

July 1, 2003

CERTIFIED MAIL

Harold Keppner
U. S. Army Corps of Engineers
Buffalo District, Regulatory Branch
1776 Niagara Street
Buffalo, New York 14207-4230

Re: All Counties within the Buffalo District within Ohio
Grant of Section 401 Water Quality Certification to Establish Letters of Permission for
Seven Categories of Activities in Surface Water
ACOE Public Notice No. (B)2003-00573(0)
Ohio EPA ID No. 032899

Dear Mr. Keppner:

Pursuant to Section 401 of the Federal Water Pollution Control Act, Public Law 95-217, the Director of Ohio Environmental Protection Agency hereby certifies that the above-referenced project will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act.

This authorization is specifically limited to a Section 401 water quality certification with respect to water pollution and does not relieve the applicant of further certifications or permits as may be necessary under the law. I have determined that a lowering of water quality in various watersheds within the jurisdiction of the Buffalo District of the U.S. Army Corps of Engineers as authorized by this Section 401 water quality certification is necessary. I have made this determination based upon the consideration of all public comments, and including the technical, social, and economic considerations concerning this application and its impact on waters of the state.

I. CONDITIONS

This 401 water quality certification is issued subject to the following modifications and/or conditions:

- A. General Conditions Applicable to All Letter of Permission Categories Authorized by this 401 Certification -
1. This Section 401 certification authorizes the seven categories of Section 404 discharges listed below. The authorized work should be completed no later than 5 years from the date of this Ohio EPA 401 certification. To ensure timely renewal of this certification, the application for recertification should be submitted 180 days prior to expiration.

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2. This certification does not authorize impacts to Category 3 wetlands as defined in Ohio Administrative Code 3745-1-54.
3. Activities authorized by this certification shall not occur during fish spawning season as defined by ODNR and U.S. Fish & Wildlife Service as defined during the coordination period, unless a waiver is granted by the aforementioned agencies.
4. This certification does not authorize projects that adversely impact state and federally endangered and threatened wildlife and vegetative species.
5. No asphalt or other petroleum-based substance shall be authorized below the Ordinary High Water Mark.
6. Steps shall be employed throughout the course of these projects to avoid the creation of unnecessary turbidity which may degrade water quality or adversely affect aquatic life outside of the project area.
7. This certification expires 5 years from the date of issuance.
8. Best management practices (BMPs), per Ohio EPA's Construction Site Inspection Checklist (see enclosed) shall be used during construction.
9. Any damages to the immediate environment of the projects by equipment needed for construction or hauling will be repaired immediately.
10. This certification does not authorize the fill of materials that are known to contain toxic or hazardous substances or other contaminants which could seriously impair water quality or jeopardize public health or safety.

B. Specific Conditions Applicable to Individual Letters of Permission -

Discharge of Dredged Material in Open Lake Disposal Areas in Lake Erie

1. This certification does not authorize Corps of Engineers' Civil Works projects.
2. Disposal of material dredged from Toledo Harbor, Maumee River, Lorain Harbor, Black River, Huron Harbor, Cleveland Harbor, Cuyahoga River, Ashtabula Harbor and Ashtabula River are not authorized under this certification.

3. Ohio EPA must approve new open lake disposal areas prior to this certification authorizing projects discharging into these new areas. The Ohio Geological Survey should be included in the coordination of sampling requirements and locations and in the designation of open lake disposal sites.
4. A maximum of 10,000 cubic yards of dredged material per year may be discharged into open lake disposal areas.
5. This certification specifically excludes open-lake, deep-water disposal of sand and gravel dredged from channels or waterways along the shore of Lake Erie.
6. Sediment samples should be collected as close to the date of dredging as possible to ensure that the sample data reflect the texture of sediment to be dredged from a waterway.

Discharge of Predominantly Granular Material into Nearshore Areas of Lake Erie

1. Sediment collection, total organic carbon analysis and grain size analytical methods shall be conducted in accordance with methods acceptable to Ohio EPA and submitted to Ohio EPA for review during the 15-day comment period.
2. This certification does not authorize discharge of dredged material under this category when the dredged material is less than 60% sand and/or gravel, or contains greater than 5 grams/kilogram total organic carbon.
3. If the proposed disposal site is located within 3000 feet of a potable water intake, coordination of the Letter of Permission should include the local water authority.

