

IEPA Log No.: **C-0063-20**
CoE appl. #: **N/A**

Public Notice Beginning Date: **August 10, 2020**
Public Notice Ending Date: **September 9, 2020**

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: U.S. Army Corps of Engineers, Chicago District, 231 South LaSalle Street, Suite 1500, Chicago, IL 60604

Discharge Location: Various locations in Cook and Lake County

Name of Receiving Water: Lake Michigan

Project Description: Authorization of the Regional General Permit Lake Michigan Activities for Cook and Lake County.

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 an application received from 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. Also attached is the draft 401 water quality certification.

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 Francisco J. Herrera at 217/782-3362.

FJH:C-0063-20PN and Factsheet.docx

Fact Sheet for Antidegradation Assessment
For U.S. Army Corps of Engineers – Regional General Permit Lake Michigan Activities,
County of Cook and Lake Illinois
IEPA Log # C-0063-20
Contact: Scott Twait 217/782-3362
Public Notice Start Date: August 10, 2020

The U.S. Army Corps of Engineers, Chicago District (USACE) has proposed the establishment of a new Regional General Permit that will authorize work within Lake Michigan in Cook and Lake Counties. The Regional General Permit (RGP) is designed to cover activities under Section 10 of the 1899 Rivers and Harbors Act and Section 404 of the federal Clean Water Act that would have minimal individual and cumulative impacts on Lake Michigan aquatic resources in the counties of Cook and Lake. The Chicago District issued a public notice concerning the proposed RGP on March 31, 2020. The Corps public notice and additional information can be found at <https://www.lrc.usace.army.mil/Portals/36/docs/regulatory/publicnotices/LRC-2020-7PN.pdf>. The Illinois Environmental Protection Agency (Agency) is considering general water quality certification pursuant to Section 401 of the Clean Water Act for the proposed RGP.

An antidegradation assessment in accordance with 35 Ill. Adm. Code 302.105 (Antidegradation standard) has been conducted on the conditions and limitations of the RGP. The purpose of this assessment is to determine whether or not the activities authorized under the proposed RGP will meet Illinois' water quality standards and therefore qualify for general water quality certification pursuant to Section 401 of the Clean Water Act. The Agency is proposing to issue general Section 401 water quality certification with conditions for the following proposed activities:

1. Installation, repair and modification of permanent and seasonal piers/docks, boat ramps, boat hoists, and lifts;
2. Navigational and mooring aids;
3. Temporary recreational structures;
4. Installation, repair, and modification of shore protection (revetments, breakwaters, seawalls);
5. Beach nourishments;
6. Maintenance of existing public harbors, public access facilities, and navigational features required for maintaining existing function;
7. In-water placement of dredged material, including beneficial use of dredged material for beach nourishment, shore protection, or ecosystem restoration; and
8. Temporary structures and minor discharges of dredged or fill material necessary for the removal of vessels (wrecked, abandoned or disabled) or for the removal of man-made obstructions to navigation.

Identification and Characterization of the Affected Water Body.

The Regional General Permit regulates activities that may be applied to Lake Michigan Basin waters. Lake Michigan is a large oligotrophic lake subject to the Lake Michigan Basin water quality standards of 35 Ill. Adm. Code 302 Subpart E. Illinois has jurisdiction over 1,526 square miles of Lake Michigan open water, 3.88 square miles of Lake Michigan harbors and 64 miles of Lake Michigan shoreline, which are covered under the Lake Michigan Basin Water Quality Standards. Lake Michigan shoreline protection enhancement projects take place within two Lake Michigan Water types: Lake Michigan Open Waters and Lake Michigan Shoreline.

Lake Michigan Open Waters, Waterbody Segment, QLM-01, is listed on the draft 2018 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, public and food processing water supply, primary recreational contact, secondary contact and aesthetic quality uses are fully supported. Lake Michigan Shoreline Waters comprise 51 waterbody segments that span the entire 64 miles of Lake Michigan shoreline (excluding harbors and harbor entrances) within Illinois. Each of these segments are listed on the draft 2018 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 and primary contact with a potential cause of *Escherichia coli*.

