

Sediment Management Plan
Sheboygan River and Harbor Superfund Site
Sheboygan County, Wisconsin
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Prepared By
Pollution Risk Services, LLC



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1.0 INTRODUCTION

This Sediment Management Plan (SMP) is an appendix to the Remedial Action Work Plan (RAWP). The scope of the Lower River Remedial Action includes off-site disposal of dredged sediment. The purpose of this document is to provide plans for managing this material, including describing:

- Details regarding the transportation of dredged sediments, including loading material, adding drying agent (if necessary), and transport by truck to the disposal facility;
- Contingencies for any spills that might occur; and
- Details regarding the disposal of dredged sediment, including the disposal facility locations.

2.0 EQUIPMENT

The following equipment will be used for the transportation and disposal of sediment waste:

- The primary equipment used for loading sediment will be an excavator equipped with 48-inch-wide bucket located outside the pad in the “loading area”. In addition, a rubber tire loader equipped with a bucket will be used to push sediment to the excavator, as necessary.
- Haul units will be 4-axle and/or 8-axle end-dump on-highway trucks. Operation will start out with eight haul units and may increase to ten depending on efficiency and material flow without compromising cleanliness and safety.

3.0 MEANS AND METHODS

The loading and transportation of dredged sediments are described in the following sections. In general, after drying, the sediments will be loaded onto trucks for transport to the disposal facilities.

Truck Loading

Lined (TSCA) or un-lined (non-TSCA) trucks will be used to haul sediments to appropriate disposal facilities. Truck-loading operations will be performed at two bermed loading/decontamination areas, one located on the east side and one on the west side of the dewatering pad. Bermed areas will be equipped with pumps, hoses, broom, water sprayer, and shovel to decontaminate, if necessary, trucks and transfer solids and liquids onto the dewatering pad.

Sediment Drying

The Geo-textile tube is the primary method for separating water from the sediment. If sediment does not meet the landfill parameters, then the secondary method will be air drying. If sediment still does not meet the landfill parameters, then the tertiary method of adding drying agents will be employed to accelerate the drying process. The anticipated amount of drying agent that will be added to the sediment is approximately 2 to 3 percent by weight. This mixture ratio will be adjusted as necessary to absorb free liquids in the sediment before it is sent to the landfill. Drying agent material will be stockpiled and mixed with the sediment within the confinements of the dewatering area.

Disposal Facility

Non-TSCA material will be transported to either Veolia (Chilton) or Waste Management (Manitowoc) landfill. Haul routes will be those regulated for use. TSCA material will be transported to Environmental Quality (Wayne) landfill in Michigan.

Upon entering the disposal facility, truck drivers will conform to the facility's health and safety procedures at all times while on-site. Shipments will be weighed at the disposal facility to determine the quantity of sediment sent to the disposal facility. Weight records will be maintained electronically in the project file.

Waste Profiling

Sediment to be transported from the site will be appropriately characterized. Five sediment cores to a depth of 4 feet or refusal, whichever comes first, evenly spaced along the geotextile tube (every 40 feet) will be collected and composited. The analytical data will be submitted for review and acceptance by the disposal facility. Upon acceptance, a waste disposal approval letter will be provided by the disposal facility. This document will be maintained in the project office throughout the duration of remediation and will include the following information:

- Identity of the disposal facility (to include: name, address, and EPA I.D. #);
- Identity of the material covered by the Certificate (include: manifest number);
- Statement certifying disposal of the identified material (include date(s) of disposal and disposal process used); and

- Certification as defined in 40 CFR 761, Section 3.

Compliance Status

The USEPA Region 5 confirmed from previous work conducted on the Sheboygan River (e.g., Upper River) that Veolia and Waste Management landfills meet the requirements for accepting non-TSCA (less than 50 ppm) sediment and that Wayne landfill meets the requirement for accepting TSCS (50 ppm or greater) sediment.

