

IEPA Log No.: **C-0225-12**
CoE appl. #: **2011-280**

Public Notice Beginning Date: **June 24, 2016**
Public Notice Ending Date: **July 25, 2016**

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
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-3362

Name and Address of Discharger: Burning Star Green Energy, LLC, 205 Worth Avenue #201, Palm Beach, FL 33480

Discharge Location: Sections 2 and 3, T6S, R4W of the 3rd P.M. in Perry County near Cutler

Name of Receiving Water: Unnamed Wetlands and Deepwater Habitat.

Project Description: Burning Star Slurry Recovery.

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
Burning Star Green Energy – Unnamed Wetlands and Deepwater Habitat – Perry County
COE Log #MVS-2011-280
IEPA Log #C-0225-12
Contact: Scott Twait (217/558-2012)
June 24, 2016

The applicant has applied for Section 401 water quality certification for impacts associated with a carbon recovery operation. The proposed permit area is approximately 355.9 acres. The product will be reclaimed fine coal from the slurry remnants deposited by the Consolidation Coal Company's former Burning Star 4 surface mine.

The slurry will be removed by two methods. Hydraulic dredging will be the primary removal technique while conventional (dry) excavation and haulage will occur generally at the north end of the refuse area where soil cover has been applied. Overburden removal is not applicable; however, if potentially toxic materials are uncovered in the routine earth moving operations, such material will be placed so as to assure it is covered with a minimum of four feet of suitable non-toxic non-flammable material. Areas left bare from removal of existing vegetation will be reseeded with a permanent seed mixture and mulched.

Secondary refuse from the processing facility will be the only waste material from this operation. Such material will consist of extremely fine-sized material, primary fireclay, and non-combustible materials of higher specific gravity non-coal minerals. Net neutralization potential of this reject material cannot be determined until such time as the process begins at which time the information will be provided to the Regulatory Authorities. Non-coal waste will be removed from the site by a licensed hauler. Coal waste for approximately the first year of operation will be disposed of in Secondary Refuse Cells which will receive the required earthen cover upon the refuse area's closure. After the first year, the open pit volume opened up by the dredging operation will be utilized to receive coal waste for the remainder of the mine's life. The existing slurry pond will be the receiving water body for runoff from within the Secondary Refuse Area.

The operation and associated surface facility within the proposed mine permit area is expected to cause unavoidable impacts to 34.8 acres of wetlands and 48.3 acres of deepwater habitat.

The majority of the wetlands on the proposed permit area are associated with the slurry impoundment. They are dominated by Phragmites and are low quality habitats. A 1:1 ratio was deemed sufficient because the existing emergent wetlands are low quality wetlands dominated by Phragmites. The applicant will limit the amount of habitat impacted at any one time by removing vegetation and topsoil incrementally as mining advances. The wetland and open water habitats will be restored in the same general location as the pre-mine habitats. Backfilling and grading will occur within 180 days following coal removal and shall not be more than four spoil ridges behind the pit being worked. Wetland wildlife areas will be seeded with a native, emergent wetland plant mix. The post mine reclamation plan will include the restoration of deepwater habitat (48.3 acres) and wetlands (34.8 acres).

The restored wetlands will be planted with a native wetland mix and Phragmites will be controlled. As a result, the restored wetlands will be of higher quality than the existing wetlands. In addition, the applicant will practice contemporaneous reclamation, meaning backfilling, grading, topsoil replacement, and re-vegetation will occur as mining advances. Incremental advancement and contemporaneous reclamation will greatly minimize the temporal loss of wetland function.

Identification and Characterization of the Affected Water Body.

There will be 34.8 acres of wetland and 48.3 acres of deepwater habitat impacts due to this project. The wetlands and deepwater habitat are associated with an old slurry disposal area. There are 24 palustrine emergent (PEM) wetlands accounting for 36.41 total acres and 1 palustrine, unconsolidated bottom (PUB) wetland accounting for 0.13 acres of which 34.64 acres and 0.13 acres will be impacted respectively. The existing wetlands were created by past surface mining activities and are currently dominated by the invasive, exotic species Phragmites (*Phragmites australis*).

