IEPA Log No.: C-0386-09 & C-0387-09 CoE appl. #: 2010-247

Public Notice Beginning Date: February 15, 2012 Public Notice Ending Date: April 20, 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 Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276 217/782-3362

Name and Address of Discharger: Prairie Coal Company, LLC, City Place One, Suite 300, St. Louis, Missouri 63141

Discharge Location: Sec. 29, 30, 31, 32 T4S, R3W, 3rd P.M., Perry County

Name of Receiving Water: Unnamed tributary to Wolf Creek

Project Description: Prairie Coal Company, LLC- proposed Lost Prairie Mine

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 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.

Please find attached or on the internet at http://www.epa.state.il.us/public-notices/sec-401-notices.html a notice for a public hearing regarding the application for Section 401 water quality certification to be held March 21, 2012 at approximately 7:00 pm (following the close of the 5pm NDPES hearing) at:

> Pinckneyville Junior High School Gymnasium 700 East Water Street Pinckneyville, Illinois

The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. Commenters shall provide their names and addresses along with comments on the certification application. The certification and notice number(s) must appear on each comment page. Written comments must be postmarked or e-mailed by midnight, April 20, 2012, when the hearing record closes (e-mails must specify "Lost Prairie Mine 401" in subject line). The IEPA welcomes substantive written comments. Comments need not be notarized and should be sent to:

> Hearing Officer Dean Studer Illinois Environmental Protection Agency 1021 North Grand Avenue East P. O. Box 19276

Springfield, IL 62794-9276

Phone 217-558-8280 TDD (hearing impaired) 217-782-9143

E-mail epa.publichearingcom@Illinois.gov

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 Keith Runge at 217/782-3362.

Fact Sheet for Antidegradation Assessment

RE: Prairie Coal Company, LLC IEPA Log #C-0386-09& C-0387-09

COE Log #2010-247

Contact: Scott Twait at 217/558-2012

February 15, 2012

The applicant has applied for Section 401 water quality certification for impacts associated with the above ground facilities of an underground mine. The project area consists of approximately 848 acres located in Sections 29, 30, 31, and 32 T4S, R3W in Perry County. Two portals will be created to the underground mine along with two airshafts for ventilation. The surface facilities will include roads, a rail loadout and transport system, coal and soil stockpiles, coal refuse disposal facilities, preparation plant, an office/maintenance building with parking area, and Sedimentation Pond #1. Sediment Pond #1 is a temporary impoundment and will be reclaimed during the final reclamation process.

County: Perry

Impacts to aquatic resources have been avoided to the extent possible by the design of the proposed mine facilities. Access roads, railroad tracts, and coal processing/staging areas have been placed in areas currently used as agriculture lands. At the request of USACE, the mine relocated an overburden stockpile to an upland area so it would be less environmentally damaging to the streams and wetland. By minimizing development within the valley of Stream 1, impacts to streams and their riparian areas, as well as the upland buffer forest, have been reduced. The proposed impacts were avoided to the maximum extent practicable, minimized, and the unavoidable impacts are proposed to be compensated for in the mitigation plan.

The information in this antidegradation assessment came from the joint application and all subsequent submittals, COE public notice, July 2011 "Assessment of Alternatives for Minimal Environmental Degradation and Economic Benefit Analysis" prepared by Midwest Reclamation Resources Inc.

Identification and Characterization of the Affected Water Body.

The subject facility proposes to build a dam on an unnamed tributary of Wolf Creek at a point where 0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. The unnamed tributary of Wolf Creek is classified as a General Use Water. The unnamed tributary of Wolf Creek is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor is it given an integrity rating in that document. The unnamed tributary of Wolf Creek, tributary to Waterbody Segment, NCK-01, is not listed on the draft 2010 Illinois Integrated Water Quality Report and Section 303(d) List since it has not been assessed. The unnamed tributary of Wolf Creek is not subject to enhanced dissolved oxygen standards.

The USGS Illinois Streamstats basin characteristics program gives a watershed size of 1.06 square miles at the discharge location. According to the Illinois State Water Survey, the unnamed tributary of Wolf Creek in the area of the proposed mine discharge is likely to be a 7Q1.1 zero flow stream. In this region of Illinois, 7Q1.1 zero flow streams are streams with a watershed area of 5 square miles or less. These streams will exhibit no flow for at least a continuous seven day period nine out of ten years. Aquatic life communities are poorly developed in these types of streams due to lack of water during dry periods during most years. Given this flow regime, no additional biological characterization is required. However, stream assessments and wetland delineations were performed by Third Rock Consultants of Lexington, Kentucky, and located in the *Aquatic Resources Report*.

