The Complete Permit Application

Regulatory Project Managers
Corps Detroit District Regulatory Office
EGLE Grand Rapids District Office
August 28, 2019
Outline

- Complete application
- Commonly missing pieces
- Tips on applying
- Permit application resources
Applying for a Permit

Michigan Joint Permit Application

*Information required by EGLE may differ from Corps*
Complete application

- Corps review begins when we receive a **complete** application

- Project description
- Adjacent property owners
- Maps
- Purpose and use
- Wetland delineation
- Dredged material handling
- Applicant info
- Drawings
- Mitigation statements
- Signature
Project Purpose

- Why does the applicant want to do the work?
- Not a project description
- Informs alternatives analysis
- May include specific objectives, constraints
- “To provide…”
Purpose

- Project: Dock
- Purpose: Provide waterway access and docking for 10 watercraft
Purpose

- Project:
  - Shoreline grooming

- Purpose:
  - Provide a vegetation-free shoreline recreation area free of debris
Purpose

- Project: Driveway
- Purpose: Provide vehicle access to an upland area where a house would be built
Purpose

- Provide a luxury condominium development in the Big Lake area with marina facilities and waterfront recreational opportunities for residents
Include all jurisdictional work

- On application
- In drawings

**We suggest: Contact us in advance for a Jurisdictional Determination or with questions.**
Include work in all jurisdictional areas

- Impact amounts depend on correct wetland boundaries
- Have Corps/EGLE verify boundaries before you prepare an application
- May affect mitigation requirements
Construction sequence

- Types of equipment, access routes
- Dredge methods, material handling
- Sequence of work
- Temporary construction measures, stockpiling, sidecasting
Temporary construction measures

Temporary fill for equipment access

Silt curtain
Temporary construction measures?

[Diagram showing a section of land with dimensions 360 ft and 450 ft, labeled as "Dredge Area"]
Silt curtain

Silt curtain cross section

- Float
- Impermeable fabric
- Chain anchor

Silt curtain - 1480 linear ft

360 ft

Dredge Area

450 ft
Silt Curtain

- Required by EGLE and/or Corps for many dredging projects
- Need drawings/dimensions for Corps permit
- We recommend:
  - Include it in your application
  - If you don’t plan to use one, tell us why
Dredged material handling and return water

Bermed containment area

Return water pipe

Stone velocity dissipater

Silt curtain

Discharge of return water
Dredged material handling and return water

- Outfall pipe?
- Slurry line?
- Return water?
- Spoils dewatering area
- Is this upland?
Structures often left out

- Spring piles
- Ice piles
- Boat hoists
- Mooring buoys
- Seasonal structures
Proposed riprap/revetment
Proposed revetment

Fill waterward of Ordinary High Water Mark
Proposed revetment

- Fill waterward of Ordinary High Water Mark
- Temporary stockpiling area
- Dredge area
Mechanized landclearing

- Grading, leveling, contouring, clearing of vegetation roots
  - Describe it in permit application
  - Show footprint in drawings
Buried utility lines

- Open trench?
  - May involve discharges of fill in wetlands

- Directional drill?
  - May require a permit if Section 10 waters
Disposal site for dredged material

- Dewatering and final disposal sites
- We verify that it’s upland
- Map it out, especially if multiple sites
Map the disposal area

- Map it out, especially if multiple sites
- Show full footprint of disposal area
- If wetlands are near, be specific
Information on potential wetland impacts

- Wetlands present?
- Delineate all waters on project drawings
- Not just those in the proposed work area
- Contact us in advance for a jurisdictional determination
National Wetlands Inventory: potential wetlands

www.fws.gov/wetlands
Provide datasheets with wetland delineation map
Shoreline projects

- Are there wetlands along the lakeshore?
Adjacent riparian property owner mailing addresses

- Accurate **mailing** addresses for riparian neighbors on each side of the project location
  - In some cases you may need to include neighbors across a canal or more than immediately adjacent neighbors
Which adjacent riparian property owners?
Which adjacent riparian property owners?

Properties where the work area is located
Which adjacent riparian property owners?

- Properties where the work area is located
- Adjacent properties on each side
Which adjacent riparian property owners?
Which adjacent riparian property owners?
Agency information requirements

Corps information requirements

EGLE information requirements
Application requirements

- If your proposed project is on or crosses a neighboring property line, you may be required to provide...
  - A letter of authorization from your neighbor
  - An easement from your neighbor
  - A riparian interest area survey
RIA surveys - Lake

- A center point or centerline is determined
- Lines are drawn from center back to land-based property lines
RIA surveys – River/Stream

- A centerline is determined
- Lines are drawn from center back to land-based property lines
Example 1

- Structure close to property line or crossing property line
Example 2

- Small frontage
- 80ft dock on 13ft frontage
Riparian Interest Areas

Gull Lake, Kalamazoo County
Example Project

- Applicant would need an easement from adjacent owners

OR

- Modify the project to fit within RIA
New dredge sediment testing procedure
New dredge sediment testing procedure

- This will supersede and replace previous procedure 09-018 dated March 19, 2013
- Effective date is April 13, 2018
- Link to new procedure WRD-048 on DEQ dredging projects website:
New dredge sediment testing procedure

What changed?

