

Illinois Environmental Protection Agency
Bureau of Water, Permit Section
(IEPA)

1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276, 217/782-3362

The IEPA has issued a Public Notice of a request for a Clean Water Act Section 401 water quality certification that would allow the issuance of a federal permit for the discharge of pollutants to waters of the State.

Public Notice Beginning Date:

Monday, May 12, 2025

Public Notice Ending Date:

Monday, June 2, 2025

Agency Log No.: C-0002-25

Federal Permit Information: Federal permit/license no. 2014-1164 is under the jurisdiction of Rock Island District U.S. Army Corps of Engineers

Name and Address of Discharger: U.S. Army Corps of Engineers, Rock Island District - Clock Tower Building, P.O. Box 2004, Rock Island, IL 61204

Discharge Location: In Section 33 of Township 18-North and Range 1-West of the West 4th & East 3rd Principal Meridian in Rock Island County. Additional project location information includes the following: The project occurs in the states of Illinois, Iowa, Missouri, and Wisconsin, , IL 61265

Name of Receiving Water: Mississippi River

Project Name/Description: Dredged Materials in support of 9-foot Navigation Channel Project on the Mississippi River - proposed routine channel maintenance of the 9-foot Navigation Project on the Mississippi River, River Miles 300.0 to 614.0

Construction Schedule: Beginning Feb 2025 and ending Mar 2025

The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters must provide their name and address along with comments on the certification request. The IEPA Log number must appear on each comment page. Commenters may include a request for public hearing. Only hearing requests and comments that pertain to Clean Water Act Section 401 authority will be considered. This authority provides consideration of whether the permit or license would be consistent with Sections 301, 302, 303, 306, or 307 of the CWA, as well as "any other appropriate requirement of State [or tribal] law". Requests for additional comment period must provide a demonstration of need. The final day of comment acceptance will be on the Public Notice Ending date shown above, unless the IEPA grants an extended notice period. The attached Fact Sheet provides a detailed description of the project and the findings of the IEPA's antidegradation assessment.

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 see the contact information below.

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Post Document. No. C-0002-25-05122025-PublicNoticeAndFactSheet.pdf

401 Water Quality Certification Fact Sheet for Maintenance Dredging

IEPA Log No. C-0002-25

Contact: Angie Sutton 217-782-9864

The United States Corps of Engineers (USACE) has applied for 401 water quality certification for maintenance dredging of the navigational channel on the Mississippi River from River Mile (RM) 300 to 614 within the States of Missouri, Illinois, Iowa and Wisconsin. River Miles in Illinois include RM 0 through most of RM 580. The affected reaches of the river in Illinois are located in the following counties: Jo Daviess, Carroll, Whiteside, Rock Island, Mercer, Henderson, Hancock, Adams, Pike, Calhoun, Jersey, Madison, St. Clair, Monroe, Randolph, Jackson, Union, and Alexander. The project extends approximately 314 river miles from just downstream of Lock and Dam (L&D) 10 at Guttenburg, IA to just downstream of L&D 22 near Saverton, MO. The project is comprised of 12 pools (Pool 11 – 22) create by a series of locks and dams.

Funds for development, operation, and maintenance of the navigation system were authorized by initiation of the Rivers and Harbors Act of July 3, 1930. This and subsequent legislation provided for the construction of a series of locks and dams and dredging to create and maintain a reliable navigation channel of at least 9 feet and 300 feet wide and wider in bends. Aside from routine maintenance on L&D structures, annual dredging is required at various locations in the navigation channel. The locations within the Upper Mississippi River (UMR) that require dredging are numerous, and often unpredictable.

Annual maintenance dredging is normally performed at 15 to 20 sites with material volume ranging from approximately 95,000 to 1,300,000 cubic yards (CY) annually. The dredged material is removed by either hydraulic methods using a cutter-suction dredge, or by mechanical methods using a clamshell dredge or backhoe. Hydraulic dredging transports material in a slurry to the placement site through a pipeline for final placement, while mechanical dredging loads material onto barges for transport to approved placement sites. Spoils would be placed in historic placement sites as no new placement sites are proposed. Dredged material may be placed in several different manners such as open water, bankline, inland floodplain, upland or contained, temporary placement, or beneficial use sites.

Information used in this review was obtained from the application documents dated November 2024, and December 27, 2024.

Identification and Characterization of the Affected Water Body.