Discharge of Dredged or Fill Material Associated With Wetland Construction, Restoration, Or Enhancement

1. A quantitative assessment method of the aquatic resource, acceptable to Ohio EPA shall be submitted to Ohio EPA with the Letter of Permission proposal.
2. Per Ohio Administrative Code 3745-1-54(f), any filling of Category 1 or Category 2 wetlands, associated with the construction of structures, including, but not limited to, levees and dikes, requires, at a minimum, a mitigation ratio of 1.5:1.

3. When practicable and feasible, the design of diked wetlands shall provide for water exchange to allow fish access, yet exclude carp greater than 2 inches wide.
4. A long-term management plan shall be prepared for each project. When practicable and feasible, this plan shall include a carp management plan that may prescribe water draw-down every 2-3 years or carp shocking and removal from the diked wetland. The Corps shall provide a copy of the plan to Ohio EPA for review and comment at the beginning of the 15-day review period.
5. The top width of dikes or levees shall not exceed 12 feet with the exception of dikes or levees on Lake Erie or associated bays where the maximum width shall not exceed 20 feet.

Fill Placed for Wildlife Enhancement As Mitigation for Section 10 Activities

1. Minimize fill to meet wildlife enhancement purposes only.

Filled Crib Docks 50 Feet Or Less in Total Length, And Having Cribs With an Open Design

1. An open gap should be left at the shoreward end to facilitate littoral transport of sand and gravel past the structure and prevent stagnant areas. The gap length should be determined site specifically by the project engineer.
2. Fill shall consist of either rock or clean concrete without exposed rebar. The rock or concrete and the crib openings shall be sized to encourage fish access.
3. The crib docks shall be oriented and constructed to allow water circulation and littoral transport along the shore and to avoid downdrift scouring.
4. Cadmium chromium arsenate (CCA) treated lumber or creosote treated lumber shall not be used in these docks. Steel or concrete without exposed rebar are acceptable construction materials for crib docks.

Fill for Boat Ramps (Construction and Renovation)

1. Any sand and gravel of littoral origin that will be covered by the proposed boat ramp should be sidecast lakeward before the ramp is constructed.

Placement of Sand to Maintain and Restore Public Bathing Beaches

1. Sediment collection and grain size analysis shall be conducted in accordance with a method acceptable to Ohio EPA.
2. This certification does not authorize discharge of dredged material when the dredged material is less than 60% sand and/or gravel, or contains greater than 5 grams/kilogram total organic carbon.
3. Sand and gravel for beach nourishment purposes may come from upland sources or from deposits found in the designated commercial offshore dredging areas. See the attached figures of the designated commercial dredging areas.

II. NOTIFICATIONS TO OHIO EPA

All notifications, correspondence, and reports regarding this Section 401 Water Quality Certification and/or Isolated Wetlands Permit shall reference the following information:

Applicant: U.S. Army Corps of Engineers, Buffalo District
Project: Letters of Permission 2003-2008
Ohio EPA ID#: 032899

and shall be sent to:

Ohio EPA, Division of Surface Water/401
122 South Front Street
P.O. Box 1049
Columbus, Ohio 43216-1049

III. COORDINATION REQUIREMENTS PRIOR TO ISSUANCE OF INDIVIDUAL LETTER OF PERMISSION

The Buffalo District shall inform Ohio EPA by faxed letter regarding the proposed work, including a USGS map showing the site location, and details regarding the water quality impacts to the Lake Erie watershed (e.g., volume of dredged material, volume of proposed open lake disposed material, depth of proposed dredging, sediment chemical analysis and grain size information, design for proposed diked wetlands, open crib docks and boat ramps, wetland long-term management plan, where applicable).

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You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code by any person who was a party to this proceeding. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after the notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency and the Environmental Enforcement Section of the Office of the Attorney General within three (3) days of the filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission, 236 East Town Street, Room 300, Columbus, Ohio 43266-0557.

