proposed mitigation area is located in section 8, Township 8 South, Range 5 East, Saline County, Illinois. The site is located approximately 3 miles west of Galatia, IL. The proposed mitigation area is located approximately 5 miles from the proposed impact area and both areas are located within the Middle Fork Saline River Watershed (HUC 0514020402). Both the proposed mitigation area and proposed permit area are located upstream of the Middle Fork of the Saline River.

The proposed mitigation area provides exceptional potential for stream restoration. A channelized portion of Prairie Creek flows through the area and the USGS topographic map and aerial photograph from 1938 show the location of the pre-channelized stream. Stream mitigation will involve the restoration of a side channel that mimics the original flow pattern of Prairie Creek prior to channelization.

A total of 2.49 acres of wetlands will be restored on the mitigation area (Table 1). The restored wetland acreage will include 1.61 acres of palustrine emergent wetlands (PEM), 0.24 acres of palustrine scrub shrub wetlands (PSS), and 0.64 acres of palustrine forested wetlands (PFO). The wetlands will be restored in the riparian area of the proposed stream channel. The wetlands will be designed to receive surface runoff, as well as overbank flooding from the proposed stream channel. The wetlands identified on Figure 4 are shown in approximate locations. Detailed topography of the mitigation area is being obtained and the wetlands will be placed after examination of the existing site topography. Plant species proposed for planting in the wetlands will be native species with wetland indicator statuses of FAC, FACW, or OBL.

The slurry pond has an expected life of 4.6 years of fine coal refuse storage. Once the slurry pond is filled, the mine will place course and fine (combined) coal refuse in the pool area so that the impoundment no longer has a potential to impound water. The abandonment cap will consist of crowning the coal refuse disposal facility in the impoundment pool area to drain to the perimeter ditches. The coarse coal refuse will be treated with lime to neutralize the course coal refuse and will be covered with 1 foot of soil and revegetated in accordance with the IDNR reclamation plan.

The information in this antidegradation assessment came from the May 2010 wetland and stream delineation report by HDR Engineering titled "Bunkhouse Area Wetland and Stream Delineation Report" updated October 2010 and November 2010, the "Conceptual Wetland and Stream Mitigation Plan" prepared by HDR Engineering, the "Biotic Characterization of an Unnamed Tributary of the Middle Fork of the Saline River" prepared by HDR Engineering on April 20, 2010, the engineering report by The American Coal Company titled, "Bunkhouse Refuse Disposal Facility, Galatia Mine Complex" dated February 2007, and an alternative analysis sent via e-mail March 23, 2011.

Identification and Characterization of the Affected Water Body.

The unnamed tributaries of Middle Fork Saline River and the wetlands are General Use Waters with a zero 7Q10 low flow. Using the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, the streams and wetlands are not listed as a biologically significant streams nor have they received an integrity rating. The wetlands and unnamed tributaries of Middle Fork Saline River, tributary to Waterbody Segment, ATG-05, are not listed on the draft Illinois Integrated Water Quality Report and Section 303(d) List for 2010 List since they have not been assessed. The streams and wetlands are not enhanced water bodies pursuant to the dissolved oxygen water quality standard.

Construction of the slurry pond will directly impact 5,004 linear feet of the three unnamed tributaries to Middle Fork Saline River (3,136' of intermittent streams and 1,868' of ephemeral streams). The Applicant has completed a biotic characterization of the unnamed tributary of the Middle Fork Saline River. The study was competed on April 20, 2010 and included physical habitat assessment and aquatic macroinvertebrates surveys in three selected reaches of the

unnamed stream. According to the applicant, "Results from the survey indicated the unnamed tributary does provide habitat for a range of aquatic invertebrates species some that are moderately intolerant of pollution such as damselflies and dragonflies; however, the majority of the organisms collected were considered tolerant of poor water quality." and "In summary, the stream does not harbor any threatened or endangered species; however, a stable and functional invertebrate community does exist with this unnamed intermittent tributary."