The Illinois EPA has completed 51 Total Maximum Daily Load (TMDL) reports to address primary recreational use impairments by bacteria at beaches along Lake Michigan's Shoreline in Illinois. These TMDL reports are presented in 3 separate documents for the following areas: Lake County (9 beaches), Suburban Cook County (13 beaches), and the City of Chicago (29 beaches). These documents are available at <https://www2.illinois.gov/epa/topics/water-quality/watershed-management/tmdls/Pages/reports.aspx>.

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

The pollutant load increases that would occur from activities covered by the Regional General Permit include increases in total suspended solids during the construction of shoreline erosion protection structures and the dredging and placement of the spoil material. These increases are expected to be local and temporary for the proposed activities. Benthic habitat may be disturbed in the vicinity of the construction or dredging and filling area. Shoreline protection structures may convert some open lakebed areas into stone revetments, breakwaters or stone reinforced steel groins. Dredging activities would be limited to areas where certain water depths are necessary for navigation and where dredging has occurred in the past. Dredged materials may be placed in the open waters of Lake Michigan or onto beaches or in nearshore areas to replenish sand starved areas.

Construction or beneficial use fill material will either be obtained from upland quarry sites which are considered non-pollutional or it will be obtained from in-lake dredge sites. For materials obtained in-lake, pre-dredge sediment samples will be required to be analyzed for particle size distribution, asbestos, and certain chemical parameters to determine if material exceed threshold concentrations. If the pre-dredge testing indicates thresholds may be exceeded, the permittee will be required to either conduct water quality monitoring at the discharge and at in-lake locations determined by a mixing zone analysis or to obtain a case-specific written approval from the Agency prior to discharge. The sampling and testing of dredged materials will be required prior to each yearly dredging event, unless the permittee can demonstrate that previous years material analyses shows that the materials involved is consistently non-pollutional and does not cause or contribute to water quality violations.

TMDL reports have been prepared by the Agency and approved by the USEPA for 51 beaches along Illinois' Lake Michigan shoreline to address Primary Contact Use Recreation impairments due to excess bacteria. The proposed activities may occur within an area identified by the TMDL reports as a Beach Protection Area subject to that TMDL. The proposed activities may create embayments that influence nearshore concentrations of bacteria. Certain shoreline protection activities, due to different factors, will either require implementation of Best Management Practices in accordance with the TMDL or require the permittee to seek case-specific 401 certification for the project.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in total suspended solids would be local and temporary. Although the benthic habitat will be disturbed by the construction activities, it is anticipated to recover and improve over time due to the placement of sand over exposed clay lakebed substrates. Additionally, the voids within the proposed shoreline protective structures are expected to provide a stable and diverse habitat opportunity for fish and other aquatic species.

According to the proposed RGP, regulated activities must include a statement describing how compensatory mitigation requirements will be satisfied, or an explanation why compensatory mitigation should not be required for proposed impacts to Lake Michigan. The Corps of Engineers will make a determination if compensatory mitigation is required in accordance with 33 CFR 332. For projects that would be covered by the RGP's general Section 401 certification, the Illinois EPA has determined that compensatory mitigation requirements as determined by the Corps of Engineers satisfies the Agency's antidegradation rule at 302.105(f) as it may be construed as related to mitigation.

Proposed Lake Michigan shoreline embayments would be required to comply with the TMDL's water quality concentration limit load allocation of 126 cfu/100ml if the proposed embayment is constructed within a Beach Protected Area as defined in the USEPA approved TMDL for Lake Michigan Shoreline segments. Implementation of Best Management Practices in accordance with the TMDL report's recommendations would be required as assurance that any potential adverse effects on water quality related to bacterial loading is adequately addressed.

Purpose and Anticipated Benefits of the Proposed Activity.

The purpose of Lake Michigan shoreline protection enhancement projects are to establish a more stable layer of sand that serves to reduce downcutting of the clay lakebed and prevents erosion along the project-affected length of the shoreline as well as to provide a higher level of shoreline protection during higher lake levels and larger storm waves. The purpose of any proposed sand nourishment is to offset any littoral sands whose drift would be restricted by the proposed shoreline protection structures and to maintain sand lost during storm events. Erosion of the lakebed and bluff, if not prevented, would undermine existing shoreline structures or the bluff and result in additional beach erosion and resuspension of clays found in the substrate material. The purpose of dredging is to provide necessary maintenance to recreational areas and navigational features allowing for continued use.