The Mississippi River from River Mile 0 to 580 is a General Use Water. At River Mile 580, located in Jo Daviess County, the 7Q10 flow is approximately 13,495 cfs. At River Mile 0, located in Alexander County, the 7Q10 flow is approximately 49,200 cfs. The Mississippi River between these river mile markers is not listed as biologically significant in the 2008 Illinois Department of Natural Resources publication Integrating Multiple Taxa in a Biological Stream Rating System nor been given an integrity rating in this document. The Mississippi River reach in Illinois for this project is comprised of ten segments listed as Waterbody Segments IL_M-12, IL_M-02, IL_K-22, IL_K-17, IL_K-21, IL_J-05, IL_J-02, IL_J, IL_J-36, and IL_I-84. The waterbody segments that have reaches enhanced in regard to the dissolved oxygen water quality standard are IL_M-12, IL_M-02, IL_K-21, IL_J-05, IL_J-02, IL_J, IL_J-36, and IL_I-84.

All waterbody segments are found on the 2024 Illinois 303(d) List.

The Mississippi River, Waterbody Segment, IL_M-12, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls, and toxaphene, and primary contact use with a potential cause given as fecal coliform. Aquatic life use is fully supported.

The Mississippi River, Waterbody Segment, IL_M-02, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls, and toxaphene, primary contact use with a potential cause given as fecal coliform, and public and food processing water supply use with a potential cause given as iron. Aesthetic quality and aquatic life uses are fully supported.

The Mississippi River, Waterbody Segment, IL_K-22, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls, and toxaphene, and public and food processing water supply use with potential causes given as atrazine and iron. Aesthetic quality, aquatic life, primary contact uses are fully supported.

The Mississippi River, Waterbody Segment, IL_K-17, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls, and toxaphene, primary contact use with a potential cause of fecal coliform and public and food processing water supply use with potential causes given as atrazine and iron. Aesthetic quality and aquatic life uses are fully supported.

The Mississippi River, Waterbody Segment, IL_K-21, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls, and toxaphene, and primary contact use with a potential cause given as fecal coliform. Aesthetic quality and aquatic life use is fully supported.

The Mississippi River, Waterbody Segment, IL_J-05, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls, and toxaphene, and public and food processing water supply use with a potential cause given as iron. Aesthetic quality, aquatic life, and primary contact uses are fully supported.

The Mississippi River, Waterbody Segment, IL_J-02, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls, and toxaphene. Aquatic life, primary contact and public and food processing water supply uses are fully supported. Waterbody

The Mississippi River, Waterbody Segment, IL_J, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as mercury and polychlorinated biphenyls. Aquatic life and food processing water supply uses are fully supported.

The Mississippi River, Waterbody Segment, IL_J-36, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls, and toxaphene, and primary contact use with a potential cause given as fecal coliform. Aquatic life and aesthetic quality uses are fully supported.

The Mississippi River, Waterbody Segment, IL_I-84, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls, and toxaphene, public and food processing water supply use with a potential cause given as iron. Aesthetic quality, aquatic life, and primary contact uses are fully supported.

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

Pollutant load increases that would occur from this project include some increases in suspended solids during the dredging and placement of the spoil material. The benthic habitat to be dredged will be disturbed but should revert to its previous

condition of aquatic life support soon after dredging. Dredged material will primarily be fine to medium-grain sand or a sand/gravel mixture.

Testing and previous dredging experience have shown very limited suspension and/or turbidity associated with the dredging of coarse-grained materials. Such materials settle very rapidly and are seldom carried back into the river with the return water. Therefore, dredging activity in the majority of the UMR will not create adverse suspended particulates or turbidity levels in the vicinity of dredged material placement sites where coarse material is present. Bulk sediment analyses were performed for the following constituents: arsenic, cadmium, chromium, copper, lead, mercury, zinc, polycyclic aromatic hydrocarbons, and polychlorinated biphenyls. Except for arsenic, at RM 493.9, all analyte concentrations were below their respective consensus-based Threshold Effect Concentration (TEC) sediment quality guideline

Dredged material placement sites may be terrestrial or aquatic and may range in size from less than one acre to 10 acres or more. Dredged material may be placed in several different manners such as open water, bankline, inland floodplain, upland or contained, temporary placement, or beneficial use sites.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in suspended solids will be local and temporary. Placement areas will be the same (or very similar) to past dredging projects. Placement sites have been previously evaluated and are documented in site-specific Dredged Material Management Plans (DMMPs) or Environmental Assessments (EAs). Any necessary mitigation measures required for dredged material placement sites proposed are addressed in those documents and new placement sites will require additional evaluations. The District also continues to coordinate dredging actions with the On-Site Inspection Team (OSIT) and considers recommendations to avoid and minimize impacts to natural resources.