Sincerely,

Christopher Jones
Director

CJ:lf

Enclosure

cc: Kevin Pierard, U.S. EPA, Region V
Mary Knapp, U.S. Fish & Wildlife Service
Randy Sanders, ODNR, Division of Real Estate & Land Management
Tom Balduf, Ohio EPA, Northwest District Office
Dave Stroud, Ohio EPA, Northeast District Office
Roger Thoma, Ohio EPA, Northeast District Office
Julie Letterhos, Ohio EPA, Division of Surface Water
Laura Fay, Ohio EPA, Division of Surface Water



Construction Site Inspection Checklist

By making use of some simple Best Management Practices (BMPs) a developer can do his or her share to protect Ohio's water resources from the harmful effects of sediment. The topography of the site and the extent of the construction activities will determine which of these practices are applicable to any given site, but the BMPs listed here are applicable to most construction sites. For details on the installation and maintenance of these BMPs, please refer to ***Rainwater and Land Development, Ohio's Standards for Storm Water Management, Land Development and Urban Stream Protection*** (Ohio Department of Natural Resources, 1996), available from your county Soil and Water Conservation District (SWCD).

Temporary Stabilization

This is the most effective BMP. All disturbed areas that will lie dormant for over 21 days must be stabilized within 7 days of the date the area becomes inactive. The goal of temporary stabilization is to provide cover, quickly. Areas within 50 feet of a stream must be stabilized within 2 days of inactivity. This is accomplished by seeding with fast-growing grasses then covering with straw mulch. Apply only mulch between November 1 and March 31. To minimize your costs of temporary stabilization, leave natural cover in place for as long as possible. Only disturb areas you intend to work within the next 21 days.

Construction Entrances

Construction entrances are installed to minimize off-site tracking of sediments. A stone access drive should be installed at every point where vehicles enter or exit the site. Every individual lot should also have its own drive once construction on the lot begins.

Sediment Ponds

This is the sediment control of choice for areas, which exceed the design capacity of silt fence (see page 119 of the ***Rainwater*** manual) or to control concentrated flows or runoff. There are two types of sediment ponds: sediment basins and sediment traps. A sediment trap is appropriate where the contributing drainage area is 10 acres or less. The outlet is an earthen embankment with a simple stone spillway. A sediment basin is appropriate for drainage areas larger than 10 acres. The outlet is an engineered riser pipe. Often a permanent storm water management pond, such as a retention or detention basin, can be modified to act as a sediment basin during construction. All sediment ponds, regardless of whether they are a trap or a basin and regardless of whether they will become a permanent storm water pond, must provide a minimum storage of 67 cubic yards per acre of total contributing drainage area. Sediment ponds must be installed within 7 days of first grubbing the area they control.

Silt Fence

This is typically used at the perimeter of a disturbed area. It's only for small drainage areas on relatively flat slopes or around small soil storage piles. Not suitable where runoff is concentrated in a ditch, pipe or through streams. For large drainage areas where flow is concentrated, collect runoff in diversion berms or channels and pass it through a sediment pond prior to discharging it from the site. Combination barriers constructed of silt fence supported by straw bales or silt fence embedded within rock check dams may be effective within small channels. As with all sediment controls, silt fence must be capable of ponding runoff so that sediment can settle out of suspension. Silt fence must be installed within 7 days of first grubbing the area it controls.

Inlet Protection

These must be installed on all yard drains and curb drains when these inlets do not drain to a sediment trap or basin. Even if there is a sediment trap or basin, inlet protection is still recommended, as it will increase the overall sediment removal efficiency. Best used on roads with little or no traffic. If working properly, inlet protection will cause water to pond. If used on curb inlets, streets will flood temporarily during heavy storms. Check with your municipality before installing curb inlet protection. They may prefer an alternate means of sediment control such as silt fence or ponds.

Permanent Stabilization

All areas at final grade must be permanently stabilized within 7 days of reaching final grade. This is usually accomplished by using seed and mulch, but special measures are sometimes required. This is particularly true in drainage ditches or on steep slopes. These measures include the addition of topsoil, erosion control matting, rock rip-rap or retaining walls. Permanent seeding should be done March 1 to May 31 and August 1 to September 30. Dormant seeding can be done from November 20 to March 15. At all other times of the year, the area should be temporarily stabilized until a permanent seeding can be applied.

Non-Sediment Pollution Control

Although sediment is the pollutant of greatest concern on most construction sites, there are other sources of pollution. Most of these BMPs are easy to implement with a little bit of planning and go a long way toward keeping your site clean and organized. Please be sure to inform all contractors how these BMPs affect their operations on the site, particularly those that will be working near a stream.