Documentation and Tracking

Each shipment sent to the disposal facility will be accompanied by a manifest. Transporter certification of the waste activities and EPA ID numbers will be submitted. Records of shipments sent and logged into the disposal facility will be reconciled on a daily basis by the Project Manager. The disposal facility will provide weight records and confirmation of shipments received to the Project Manager. The Project Manager will maintain an electronic log of shipments to the disposal facility and the weight of each shipment. The weights of all loads of sediment removed from the site will be provided in the Construction Complete Report.

4.0 BEST MANAGEMENT PRACTICES

Precautions to protect the environment during loading and transporting will be implemented throughout the remedial action. Environmental controls for these procedures, and contingencies for potential spills, are described below.

Spill Prevention

BMPs will be implemented during loading and transporting to prevent accidental spills on land. Primary goals include:

- Prevent spilling contaminated sediment or drying agent into surface water at the loading area.
- Prevent tracking contaminated sediment off-site into any area where it may contact water that would be uncontrolled by containment measures.
- Prevent material spilling from the truck during transport from the loading area to the disposal facility.
- Prevent fugitive dust emission during loading.

Operations will be visually observed at all times. If there is a threat of the above goals not being met, work will be stopped and controls will be modified as needed until these goals are met. If, despite these controls, accidental releases of sediment occur, the released sediment will be recovered, conditions leading to the accident will be corrected, and the releases will be documented and reported to the USEPA. BMPs include:

- Slow addition of the drying agent to avoid spills and/or fugitive dust emission.
- Controlled loading of trucks to prevent sloshing.
- Visual inspection of the loading area and the truck prior to releasing the truck.
- Decontamination of tire and surfaces (if necessary) before leaving loading area.
- Application of water when visible dust is observed from roadways, loading area, and other possible sources of dust generation.

Contingencies for Spills

The trucking contractors will be informed prior to start that they will be hauling contaminated sediment. They will acknowledge their understanding and acceptance of responsibility for preventing spills and conducting spill contingency procedures in the event of spills. If a truck accidentally spills (e.g., collision during transport or turns over) the following will immediately occur:

- Once the safety of personnel is ensured, call 911. The truck driver will then estimate to the best of their ability the approximately quantity of material lost (e.g., 30 percent of load).
- The driver will notify the Project Manager immediately via radio or cell phone. The Project Manager will notify the USEPA National Response Center if a reportable quantity of a hazardous substance is released to the environment.
- The Project Manager will notify the project team who will contain the material to the extent practicable. Cleanup will be performed as soon as possible and take precedence over normal site-related activities.

- The Project Manager will complete the Incident Report and notify USEPA personnel for a site meeting and determination of further actions.
- In consultation with the agencies, further actions may include testing in the spill area to determine the extent of spill (if not on paved surfaces) and removing all affected material. Depending on the quantity, these actions may not be necessary.

6.0 QUALITY ASSURANCE/QUALITY CONTROL

During the first week of each load-out phase or any time there is airborne particulates, air monitoring will be performed at two downwind locations along the perimeter of the dewatering pad to assure that no offsite migration has occurred. Sampling and analysis procedures are provided in the *Verification Sampling Plan*.

7.0 FUELING

Fuel transfers will be performed in accordance with U.S. Coast Guard oil transfer procedures. Diesel fuel is stored in 150 and 550 gallon double-wall fuel tanks. All fuel transfer hoses will be inspected, tested, and maintained in accordance with U.S. Coast Guard requirements. Spill procedures will be in accordance with the *Contingency Plan* and *Environmental Protection Plan*.

8.0 DECONTAMINATION

Equipment decontamination will include the following procedures:

- The equipment will be thoroughly inspected and swept clean prior to de-mobilization.
- All latent material will be contained, loaded, and hauled to the designated landfill for proper disposal.
- All decontamination of equipment will be performed within the confinement of either (east or west side of dewatering pad) decontamination station.