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

The review of the activities allowed under the Regional General Permit proposed for general 401 water quality certification finds that the conditions and limitations defined by the RGP and proposed Section 401 certification conditions will assure that all technically and economically reasonable measures to avoid or minimize the extent of the impacts will be incorporated into the proposed activities.

Agency Conclusion

This preliminary assessment in regards to 401 water quality certification issuance for the U.S. Army Corps of Engineers, Chicago District Regional General Permit Program 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 activities proposed for general 401 water quality certification subject to conditions would have minimal individual and cumulative impacts on the aquatic resources within the State of Illinois. Comments received during the 401 water quality certification public notice period will be evaluated before a final decision is made by the Agency.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

217/782-3362

DRAFT

U. S. Army Corps of Engineers
Chicago District
Regulatory Branch
231 South LaSalle Street, Suite 1500
Chicago, Illinois 60604

Re: U.S. Army Corps of Engineers, Chicago District Regional General Permit for Lake Michigan
401 Water Quality Certification with Conditions

Dear Sir or Madam:

This Agency has reviewed the proposed Regional General Permit public noticed for Cook and Lake County by the Chicago District on March 31, 2020. Based on the information included in the public notice and on the Agency's record, it is our engineering judgment that the activities proposed for coverage under the General Permit may be completed without causing water pollution as defined in the Illinois Environmental Protection Act, provided the project is carefully planned and supervised.

Section 401 water quality certification is hereby issued for the following activities listed under the Regional General Permit: (1) Installation, repair and modification of permanent and seasonal piers/docks, (2) Navigational and mooring aids, (3) Temporary recreational structures, (4) Installation, repair, and modification of shore protection, (5) Beach nourishment, (6) Maintenance of existing public harbor, public access facilities, and navigational features required for maintaining existing function, (7) In-water placement of dredged material including beneficial use of dredged material for beach nourishment, shore protection, or ecosystem restoration and (8) Temporary structures and minor discharges of dredged or fill material necessary for the removal of vessels or for the removal of man-made obstructions to navigation; subject to the following General Conditions and subject to the attached Special Conditions for items (4) and (7) of the above listed activities.

General Condition 1: The applicant shall not cause:

- a. a violation of applicable water quality standards of the Illinois Pollution Control Board Title 35, Subtitle C: Water Pollution Rules and Regulation;
- b. water pollution defined and prohibited by the Illinois Environmental Protection Act;
- c. interference with water use practices near public recreation areas or water supply intakes;
- d. a violation of applicable provisions of the Illinois Environmental Protection Act.

General Condition 2: The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.

General Condition 3: The applicant is advised that the following permit(s) must be obtained from the Illinois EPA: The permittee shall obtain a Section 39 Final Determination by submitting a Joint Application to IDNR and IEPA prior to commencement of proposed construction. The applicant must obtain permits to construct sanitary sewers, water mains, and related facilities prior to construction.

General Condition 4: In-water construction including mechanical dredging operations shall be conducted in a manner to minimize resuspension of materials in the water column using techniques such

as careful equipment use, use of equipment modifications such as closed clamshell buckets, use of turbidity curtains during dredging and use of sealed barges and transportation trucks. Turbidity curtains shall be used in accordance with the current version of the "Illinois Urban Manual"

<https://illinoisurbanmanual.org/> Practice Standard for Floating Silt Curtain (no. 917).

General Condition 5: Except for placement of dredged material covered under the Regional General Permit, any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area that is in compliance with all State statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.

General Condition 6: The applicant shall be responsible for obtaining a NPDES Storm Water Permit under the federal Clean Water Act prior to initiating construction if the construction activity associated with the project will result in the disturbance of one (1) or more acres, total land area. A NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the IEPA's Division of Water Pollution Control, Permit Section.

General Condition 7: The applicant shall implement all necessary sedimentation and erosion control measures consistent with the current version of the "Illinois Urban Manual" found at <https://illinoisurbanmanual.org/>.

General Condition 8: Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/stream banks, or 3) placed in waters of the State.

General Condition 9: The fill material used in Lake Michigan shall be predominantly sand or larger size material, with <20% passing a #230 U. S. sieve.

