

IEPA Log No.: **C-0287-17**
CoE appl. #: **LRL-2006-635-mad**

Public Notice Beginning Date: **November 14, 2018**
Public Notice Ending Date: **December 14, 2018**

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

Section 401 Water Quality Certification for Discharge of Dredged or Fill Material

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: Pine Bluff Materials, LLC – 1030 Visco Drive, Nashville, TN 37210

Discharge Location: Near Brookport in Sections 5 and 6 of Township 17 South and Range 7 East, and Sections 21, 28, 29, 32, and 33 of Township 16 South and Range 7 East of the 3rd P.M. in Pope and Massac County.

Name of Receiving Water: Ohio River

Project Description: Proposed reauthorization of commercial sand dredging activities within Ohio River, river miles 923 to 930, for a ten-year period.

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge dredged or fill material 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 contact Darren Gove at 217/782-3362 or darren.gove@illinois.gov.

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Fact Sheet for Antidegradation Assessment
For Pine Bluff Materials, LLC
IEPA Log No. C-0287-17
COE Log No. LRL-2006-635-mad
Contact: Abby Brokaw 217/558-2012
Public Notice Start Date: November 14, 2018

Pine Bluff Materials (“Applicant”) has applied for 401 Water Quality Certification to reauthorize maintenance dredging over the next 10-year period from Ohio River mile marker 923 to river mile marker 930, right descending bank, in Massac and Pope counties, Illinois and Livingston County, Kentucky. The Applicant has been performing commercial sand and gravel operations for over a decade under a U.S. Army Corps of Engineer (USACE) authorization that expired in July of 2018. The Applicant maintains an authorization extension for the proposed dredging area and a Letter of Permission from the USACE for work in various sections of the Ohio River between river mile markers 788.0 and 956.0.

The Applicant proposes to obtain approximately 1.5 million tons of sand/year from the reauthorized dredging area. The sand recovered from dredging operations would be utilized as a mix element for use in mortar, concrete, and asphalt for federal, state, local and private construction projects. The Applicant estimates that approximately 5% or 75,000 tons/year of dredged material would be discharged back into the Ohio River in the approximate area of removal.

The Applicant currently operates five hydraulic cutter head suction dredges, referred to as floating plants. The floating plants dredge material from the river to classify and segregate the materials to meet customer specification. The dredged material is processed instream and onboard the dredge vessel. The commercial sand and gravel is placed on barges located in the water next to the dredge. The leftover material is simultaneously deposited back into the river at the dredge site. The dredging would be completed with the deployment of one or more of the Applicant’s vessels identified as Dredge Pine Bluff, Dredge Armstrong, Dredge Silver, Dredge 3 and Dredge 4. Dredge Pine Bluff is responsible for 55% of the fleets total production and its characteristics are considered representative of the discharge characteristics of the entire fleet.

The floating plants have three separate discharge points including, the pump box/triple deck screens, classifying tanks overflow and sand screw overflow. Discharge from the pump box/triple deck screens consists primarily of large (>3/8 inch) size material and does not consist of a significant quantity of free water (estimated at <~100 GPM). The overflow of the sand classifying tank is estimated at 3,700 GPM. Based on estimated flow rate and the average total suspended solids (TSS) concentration collected from the overflow of each classifying tank of 33.5 mg/L, the loading is estimated at ~1,490 lbs./day. The sand washing screws are estimated to produce a discharge flow rate of 1,600 GPM. Based on the estimated flow rate and the average TSS concentration collected from the overflow of each sand screw of 61 mg/L, the loading is estimated at ~1,180 lbs./day.

The operation of the fleet may result in maximum combined discharge rate of approximately 10,000 GPM or 14.4 MGD (rated per 24-hr based on the Applicant’s calculation) to the Ohio River (Illinois and Kentucky waters). The maximum combined discharge rate of the fleet to impact Illinois waters is 7.2 MGD. Based on the production percentages and estimated loading for Dredge Pine Bluff (~2,670 lbs./day), the total fleet loading would be estimated at ~4,850 lbs./day. All of the loading is sourced from the Ohio River and no chemicals or additives would be introduced to the River.