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	<input type="checkbox"/>	<input type="checkbox"/>
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	<input type="checkbox"/>	<input type="checkbox"/>
3. Have disturbed areas outside the silt fence been seeded or mulched?	<input type="checkbox"/>	<input type="checkbox"/>
4. Have soil stockpiles that will sit for over 21 days been stabilized?	<input type="checkbox"/>	<input type="checkbox"/>
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	<input type="checkbox"/>	<input type="checkbox"/>
6. Has seed or mulch blown away? If so, repair.	<input type="checkbox"/>	<input type="checkbox"/>

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is the stone 2-inch diameter?	<input type="checkbox"/>	<input type="checkbox"/>
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	<input type="checkbox"/>	<input type="checkbox"/>
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	<input type="checkbox"/>	<input type="checkbox"/>
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	<input type="checkbox"/>	<input type="checkbox"/>

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	<input type="checkbox"/>	<input type="checkbox"/>
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	<input type="checkbox"/>	<input type="checkbox"/>
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	<input type="checkbox"/>	<input type="checkbox"/>
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric? Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically? For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan (see page 105 of <i>Rainwater</i> manual)?	<input type="checkbox"/>	<input type="checkbox"/>
7. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped? For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? NOTE: If not, a baffle should be added to lengthen the distance.	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	<input type="checkbox"/>	<input type="checkbox"/>
10. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight? Was the basin installed prior to grading the site?	<input type="checkbox"/>	<input type="checkbox"/>
11. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	<input type="checkbox"/>	<input type="checkbox"/>

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	<input type="checkbox"/>	<input type="checkbox"/>
3. Is the fence pulled tight so it won't sag when water builds up behind it?	<input type="checkbox"/>	<input type="checkbox"/>
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	<input type="checkbox"/>	<input type="checkbox"/>
6. Have all the gaps and tears in the fence been eliminated.	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the fence controlling an appropriate drainage area? Refer to page 119 of Rainwater manual. RULE OF THUMB: Design capacity for 100 linear feet of silt fence is 0.5 acres for slopes < 2%, 0.25 acres for slopes 2% to 20%, & 0.125 acres for slopes 20% or more. Generally, no more than 0.25 acres should lie behind 100 feet of fence at 2% to 10% slope, i.e., the distance between the fence and the top of the slope behind it should be no more than 125 feet. The allowable distance increases on flatter slopes and decreases for steeper slopes.	<input type="checkbox"/>	<input type="checkbox"/>

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the fabric been replaced when it develops tears or sags?	<input type="checkbox"/>	<input type="checkbox"/>
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window? For yard inlet protection, does the structure encircle the entire grate?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the fabric properly entrenched or anchored so that water passes through it and not under it?	<input type="checkbox"/>	<input type="checkbox"/>
5. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.	<input type="checkbox"/>	<input type="checkbox"/>
6. Is sediment that has accumulated around the inlet removed on a regular basis?	<input type="checkbox"/>	<input type="checkbox"/>

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

PERMANENT STABILIZATION

Key things to look for ...