Mussel surveys and ongoing evaluations of mussel bed locations are conducted to ensure that dredging operations make every attempt to avoid or minimize impacts to identified mussel populations.

Additional site-specific information of effects on particulates and turbidity, chemical and physical properties of the water column, effects to biota, and actions taken to minimize impacts are described in subsequent DMMPs and/or EAs. Beneficial uses of dredged material are also pursued when and where they are feasible.

Purpose and Anticipated Benefits of the Proposed Activity.

The UMR is a nationally important commercial transportation route which requires locks, dams, channel training structures, and dredging to maintain safe and efficient inland waterway traffic. This project is necessary in order to maintain the UMR 9-foot Navigation Channel Project to a depth of 9-feet below flat pool and 300 feet wide.

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

The alternatives for this project will follow guidelines set forth by the Agency. Prior to the discharge of any dredged material all Agencies involved in the project shall be informed of the proposed dredging activity. Dredging shall occur in historic dredging locations. The historic dredging locations include reaches of the river(s) in which dredging has occurred in the past five years. If additional reaches are necessary, they need to be reviewed individually. Historic dredge placement sites, used within the last five years, may be utilized. Any new or additional dredge spoil placement sites will need to be reviewed individually. The least intrusive alternative would be to not allow dredging. However, this is not an acceptable alternative given that this is a useful project and will maintain commercial and recreational uses of the river system.

No new placement sites are proposed and dredged material placement sites proposed have been previously evaluated and selected in compliance with the NEPA. Any new sites proposed will require additional NEPA evaluation.

Further discussion on Project alternatives is included in the following documents:

- Final Environmental Impact Statement for Operation and Maintenance of the Upper Mississippi River 9-Foot Navigation Channel (*USACE, 1974*)
- The Long-Term Management Strategy for Dredged Material Placement Upper Mississippi River Main Report (*USACE, 1990*)
- The Summary of Cumulative Dredging, Dredged Material Placement Actions, and Programmatic Environmental Assessment for Future Dredged Material Placement Associated with Channel Maintenance Activities (*USACE, 2003*); and
- Site-specific Dredged Material Management Plans (DMMPs) or Environmental Assessments (EAs)

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

The District has coordinated dredging operations with various State and Federal agencies including the U.S. Fish and Wildlife Service and the Illinois Department of Natural Resources. This multi-agency group, the On-site Inspection Team (OSIT), has considered threatened and endangered species as part of the dredged material placement related actions for this project and as such have made the following determinations:

There are 10 federally-listed threatened and endangered species, one candidate species, two proposed endangered species, one proposed threatened species, and one non-essential experimental population for counties occurring within the Project area along the Upper Mississippi River. The fat pocketbook (*Potamilus capax*), Higgins eye pearlymussel (*Lampsilis higginsii*), sheepnose mussel (*Plethobasus cyphyus*), spectaclecase mussel (*Cumberlandia monodonta*), gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), rusty patch bumble bee (*Bombus affinis*), decurrent false aster (*Boltonia decurrens*), and eastern prairie fringed orchid (*Platanthera leucophaea*) are listed as threatened or endangered species. The tricolored bat (*Perimyotis subflavus*) and salamander mussel (*Simpsonaias ambigua*) are listed as proposed endangered. The monarch butterfly (*Danaus plexippus*) is listed as a Candidate. The western regal fritillary is listed as proposed threatened. The whooping crane (*Grus americana*) is listed a Non-Essential Experimental Population.

Based on the habitat needs of the species, the dredging season, and typical dredge and placement practices, the only species perceived to be potentially affected by dredge and placement operations are mussel species including the Higgins eye, sheepnose, spectaclecase, salamander, and fat pocketbook mussels. Potential impacts to other species, such as the bat species, are likely to be more easily identified and avoided during the planning process. Avoidance measures would consist of limiting vegetation clearing and ground disturbance, adjusting schedules around a species' active season, and avoiding known populations actively utilizing specific placement sites.

Agency Conclusion.

This assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (Antidegradation standard). We find that the proposed activity, utilizing historic dredging locations and placement sites, 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. This activity will benefit the community at large by maintaining commercial and recreational uses of the river system. The proposed activity is therefore compliant with the Antidegradation standard.