Additionally 1.58 acres of wetlands will be impacted (1.07 acres of farmed wetland (PEMf), 0.27 acres of emergent wetland (PEM), 0.08 acres of scrub/shrub wetland (PSS), and 0.16 acres of forested wetland (PFO)). According to the "Bunkhouse Area Wetland and Stream Delineation Report", May 2010, updated October 2010 and November 2010, "The stream on the site were channelized, entrenched streams that had been impacted by the past agricultural activities on the area."

The IDNR WIRT System does not list any threatened or endangered species residing in the project area.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.
The Slurry Pond will not discharge; therefore there will be no increased loading. One stream flows through the site; however, the stream will be routed around the site. The existing wetlands and streams on the site will be mitigated according to the mitigation plan.

Fate and Effect of Parameters Proposed for Increased Loading.
The project will eliminate the current habitat in the affected unnamed tributaries. To offset the stream impacts the facility is proposing to mitigate at a site within the same watershed. The proposed mitigation area provides exceptional potential for stream restoration. A channelized portion of Prairie Creek flows through the area and the USGS topographic map and aerial photograph from 1938 show the location of the pre-channelized stream (Figure 2 and 3). Stream mitigation will involve the restoration of a side channel that mimics the original flow pattern of Prairie Creek prior to channelization.

The project will eliminate the current habitat in the affected wetland area. To offset the wetland impacts the facility is proposing to mitigate at a site within the same watershed. A total of 2.49 acres of wetlands will be restored on the mitigation area. The restored wetland acreage will include 1.61 acres of palustrine emergent wetlands (PEM), 0.24 acres of palustrine scrub shrub wetlands (PSS), and 0.64 acres of palustrine forested wetlands (PFO). The wetlands will be restored in the riparian area of the proposed stream channel. The wetlands will be designed to receive surface runoff, as well as overbank flooding from the proposed stream channel. The wetlands identified on Figure 4 are shown in approximate locations. Detailed topography of the mitigation area is being obtained and the wetlands will be placed after examination of the existing site topography. Plant species proposed for planting in the wetlands will be native species with wetland indicator statuses of FAC, FACW, or OBL.

The wetlands will be created at the mitigation site. Two performance standards will be used by the Applicant to determine the success of the reclaimed wetlands;

1) Wetland communities will need to meet criteria for jurisdictional wetlands as defined in the *1987 USACE Wetland Delineation Manual*.

2) Wetland and stream communities will need to meet standards for planted species survival and floristic composition as presented in the Applicant's *Conceptual Wetland and Stream Mitigation Plan*.

Purpose and Social & Economic Benefits of the Proposed Activity.
The proposed project, the construction of a low hazard coal refuse slurry impoundment, is being completed to support the existing underground mine.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.
The applicant has evaluated alternatives to construction of the slurry pond. These alternatives are no action, underground injection and offsite location of the slurry pond.

The alternative of no action was not deemed feasible since it would affect approximately 818 direct mining jobs with an annual payroll of $80 million in wages and benefits and would not meet the applicant's stated project purpose and need.

Underground injection is currently being used as an alternate refuse disposal method at the mine. However, the available storage capacity is estimated to last only another 6 months to 1.5 years. The applicant will continue to utilize this technology as it becomes available, but there are many unforeseen issues with injecting into the abandoned parts of the mine and the number one concern is miner safety. Underground injection is not a standalone solution to the refuse storage problem.

The applicant also evaluated two additional sites for refuse disposal. The first site located to the southeast of the existing disposal site had a large acreage of wetlands, making it undesirable for refuse disposal. The second site would involve an expansion to the west of the current refuse site. This site has several streams running through it making it undesirable for refuse disposal.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.
On February 28, 2011, the IDNR EcoCAT web-based tool was used and indicated that there were no endangered/threatened species present in the vicinity of the discharge. The IDNR EcoCAT web-based tool terminated the consultation.

Agency Conclusion.
This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time this antidegradation review summary was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving waters will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the community at large by providing jobs, local and regional development, and coal that will provide electrical energy. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.