General Condition 10: All construction equipment and material that enters Lake Michigan shall be free of contaminants of any kind including, but not limited to: sludge, clay, dirt, oil, grease, organic matter, or any other pollutant that would produce offensive conditions or otherwise violate water quality standards.

General Condition 11: All hydraulic machinery used for this activity and deployed in or immediately adjacent to Lake Michigan shall utilize biodegradable or bio-based hydraulic fluids to minimize pollution in the case of broken or leaking hydraulic equipment.

General Condition 12: The applicant shall ensure that a Spill Response Plan is in place which shall detail procedures for managing the accidental release of petroleum, oil, and lubricant products to the aquatic environment during construction. Absorbent pads, containment booms and skimmers shall be available to facilitate the cleanup of petroleum spills. In the event that floating hydrocarbon (oil, gas) products are observed, the applicant or his designated individual will be responsible for directing that in-water work be halted so that appropriate corrective measures are taken in accordance with the Oil Spill Response Plan prior to resuming work.

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Cook and Lake County Regional General Permit Lake Michigan Activities 401 Water Quality Certification
Log # C-0063-20

Should you have any questions or comments regarding the content of this letter, please contact Francisco J. Herrera at 217-782-3362.

Sincerely,

Darin E. LeCrone, P. E.
Manager, Industrial Unit, Permit Section
Division of Water Pollution Control

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Attachment (Special Conditions for Section 401 water quality certification of the Lake Michigan Special Conditions)

cc: Records Unit
 IDNR, OWR, DWRM, Bartlett
 USEPA, Region 5
 USFWS, Chicago

DRAFT

Illinois Environmental Protection Agency

<<Future Date>>

Special Conditions for Section 401 water quality certification of the Lake Michigan Special Conditions

- 1) An individual Section 401 certification shall be required for shoreline construction activities that may reasonably be expected to cause or contribute to violation of the USEPA approved Total Maximum Daily Loads for pathogenic bacteria. Specifically, this case-specific 401 requirement applies to 1) projects that include the installation or relocation of any municipal stormwater drainage conveyance to Lake Michigan or 2) projects that meet all the following criteria:
 - a. the project or any component of the project is located within 500 meters of a public beach;
 - b. the project includes the installation or enlargement of shoreline features that create or enlarge an embayment. For purposes of this condition an embayment shall be considered any fixed feature(s) which encloses waters of Lake Michigan and has the potential to limit the exchange of freshwater between the enclosed waters and Lake Michigan by means of inhibiting both shore-parallel currents and shore-perpendicular currents; and
 - c. there is an existing or proposed natural or man-made stormwater drainage feature that would discharge concentrated stormwater runoff to the waters enclosed by the proposed embayment. For purposes of this condition, concentrated runoff shall be considered runoff from a land area that exceeds a single residential unit and associated grounds.
- 2) For any shoreline construction activity that meets items (a) and (b) of the above condition but does not meet item (c), a case specific 401 certification will not be required provided the applicant implements appropriate Best Management Practices consistent with Table 5-1 of Illinois EPA's TMDL report titled "Total Maximum Daily Load, Shoreline Segments in Suburban Cook County, Illinois" dated May 15, 2013 to the extent necessary to address bacterial loading from constructed embayment structures and to ensure compliance with applicable fecal coliform water quality standards under 35 Ill. Adm. Code 302.505 and the geometric mean of 126 cfu/100mL load allocation requirement under the above mentioned USEPA approved TMDL.
- 3) An individual Section 401 certification shall be required for discharges of dredged material originating from areas outside of Lake Michigan Basin waters under Illinois jurisdiction. Lake Michigan Basin is defined under 35 Ill. Adm. Code 303.443.
- 4) An individual Section 401 certification shall be required for the discharge of hydraulically dredged materials.
- 5) For discharges resulting from open water disposal or beneficial use of mechanically dredged materials obtained from Lake Michigan the permittee shall comply with the following requirements:
 - a. Physical and/or chemical analysis shall be conducted prior to discharge of dredged materials to evaluate the suitability of the dredged material for discharge and to determine the necessity of additional pollution control measures. For a recurring dredging operation, the sampling and testing frequency shall be considered consistent with 35 Ill. Adm. Code 395.205 if:
 - i. Sampling and analyses are conducted prior to each yearly dredge event, or

