

Appendix M

Dredge Contingency and Spill Prevention Plan

Contingency and Spill Prevention Plan

Project Background and Objective

The city of Delafield, Wisconsin, is pursuing restoration and dredging within portions of Nagawicka Lake. Because of the important recreational value and aquatic habitat provided by the lake, various lake management issues have been raised by the community. These include the build-up of sedimentation and proliferation of invasive plant species, which result in diminution of aquatic habitat.

Nagawicka Lake is a 917-acre water body located in Sections 5, 8, 9, 16, 17, 20, and 21 of Township 7 North, Range 18 East, Waukesha County as shown in Figure 1. The lake's total tributary drainage area is approximately 45 square miles, of this, approximately 68 percent is rural land use and the remaining 32 percent is urban.

Nagawicka Lake is a heavily-used recreational lake. There are over 500 privately-owned riparian residences on Nagawicka Lake. Annually, there are more than 7,750 boat launches at the Waukesha County Naga-Waukee Park and more than 3,000 boat launches at the city of Delafield Bleeker Street boat launch. The parking lots at each of the boat launches are often filled to capacity. Because of its heavy use, and as an important recreational resource for southeast Wisconsin, various lake quality issues have been raised by the community including siltation, proliferation of invasive aquatic plant growth, and impacts to ecologically sensitive areas. The Nagawicka Lake Restoration Project will address these issues by striving to improve aquatic habitat, by maintaining property values, and by enhancing recreational access to the lake.

The city of Delafield, over the past 6 years, has developed a lake restoration plan which includes dredging portions of Nagawicka Lake and shoreline restoration.

Hydraulic dredging will be the method used to remove sediments. The sediments will be pumped via a slurry pipeline to the dewatering site.

The purpose of this Contingency and Spill Prevention Plan is to identify measures and procedures to reduce or control environmental health hazards that have the potential to occur during the dredging process.

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Spill Prevention

The potential exists for minimal diesel and gasoline spills from equipment during dredging. A spill could occur during equipment refueling or operation. Areas for potential spills include the dredge area, booster pump station, staging area for the dredges/barges, and staging/equipment area at the dewatering facility. The types of materials that will be used at this site include diesel and gasoline fuels, hydraulic oil, and polymers for the dewatering facility. Additionally, a leak in the slurry pipeline has the potential to occur.

The contractor will have a written spill prevention plan prior to the commencement of work. The contractor will be responsible for environmental protection as noted below:

- ◆ Protection against fuel or oil spills when refueling or servicing equipment. The contractor will immediately correct any fuel or oil leaks in waterborne equipment. On-site refueling will be staged such that any spills will be contained to prevent fuel from reaching the water. All petroleum products will be stored in spill proof containers at a location that minimizes the opportunity for accidental spillage.
- ◆ Maintenance and stocking of oil absorbent booms and other responsive materials on board in-water dredges and equipment. Additional spill cleanup materials may include spill response kits, shop cloths, oil sorbent pads, “kitty litter”, straw bales, and plastic sheeting.
- ◆ Use of biodegradable hydraulic oil, whenever possible.
- ◆ Floating debris caused by dredging will be removed on a daily basis.
- ◆ The contractor will provide all necessary facilities to comply with Federal, State, and local requirements concerning air, noise, and water pollution.
- ◆ Machinery to be used on this project will arrive on site in a clean, washed condition and will be maintained free of fluid leaks. Leaks will be repaired as soon as possible after discovery.

The following Best Management Practices (BMP) will be used in all areas of the project site to prevent and contain spills:

- ◆ Proper equipment including pumps, funnels, and drain pans will be used during hazardous materials transfers, especially during fueling.
- ◆ Personnel will not “top off” containers.
- ◆ Incoming vehicles will be checked for leaking hazardous materials.
- ◆ Equipment and vehicles will be routinely inspected for leaks of hazardous materials.
- ◆ Necessary repairs to equipment and vehicles will be made immediately or as soon as possible.

Spill Response

If a spill were to occur, the contractor will immediately contain the spill and begin cleanup procedures. Contaminated surfaces will be cleaned immediately after the spill using the materials listed above. Small spills will be cleaned by properly trained contractor personnel. In the event of a larger spill, the contractor will retain a cleanup contractor specializing in the material spilled.

Spill response actions will start immediately after the spill is discovered. The primary objective is to contain spilled hazardous materials within the immediate area, and prevent them from leaving the project site or reaching a drainage pathway, waterway, or other sensitive area.

Waterborne spills will be handled as follows:

- ◆ Stop the source of the spill immediately.
- ◆ Shut down all equipment and ignition sources in the area.
- ◆ Deploy boom and absorbent or other appropriate materials to contain the spill.
- ◆ Notify a spill response contractor, if necessary.

- ◆ Clean up absorbent and waste materials and dispose of at an approved waste disposal facility.
- ◆ Decontaminate any affected areas of land, equipment, and surfaces that have contacted the spilled material.

Spills on land will be handled as follows:

- ◆ Stop the source of the spill immediately.
- ◆ Shut down all equipment and ignition sources in the area.
- ◆ Apply absorbent material and berm, if necessary to divert or contain the spill.
- ◆ Collect spilled material and place into secure container or staging area.
- ◆ Clean up absorbent and waste materials, place in a labeled container, and dispose of at an approved waste disposal facility.
- ◆ Decontaminate any affected areas of land, equipment, and surfaces that have contacted the spilled material.
- ◆ Restore site, as necessary.

Sediments Pipeline

Generally, the project will have two pipeline sections: the waterborne section from the dredge to the booster pump station, and the overland section from the booster pump station to the dewatering facility. Pressure testing of the piping will be performed prior to placing sections into service to assure no leakage.

During dredging operations, the contractor will be able to determine if the piping is leaking by observing pressure at the booster pump station and/or the dredge. A drop in pressure at either location would likely be indicative of a leak in the pipeline. Visual inspection of the piping will allow for locating the leak. As soon as it is determined that a leak in the piping is present, operations will cease and the section of piping that is leaking will be replaced and then pressure tested prior to resumption of dredging activities.

If the leak occurs in a waterborne section of piping, no cleanup of sediments will be necessary since the sediments will be contained within the lake and the sediments are not contaminated. If the leak occurs in an overland section, sediments will be cleaned up as soon as possible by the contractor and placed in the dewatering facility.

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