The purpose of the proposed project is to obtain sand and gravel from the Ohio River for commercial use. Information used in this review was obtained from the permit application dated August 18, 2017; USACE Public Notice dated September 18, 2017; and subsequent materials. The dredging operation was designed to comply with the terms and conditions of the USACE Letter of Permission for Commercial Sand and Gravel Dredging in the Commonwealth of Kentucky (LRL-2004-657).

Identification and Characterization of the Affected Water Body

The Ohio River is classified as a General Use Water with 21,020 cfs of flow. Ohio River, Waterbody Segment IL_A-920-981, is listed on the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as dioxin (including 2,3,7,8-TCDD), mercury and polychlorinated biphenyls; and primary contact recreation use with a potential cause given as fecal coliform. Public and food processing water supplies and aquatic life uses are fully supported. The Ohio River 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* or given an integrity rating in that document. The Ohio River is subject to enhanced dissolved oxygen standards.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses

Pollutant load increases of TSS may occur and are a normal and unavoidable result of dredging. The Applicant collected a background sample from the Ohio River approximately 600 feet cross-current of the Dredge Pine Bluff. The TSS concentration of 62 mg/L detected in the background sample was higher than the average discharge concentration collected from Dredge Pine Bluff of 47.5 mg/L. Based on the collected samples, the Applicant does not anticipate that the dredging activities would result in a net increase in the mass loading of TSS to the Ohio River.

Benthic habitat would also be disturbed in the construction area but impacts to aquatic life uses are not anticipated.

Fate and Effect of Parameters Proposed for Increased Loading

The increase in suspended solids would be local and temporary during periods of active dredging. Increased depths in navigable areas may reduce sediment agitation from Ohio River traffic and reduce the volume of resuspended solids. Although the benthic habitat would be disturbed by the dredging activities, it is anticipated to recover and improve over time.

The Applicant is not proposing mitigation because minor impacts are anticipated with the mining operation already established. Practicable steps to minimize adverse impacts of the project would be implemented, such as: abiding by the conditions and requirements in its existing dredge permit authorizations and utilizing on-board GPS systems to avoid any protected areas.

Purpose and Social & Economic Benefits of the Proposed Activity

Commercial dredging in this area provides several jobs and business-related spending in the local economy, as well as the additional benefits of improved navigation and flood storage capacity along this stretch of the Ohio River.

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

Alternative mining locations: The Applicant proposed alternative locations for the dredging project. Old river channels or flood plains adjacent to the River can be mined productively; however, sand is unlikely to be replenished naturally. Mining these locations is not economically feasible and potentially more environmentally damaging, because they require acquisition of land, use of over-the road trucks, and abandoned mining pits.

Alternative dredging techniques: The Applicant proposed alternative dredging techniques including land disposal or disposal into another water body, which would substantially increase the cost of these

activities and has the potential to increase the environmental impacts. Alternatives also pose some increased safety concerns for crews and add logistical complications that do not result in any reduction of environmental impact. The Applicant's commercial sand and gravel dredging operation introduces no material into the waterway and deposits only the material pulled from the waterway. The material would be returned to the waterway in approximately the same location where it is removed.

The project would follow guidelines set forth by the Agency and USACE. The least intrusive alternative would be to cease dredging along this stretch of the Ohio River. However, this is not an acceptable alternative given that this is a useful project and would maintain commercial uses of the River and provide economic and employment opportunities for the community.

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

On January 29, 2018, and February 2, 2018, the Applicant contacted the IDNR Ecosystems and Environment Section regarding the Incidental Take Authorization recommendation for the Fat Pocketbook mussel (*Potamilus capax*). After the initial review, IDNR concluded the proposed action was likely to affect this mussel based on known locations. Since stating this recommendation, the Natural Heritage Database was updated, resulting in the removal of the 2011 record of the mussel. Additionally, the Applicant provided documentation to IDNR supporting their claim that the dredging location is unlikely to support mussels due to unconsolidated and shifting substrate materials. Considering the information provided by the Applicant and the update to the Natural Heritage Database, the Ecosystems and Environment section determined the project is not likely to adversely affect the Fat Pocketbook mussel. The project was also reviewed for cultural resource impacts and was determined to be in compliance with the Illinois State Agency Historic Resources Preservation Act. The EcoCAT consultation was completed on February 5, 2018.

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 assessment was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; 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 the activity will benefit the community at large by supporting the local economy and maintaining navigational uses of the river. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.