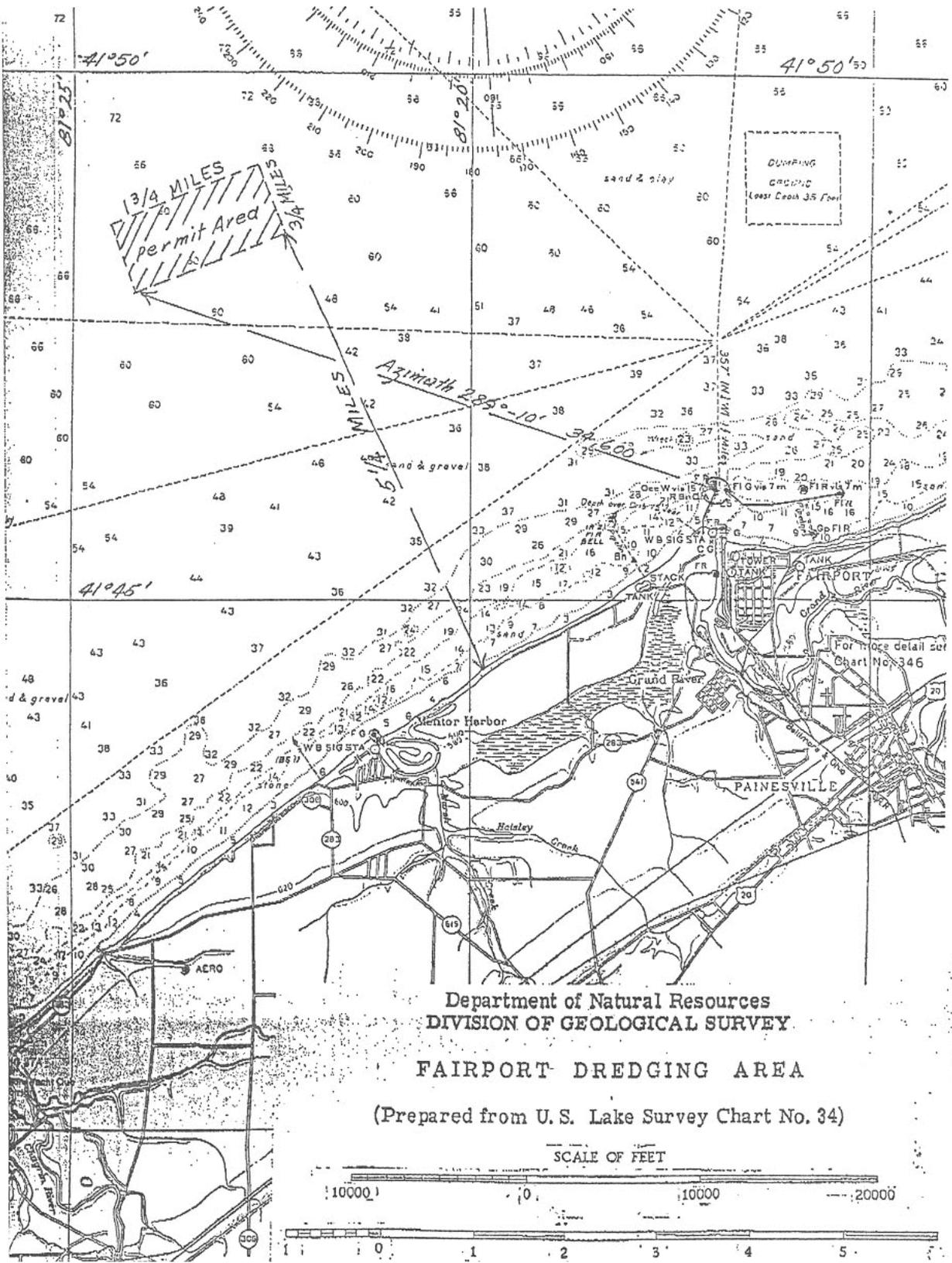
	Yes	No
1. Are any areas at final grade?	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the soil been properly prepared to accept permanent seeding?	<input type="checkbox"/>	<input type="checkbox"/>
3. Has seed and mulch been applied at the appropriate rate (see page 169 of the <i>Rainwater</i> manual)?	<input type="checkbox"/>	<input type="checkbox"/>
4. If rainfall has been inadequate, are seeded areas being watered?	<input type="checkbox"/>	<input type="checkbox"/>
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom? If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? NOTE: Rock check dams may be needed to slow the flow of runoff.	<input type="checkbox"/>	<input type="checkbox"/>
6. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	<input type="checkbox"/>	<input type="checkbox"/>
7. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	<input type="checkbox"/>	<input type="checkbox"/>