- ii. Sampling and analyses are conducted on a “once-per-permit” basis in accordance with written approval by the Illinois EPA. Such approval will be requested in writing to the Bureau of Water by the applicant and will specify the reduced sampling and analysis requirements. The Agency’s approval of reduced sampling and analysis will be based on the applicant’s demonstration of compliance with permit conditions and water quality standards over a period of time consisting of no less than the ten (10) most recent annual dredge events. A request shall consist of the following items:
 - 1. An evaluation of the results of all the particle size analyses, 4 hour supernatant analyses and surface water monitoring sample analyses conducted over the ten (10) most recent annual dredge events.
 - 2. A detailed description of the collection and testing procedures of collected samples with a topographical map showing sampling locations.
 - 3. An evaluation of the results of all the Polarized Light Microscopy (PLM) and Transmission Electron Microscopy (TEM) over the ten (10) most recent annual dredge events.

- b. The following sampling and analysis shall be conducted on a representative number of samples from the dredge cut (minimum of 3 samples analyzed separately):
 - i. A particle size distribution using a No. 230 U.S. sieve.
 - ii. Analysis of asbestos by the following methods:
 - 1. PLM and TEM methods shall be used for asbestos testing. All samples shall be analyzed by each asbestos test method.
 - 2. For new dredge cuts, the modified Superfund method as described in Special Condition 5(f) shall be conducted at least one time where dredged material is to be placed on a beach or in nearshore waters for beach nourishment. After the initial modified Superfund testing is conducted on a particular dredge cut and the results are determined to fall below the asbestos concentrations provided in Special Condition 5(d)(iv), the modified Superfund method testing is not required for subsequent dredge events.

 - iii. Resuspension analysis:
 - 1. For open water placement of dredged material, a supernatant test, based on settling periods of at least zero (0) and four (4) hours, shall be conducted on each representative sample and the receiving water. Supernatant analysis will be conducted in mass per volume for the following parameters: total suspended solids (TSS), total volatile solids (TVS), ammonia-nitrogen (as N), phosphorus (as P), total dissolved solids (TDS), sulfate, chloride, lead (total), and zinc (total).
 - 2. For beach placement of dredged material, an elutriate test shall be conducted on each representative sample and the receiving water. Elutriate analysis will be conducted in mass per volume for the following parameters: total suspended solids (TSS), total volatile solids (TVS), ammonia-nitrogen (as N), phosphorus (as P), total dissolved solids (TDS), sulfate, chloride, lead (total), and zinc (total).
 - 3. Parameters shall not exceed Lake Michigan Basin water quality standards, 35 Ill. Adm. Code 302, Subpart E. If water quality standards are not met, then the applicant shall conduct water quality monitoring at the dredged disposal site to ensure water quality standards are met at the boundary of the mixing zone, as determined using models described in the Inland Testing Manual, Appendix C, if applicable. If models

show water quality standards will not be met at the boundary of the mixing zone, then dredged material shall be govern by condition 5(e).

c. Water quality monitoring shall be conducted during open water placement activities if the 4 hour supernatant test results of the dredge material exceed the following concentrations: 0.02 mg/L ammonia-nitrogen (as N), 12 mg/L chloride, 0.007 mg/L phosphorus and 15 mg/L of total suspended solids (TSS). The following parameters shall be monitored on a twice weekly basis in the first week of the dredging event and weekly thereafter and reported in mg/L: total suspended solids (TSS), ammonia-nitrogen (as N), phosphorus (as P), and chloride. The mean 4 hour supernatant test result may only be used to make this determination provided the mean value is based on a minimum of 10 samples. The water quality sampling shall be conducted in accordance with the following:

- i. A sample of the water quality at the placement site shall be collected prior to the start of dredging activities, at surface and mid-depth elevations consisting of water hardness, water pH, and water temperature in addition to the above listed parameters.
- ii. Water quality samples shall be collected at surface and mid-depth elevations at two locations representative of the prevailing water current direction, one at approximately 100 feet from the discharge point and the other at approximately 500 feet from the discharge point.
- iii. Water quality samples shall be taken at approximately one (1) hour and four (4) hours after the discharge of dredge material commences.
- iv. Sample laboratory analysis results, drawings depicting the location of each collected sample point, the volume of dredge material discharged, method of dredged material placement and the dredge disposal location shall be recorded and compiled into a monitoring report. The monitoring report shall also provide the following information: method of determining downstream sample locations; date, time, location, and individual(s) who performed the sampling; the laboratory analysis sheets; date and time that discharge begins and ends.