Wetland ID	Wetland Type	Permit Area Acres	Impact Acres
1	PEM	0.04	0.04
2	PEM	0.33	0.33
3	PEM	0.18	0.18
4	PEM	0.08	No Impact
5	PEM	0.04	No Impact
6	PEM	0.03	No Impact
7	PEM	0.02	0.02
8	PEM	0.20	0.20
9	PEM	0.02	No Impact
10	PEM	0.20	No Impact
11	PEM	0.05	No Impact
12	PEM	0.10	No Impact
13	PEM	0.04	No Impact
14	PEM	0.21	No Impact
15	PEM	0.07	No Impact
16	PEM	0.02	No Impact
17	PEM	0.53	No Impact
18	PEM	14.50	14.50
19	PEM	15.13	15.13
20	PEM	4.13	4.13
21	PEM	0.18	No Impact
22	PEM	0.08	No Impact
23	PEM	0.11	No Impact
24	PUB	0.13	0.13
25	PEM	0.10	0.10
Total PEM Acres		36.41	34.64
Total PUB Acres		0.13	0.13
Total		36.5	34.8

No streams will be impacted by the project.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

There will be 34.8 acres of wetland and 48.3 acres of deepwater habitat impacts due to this project. There are 24 palustrine emergent (PEM) wetlands accounting for 36.41 total acres and 1 palustrine, unconsolidated bottom (PUB) wetland accounting for 0.13 acres of which 34.64 acres and 0.13 acres will be impacted respectively. The existing wetlands were created by past surface mining activities and are currently dominated by the invasive, exotic species *Phragmites (Phragmites australis)*.

Fate and Effect of Parameters Proposed for Increased Loading.

The main goal of the mitigation is to replace the functions and values lost by impacting the existing wetlands. The applicant will limit the amount of habitat impacted at any one time by removing vegetation and topsoil incrementally as mining advances. Incremental advancement and contemporaneous reclamation will greatly minimize the temporal loss of wetland function. Discharges associated with mining will be covered under NPDES Permit IL0079863.

To offset the palustrine emergent wetlands impacts the applicant plans on creating 34.8 acres of wetland (34.8 acres of palustrine emergent wetlands impacted x 1:1 ratio = 34.8 acres of palustrine emergent wetlands). The plants that will be used to create the new wetlands include Sedge (*Carex spp.*), Sedge (*Cyperus spp.*), Millet (*Echinohloa spp.*), Spike rush (*Eleocharis spp.*), Rice cutgrass (*Leersia oryzoides*), switchgrass (*Panicum spp.*), Bulrush (*Scirpus spp.*), and Smart weed (*Polygonum spp.*). Following wetland construction the site will be monitored to prevent introduction and establishment of invasive species.

Purpose and Social & Economic Benefits of the Proposed Activity.

The proposed Burning Star Slurry Recovery will benefit the community through economic and employment opportunities by the operation of a carbon recovery operation. According to information given in a document dated March 2013 by the applicant entitled Antidegradation Assessment, Burning Star Slurry Recovery, Perry County, Illinois, operating the carbon recovery mine will provide jobs for 10 full time personnel at an annual payroll of approximately \$1,000,000. An additional 20 personnel can be expected to gain full time employment from this operation, including highway truck drivers, supply and support personnel, and technical personnel. Perry County had an unemployment rate of 10.9% in January 2013 and had an annual average unemployment rate of 7.2% for 2015.

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 wetlands areas. The unavoidable impacts to 34.8 acres of wetlands and 48.3 acres of deepwater habitat will be mitigated on a 1:1 ratio. The restored wetlands will be planted with a native wetland mix and Phragmites will be controlled. As a result, the restored wetlands will be of higher quality than the existing wetlands. In addition, the applicant will practice contemporaneous reclamation, meaning backfilling, grading, topsoil replacement, and re-vegetation will occur as mining advances. Incremental advancement and contemporaneous reclamation will greatly minimize the temporal loss of wetland function.

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

On June 30, 2014, the IDNR EcoCAT web-based tool was used and indicated that there were no aquatic endangered/threatened species present in the vicinity of the discharge. Based on IDNR recommendation, protection and enhancement plans were submitted for the Common Moorhen (*Gallinula chloropus*) and the Least Bittern (*Ixobrychus exilis*). Consultation was terminated April 27, 2015.

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.