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

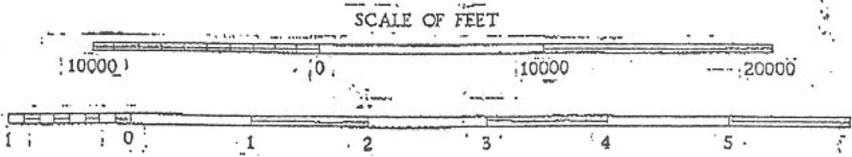
NON-SEDIMENT POLLUTION CONTROL

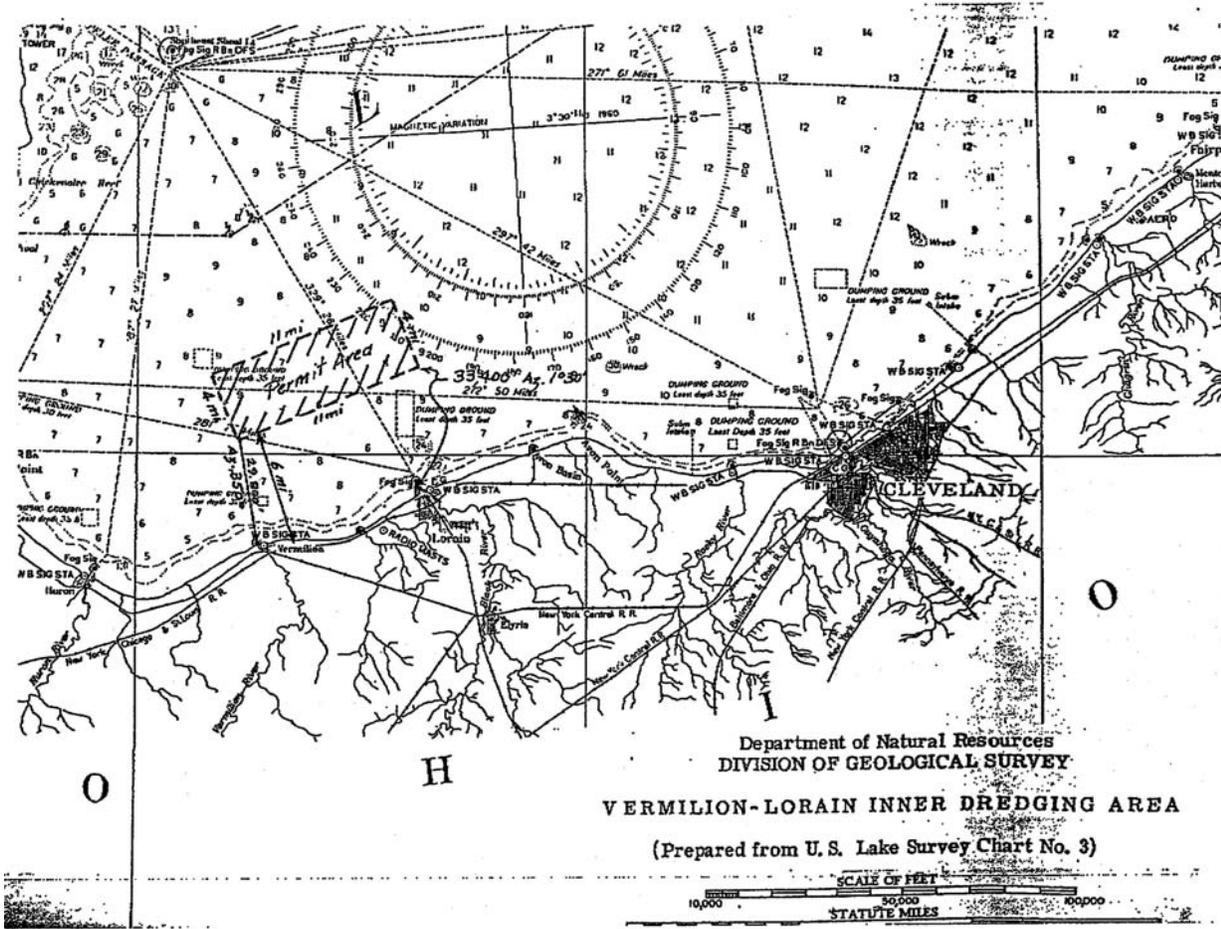
Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.	<input type="checkbox"/>	<input type="checkbox"/>
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.	<input type="checkbox"/>	<input type="checkbox"/>
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?	<input type="checkbox"/>	<input type="checkbox"/>
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.	<input type="checkbox"/>	<input type="checkbox"/>
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?	<input type="checkbox"/>	<input type="checkbox"/>
6. Have stream crossings been constructed entirely of non-erodible material?	<input type="checkbox"/>	<input type="checkbox"/>
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? NOTE: if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.	<input type="checkbox"/>	<input type="checkbox"/>