d. All parameters tested in accordance with condition 5 shall be tested by methods in accordance with 40 CFR 136 with reporting limits that do not exceed the following values:

Ammonia-Nitrogen (as N)	0.02 mg/L
Chloride	12 mg/L
Lead (total)	0.05 mg/L
Phosphorus (as P)	0.007 mg/L
Sulfate	24 mg/L
Total Dissolved Solids (TDS)	180 mg/L
Zinc (total)	0.159 mg/L
Polarized Light Microscopy (PLM)	1% ACM
Transmission Electron Microscopy (TEM)	1% ACM
Asbestos Superfund Method	2 Ms/g PM ₁₀
ACM (Asbestos containing material)	
Ms/g PM ₁₀ (Million structures per gram of particulate matter)	

- e. Should any of the results obtained from special condition 5(b) meet the following, the applicant shall submit the results to the Agency for written approval 90 days prior to proposed dredging.
 - i. Material with any separate particle size analysis equal to or greater than 20% passing a No. 230 U.S. sieve.

- ii. Material with 4 hour supernatant or elutriate results which exceed twice the reporting limit concentrations.
 - iii. Material with greater than 1% ACM reported from the PLM or TEM test.
 - iv. Material tested for asbestos using the Superfund method that exceeds a mean value of 6.23 Ms/g PM₁₀ and a 95% upper confidence limits (UCL) of 12.58 Ms/g PM₁₀ for the 12 or more samples using the sum of the Protocol and NIOSH 7402 test methods.
- f. The dredged material shall be placed in the water in a manner to minimize resuspension of sediment material and contaminants by utilizing techniques including careful placement methods, release of material near the bottom of the water body, disposal during favorable weather conditions that minimize turbulence and transport of suspended contaminants and other methods such as turbidity curtains should be used as necessary to minimize re-suspension of sediment material. Turbidity curtains shall be used in accordance with the current version of the "Illinois Urban Manual" <https://illinoisurbanmanual.org/> Practice Standard for Floating Silt Curtain (no. 917).
- g. Modified Superfund method testing shall be conducted on a minimum of twelve (12) representative sediment samples from the source material. Samples shall be prepared and analyzed in accordance with the most current version of the Superfund Method for the Determination of Releasable Asbestos in Soils and Bulk Materials(U.S. EPA 540-R-97-028, 1997) and modified in the Draft Modified Elutriator Method for the Determination of Asbestos in Soils and Bulk Material (Berman and Kolk, May 2000) and additional modifications necessary to obtain the necessary sampling and analysis of PM₁₀ in accordance with the Illinois Attorney General's Task Force Report. Sampling shall utilize a grid sampling system with equally spaced samples. Samples analyzed for asbestos shall be analyzed by Transmission Electron Microscopy (TEM) and for both the NIOSH 7402 (PCME) method and Protocol Structures method. The aforementioned sampling and analysis shall be conducted in accordance with the recommendations specified in the document entitled Illinois Beach State Park (IBSP): Determination of Asbestos Contamination in Sand Used for Beach Nourishment, Final Recommendations, dated December 29, 2003, prepared by the University of Illinois at Chicago, Center of Excellence in Environmental Health, Health Hazard Evaluation Program for the Illinois Attorney General's Task Force that was formed to address asbestos contamination at Illinois Beach State Park (IBSP). Sampling results shall be used to conduct a screening risk assessment to evaluate the potential harm to human health. Results of the screening risk assessment shall be compared to the results in Table 7 of the Illinois Attorney General's Task Force Report.
- h. The permittee shall monitor in accordance with special condition 5(c). The permittee shall operate the dredge and disposal such that the surface water at 500 feet from the discharge point does not exceed 0.02 mg/L ammonia-nitrogen (as N), 12 mg/L chloride, 0.05 mg/L lead (total), 0.007 mg/L phosphorus, 24 mg/L sulfate, 180 mg/L total dissolved solids (TDS), 0.159 mg/L zinc (total), or does not exceed the background concentrations measured under condition 5(b) and otherwise complies with the water quality standards of 35 III. Adm. Code, Subtitle C.