Development of the surface facilities required for the new underground mine will involve disturbance of ephemeral streams and wetlands. Stream assessments and wetland delineations were performed by Third Rock Consultants of Lexington, Kentucky, and located in the *Aquatic Resources Report*, on 84 stream reaches and 25 wetlands, varying in size from 0.04 acres to 2.17 acres, within the project area. Of the 64,672 lineal feet of stream reaches, only 11,759 lineal feet of ephemeral stream reaches will be impacted by the mine. Of the total 15.29 acres of wetland within the project area, only 3.48 acres will be impacted. Of this, 3.01 acres are forested wetland, while 0.47 acre is emergent wetland. The applicant proposes compensatory mitigation (using the Illinois Stream Mitigation Method) for the impacts to jurisdictional features.

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 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 wetland areas and unnamed tributaries. To offset the wetland impacts the facility is proposing to mitigate on-site. The applicant will restore the streams in approximately their original locations as part of the post mine reclamation plan. During mining, the proposed sediment pond will provide alternative habitat. The sediment pond will provide functions and value similar to those provided by the streams and riparian habitat, such as wildlife habitat. The streams will be restored and a forested riparian buffer will be planted on both sides of the restored stream channels. The forested wetlands are of fairly decent quality forming a riparian corridor, so this plan proposes that the forested wetlands that are affected by mining operations to be replaced on a 2.5:1 mitigation replacement ratio. The emergent wetlands are considered to be of lower quality, therefore the emergent wetlands affected by mining operations be replaced on a 1:1 mitigation ratio. The mine will replace 0.47 acres of emergent wetland and 7.525 acres of forested wetlands. The disturbed wetlands will be replaced within the woody wildlife, riparian zones that will be created along the restored original ephemeral stream channels, on-site, after the sediment pond is removed. The wetlands will be designed to be self-sustaining by utilizing multiple water sources that will include direct precipitation, subsurface, and overland flow runoff from upland areas, and seasonal flood waters from the adjacent streams. Vegetation will be established by using native wetland plant species common to the region. Following is a list of wetland plant species:

Common Name	Wetland Habitat
American elm	Forested
Overcup oak	Forested
Pin Oak	Forested
Red maple	Forested
River birch	Forested
Swamp white oak	Forested
Swamp chesnut oak	Forested
Sweet gum	Forested
Sycamore	Forested
Common rush	Emergent
Common three-square	Emergent
Cordgrass	Emergent
Dark green rush	Emergent
Hard stemmed bulrush	Emergent

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Rice cutgrass Emergent
Softstem bulrush Emergent
Spiny barnyard grass Emergent
Walter's millet Emergent
Wool grass Emergent

Purpose and Social & Economic Benefits of the Proposed Activity.

The underground mine will extract the coal resources of the site. According to information given in a document submitted on July 8, 2011 by Midwest Reclamation Resources Inc. entitled <u>Assessment of Alternatives for Minimal Environmental Degradation and Economic Benefit Analysis</u>, opening a new mine will provide jobs for 250 local residents with an annual payroll of approximately \$25 million. In addition, other local businesses would also benefit from the wealth created by the mine. Perry County currently has an unemployment rate of 9.0%. Approximately 17.8% of county residents were living below the poverty level.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

The construction of the proposed project will follow conditions set forth by the Agency and USACE. Erosion control measures will be implemented to prevent additional impacts to the remaining streams and wetland areas. This review has determined that sedimentation ponds offer the most effective, efficient, cost effective, safest, and economical solution. Underground mining minimizes the surface disturbance due to coal mining.

Several areas of wetlands and streams have been identified that exist within the permit boundaries. Disturbances to these wetlands and streams will be avoided by the mining activity as much as practicable. However, it is not possible to entirely avoid the existing wetlands and streams. As in Attachment V-3B3ii, "The Lost Prairie Mine permitted acreage and permit boundaries were minimized and developed to avoid and preserve as many existing wetlands as possible. Several wetlands that exist adjacent to the proposed permit area were avoided when developing the surface permit boundaries. The proposed mining operations plan for this site attempts to avoid and preserve the existing wetlands as much as possible."

<u>Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.</u>

On July 12, 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.

Prairie Coal Co. – Lost Prairie Mine has evaluated the impact of the mining operation on threatened and endangered species. According to Attachment V-3B1, the majority of the plants reviewed in this report are limited to the habitats (rocky hillsides, glades, limestone ledges, etc.) associated with the Mississippi Bluffs in Randolph County. The remaining two plants are found in moist prairie habitats. Due to the lack of suitable habitat on the proposed mine permit area it is unlikely that any of the listed plants occur there. Development and conduction of operations on the mine permit area will not alter habitat structure and function in adjacent area. Therefore, any threatened and endangered plants present in adjacent areas will not be affected by mining activities.

Additionally, Attachment V-3B1 suggested the development of a protection and enhancement plan for the Barn Owl, Loggerhead Shrike, and the Northern Harrier. Attachment V-3B1 the suggested protection and enhancement plant for the Barn Owl, Loggerhead Shrike, and the Northern Harrier.

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Due to the potential of disturbing habitat for the Indiana Bat, Prairie Coal Co.- Lost Prairie Mine has developed an *Indiana Bat, Protection and Enhancement Plan* in Attachment V-3B4.

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.