- Change from reviewing dredge sediment test results against Part 115 Solid Waste to Part 31 Water Resources Protection
- Addition of 2 metal parameters (Chromium and Nickel)
- Addition of BOD testing requirement (potential in high organic spoils to mobilize metals to GW). This is a pore water sample test. (Check with your local lab for handling and hold times)
- WRD will no longer waive testing requirements based on final spoil placement locations, including landfill placement or restrictive covenant use
### Table 1. Required PAH Testing

<table>
<thead>
<tr>
<th>ACHEMICAL</th>
<th>CONCENTRATION</th>
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<tbody>
<tr>
<td>Acenaphthene</td>
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</tr>
<tr>
<td>Acenaphthylene</td>
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<tr>
<td>Anthracene</td>
<td></td>
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<tr>
<td>Benzo(a)anthracene</td>
<td></td>
</tr>
<tr>
<td>Benzo(b)fluoranthen</td>
<td></td>
</tr>
<tr>
<td>Benzo(k)fluoranthen</td>
<td></td>
</tr>
<tr>
<td>Benzo(g,h,i)perylen</td>
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</tr>
<tr>
<td>Benzo(a)pyrene</td>
<td></td>
</tr>
<tr>
<td>Chrysene</td>
<td></td>
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<tr>
<td>Dibenzo(a,h)anthracene</td>
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</tr>
<tr>
<td>Fluoranthen</td>
<td></td>
</tr>
<tr>
<td>Fluorene</td>
<td></td>
</tr>
<tr>
<td>Indeno(1,2,3-cd)pyrene</td>
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</tr>
<tr>
<td>2-Methylnaphthalene</td>
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</tr>
<tr>
<td>Naphthalene</td>
<td></td>
</tr>
<tr>
<td>Phenanthrene</td>
<td></td>
</tr>
<tr>
<td>Pyrene</td>
<td></td>
</tr>
</tbody>
</table>

### Table 2. Aquatic Life and Wildlife Screening Guidelines

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>CONCENTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metals (mg/kg)</td>
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</tr>
<tr>
<td>Arsenic*</td>
<td>33.00</td>
</tr>
<tr>
<td>Cadmium*</td>
<td>4.98</td>
</tr>
<tr>
<td>Chromium</td>
<td>111.00</td>
</tr>
<tr>
<td>Copper*</td>
<td>149.00</td>
</tr>
<tr>
<td>Lead*</td>
<td>128.00</td>
</tr>
<tr>
<td>Mercury*</td>
<td>1.06</td>
</tr>
<tr>
<td>Nickel*</td>
<td>48.60</td>
</tr>
<tr>
<td>Selenium**</td>
<td>1.90</td>
</tr>
<tr>
<td>Zinc*</td>
<td>459.00</td>
</tr>
<tr>
<td>PAH (ug/kg)</td>
<td></td>
</tr>
<tr>
<td>Anthracene*</td>
<td>845</td>
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<td>Benzo(a)anthracene*</td>
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<td>1,450</td>
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<tr>
<td>Chrysene*</td>
<td>1,290</td>
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<tr>
<td>Fluorene*</td>
<td>536</td>
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<td>Fluoranthene*</td>
<td>2,230</td>
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<tr>
<td>Naphthalene*</td>
<td>561</td>
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<tr>
<td>Phenanthrene*</td>
<td>1,170</td>
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<tr>
<td>Pyrene*</td>
<td>1,520</td>
</tr>
<tr>
<td>Total PAH*</td>
<td>22,800</td>
</tr>
<tr>
<td>Total PCB (mg/kg)</td>
<td>0.676</td>
</tr>
<tr>
<td>Dioxin/furans as 2,3,7,8 TCDD TEQ (ug/kg)**</td>
<td>0.00012</td>
</tr>
</tbody>
</table>
What didn’t change?

- Sampling requirements are largely identical:
  - Testing for projects over 2,000 CY or smaller projects in areas of known/suspected contamination
  - Full depth (composite) core samples
  - 6 samples for 1st 10,000 CY of dredge material
  - 1 sample for each additional 10,000 CY of dredge material
  - Sand sieve testing remains identical to previous process
Avoidance/ minimization/ compensatory mitigation statements

- Required for any project involving **discharge** of dredged or fill material that requires **public notice**
- Not just wetland projects
- In MiWaters:
  - Project Alternatives
  - Project Compensation
Avoidance/ minimization/ mitigation statements

- Describe how impacts to Waters of the U.S. will be **avoided and minimized**.
- Describe how impacts to Waters of the U.S. will be **compensated**.
  - OR explain why compensatory mitigation should not be required for the proposed impacts.
Avoidance, Minimization, and Mitigation Statements

- Example – Driveway crossing a wetland:

  - Impacts will be minimized by locating the driveway crossing at the narrowest part of the wetland. A culvert will be placed under the fill to maintain connectivity and water flow within the wetland, and silt fencing will be used to prevent fill material from entering other parts of the wetland. Compensatory mitigation is not proposed because only 0.02 acre of wetland will be impacted, and we expect minimal impact to the wetland.
Avoidance, Minimization, and Mitigation Statements

- Example – Discharge of sand on exposed lakebed for a swim area:
  
  - Impacts will be minimized by limiting the discharge to **12 cubic yards placed on 0.02 acre** of lakebed, by **avoiding wetland areas**, and by using **pea stone** in the waterward part of the discharge area to minimize loss of fish spawning habitat. Compensatory mitigation is not proposed because the **impact area is limited** and **does not include wetlands**.
Avoidance, Minimization, and Mitigation Statements

Example – Discharge of fill in wetlands for a residential development

- Impacts will be minimized by **maximizing use of upland areas**. Other offsite locations were considered for the development, but the selected property contains the **least wetland area**. The work will affect 0.6 acres of wetland, and we propose compensatory mitigation by **restoring 2.4 acres** of former, previously filled wetland as detailed in the **attached mitigation plan**.
Avoidance, Minimization, and Mitigation Statements?
Project location

- Locate property on detailed map or aerial photo
- Map it accurately in MiWaters
- Locate work area within the property
- Be specific
Project Location
Project Location
Project Location

- Useful information:
  - **Coordinates**
    - Handheld GPS point
    - Smartphone app
  - Color of roof
  - "Fifth house on the left, east of Bay Street"
  - Property survey
Quantities/Dimensions

- Drawings must be **consistent** with application
- Include each dredge/fill area separately
  - Separate by type of material
- Include table or project narrative on additional sheets
## Quantities and Dimensions

### Fill Area A

<table>
<thead>
<tr>
<th>Material</th>
<th>Length</th>
<th>Width</th>
<th>Depth</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>22 ft</td>
<td>16 ft max</td>
<td>0.5 ft</td>
<td>6.1 cu yd</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 ft average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gravel</td>
<td>22 ft</td>
<td>14 ft max</td>
<td>0.5 ft</td>
<td>5.3 cu yd</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13 ft average</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Fill Area B

<table>
<thead>
<tr>
<th>Material</th>
<th>Length</th>
<th>Width</th>
<th>Depth</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>30 ft</td>
<td>16 ft max</td>
<td>0.5 ft</td>
<td>8.3 cu yd</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 ft average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gravel</td>
<td>30 ft</td>
<td>14 ft max</td>
<td>0.5 ft</td>
<td>7.2 cu yd</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13 ft average</td>
<td></td>
<td></td>
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</table>
### Quantities and Dimensions

<table>
<thead>
<tr>
<th>Fill area</th>
<th>Max length</th>
<th>Max width</th>
<th>Max depth</th>
<th>Square footage</th>
<th>Acreage</th>
<th>Volume of fill</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>210 ft</td>
<td>160 ft</td>
<td>3 ft</td>
<td>21,957 sq ft</td>
<td>0.50 ac</td>
<td>1780 cu yd</td>
</tr>
<tr>
<td>B</td>
<td>67 ft</td>
<td>25 ft</td>
<td>2 ft</td>
<td>905 sq ft</td>
<td>0.02 ac</td>
<td>44 cu yd</td>
</tr>
<tr>
<td>C</td>
<td>572 ft</td>
<td>80 ft</td>
<td>2 ft</td>
<td>35106 sq ft</td>
<td>0.81 ac</td>
<td>2210 cu yd</td>
</tr>
</tbody>
</table>

Cubic yards, not weight.
Project drawings

- Plan-view and cross-section
- Relevant information clear and legible
  - Even after photocopying!
- Scale drawings are best
- Show all dimensions on project drawings
  - Don’t just list them in the application form
How much detail?
Example Drawings

Sample Site Plan Dock

Sample Cross-Section Dock

EGLE
Cross-section

- Side view
- If possible, show EGLE and Corps Ordinary High Water Mark elevations
- Bottom elevation for dredging
- Show elevation information in relation to:
  - A specific datum (IGLD 1985) OR
  - The water level on (date you specify)
Proposed dredging, seawall replacement, riprap toe stone, pier
What is the current water level?

Webpage clips from:
https://tidesandcurrents.noaa.gov/stations.html
Show existing conditions

Proposed riprap shore protection
Elevation

- Surveyed elevations? Specify the datum.

- In Muskegon,
  
  581.5’ IGLD 85 = 581.9’ NAVD 88 = 582.4’ NGVD 29

- Using a local datum? We may request a tie-in to a known elevation.
Uncertainty in plans

- Show maximum foreseeable impact areas
- Show alternative configurations/methods
- If plans change after permit issuance, may need to seek new permit or modification
  ▶ Contact us
Tips on Applying

- Apply early – not last minute
- If either agency requests information, provide that information to both agencies
Permit Application Resources

- Toolbox handout
- Corps Regulatory website
  - Wetland determination resources
  - Navigable waters list
- Your local Corps or EGLE office
  - Jurisdictional determinations
  - Pre-application meetings
Questions?