Department of Natural Resources
 DIVISION OF GEOLOGICAL SURVEY
FAIRPORT DREDGING AREA
 (Prepared from U. S. Lake Survey Chart No. 34)

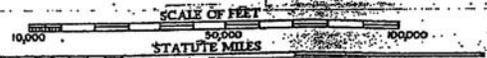




Department of Natural Resources
DIVISION OF GEOLOGICAL SURVEY

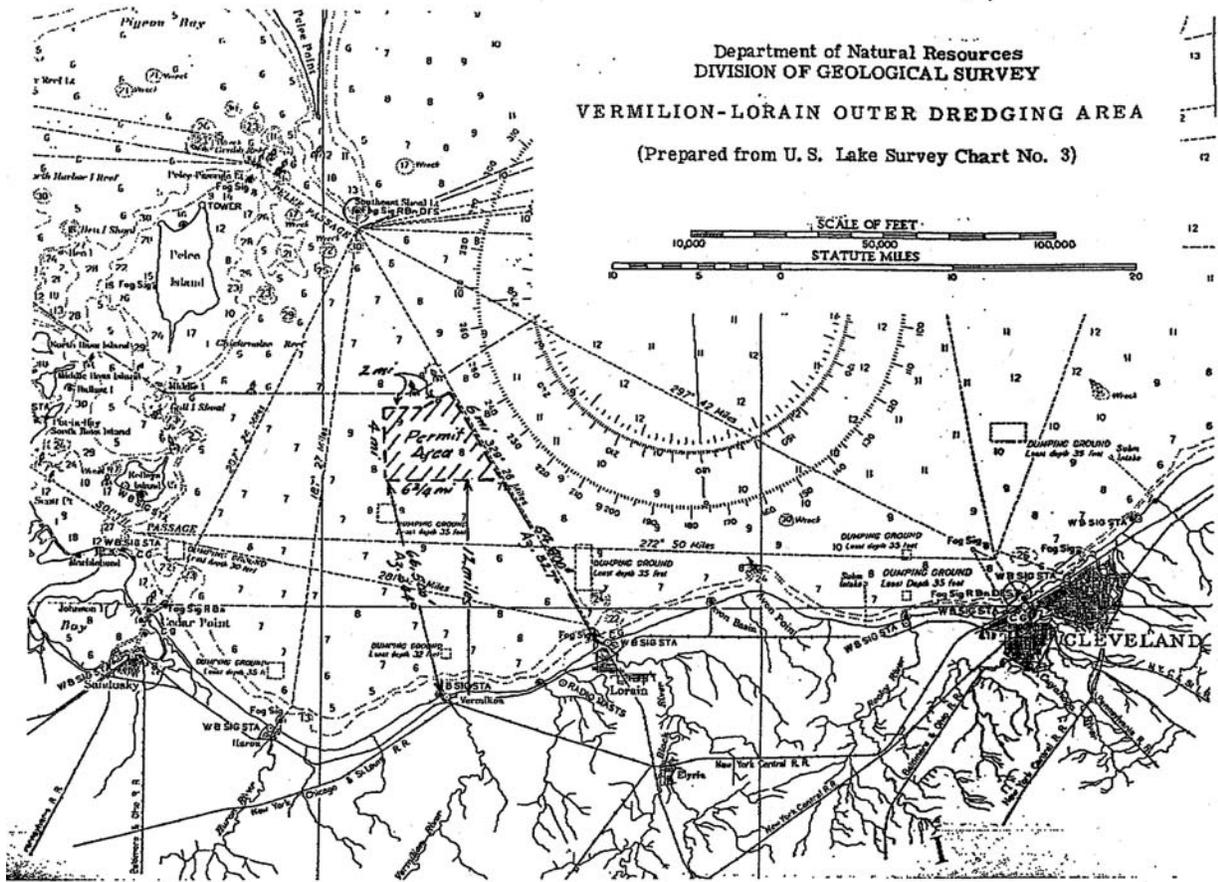
VERMILION-LORAIN INNER DREDGING AREA

(Prepared from U. S. Lake Survey Chart No. 3)



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Department of Natural Resources
DIVISION OF GEOLOGICAL SURVEY
VERMILION-LORAIN OUTER DREDGING AREA
(Prepared from U. S. Lake Survey Chart No. 3)



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