

Stormwater Pollution Prevention Plan
Sheboygan River and Harbor Superfund Site
Sheboygan County, Wisconsin

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Prepared By

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1.0 INTRODUCTION

The Stormwater Pollution Prevention Plan (SWP3) is prepared to describe the methodologies, techniques, schedule, and control measures for the stormwater and erosion control management activities to be implemented as part of de-mobilization actions at the dewatering area.

2.0 SITE EVALUATION AND DESCRIPTION

The dewatering area is approximately 2.34 acres and is bounded by Maryland Avenue to the north, the Sheboygan River to the south and east, and South 21st Street to the west.

2.1.1 Description of the Nature of Construction Activity

The SWP3 applies to the de-mobilization activities which include: removing asphalt pavement and berm, removing hard fill, and seeding site for restoration.

2.1.2 Estimate of Disturbed Areas

Approximately 0.96 acre of land associated with the property will be disturbed.

2.1.3 Soil Description

The soil is classified as the Bellevue series (Soil Survey of Sheboygan County, 1978). The Bellevue series consists of nearly level, well drained and moderately well drained soils formed in loamy alluvial material. These soils are on the flood plains of major streams and on alluvial fans. In a representative profile the surface layer is dark brown silt loam about 10 inches thick. The subsoil is about 23 inches thick and is reddish brown. It is firm silty clay loam in the upper part and friable loam in the lower part. The substratum to a depth of 60 inches is reddish brown and brown, friable, stratified silt loam, loam, and fine sandy loam. Permeability is moderate, and available water capacity is high. Organic-matter content and natural fertility are high.

2.1.4 Rainfall Data

Average high and low temperatures and rainfall for Sheboygan, Wisconsin are listed in the table below.

<u>MONTH</u>	<u>AVG TEMPERATURE</u>		<u>MEAN TEMP</u>	<u>AVG PRECIP</u>
	HIGH (°F)	LOW (°F)	(°F)	INCHES
JAN	29	13	21	1.76
FEB	33	18	26	1.33
MAR	42	27	35	2.25
APR	53	36	45	2.99
MAY	65	45	55	2.90
JUNE	76	55	66	3.28
JULY	81	61	71	3.19

AUG	80	61	71	4.08
SEPT	72	54	63	3.29
OCT	59	43	51	2.51
NOV	45	31	38	2.43
DEC	33	19	26	1.89

2.1.5 Receiving Waters

The interpreted direction of groundwater flow is towards the Sheboygan River. A Site Topo indicating the surface water flow is provided in Figure 1. On the western portion, the surface water drainage flows toward South 20th Street. On the northern and eastern portions, the surface drainage flows toward Maryland Avenue. On the southern portion, the surface water drainage flows toward the Sheboygan River.

3.0 DESCRIPTION OF CONTROLS

This section details the sequence of major activities and timing for each control measure to assure proper stormwater management. Figure 2 provides the approximate locations where disturbance and restoration will take place. The actual location may change throughout the course of de-mobilization activities due to changing field conditions and progressing phases of these activities.

3.1.1 *Sequence of Major Activities*

Stabilization activities will be performed in accordance with Design Documents, Wisconsin Construction Site Best Management Practice Handbook (WDNR Pub WT-222), the Wisconsin Department of Transportation Erosion Control Product Acceptability Lists (PAL), and generally as described below:

Activity I –Demobilization

1. Remove asphalt pad, berm, and hard fill.
2. Remove fencing.
3. Dismantle Wastewater Treatment Plant Operation and remove from site.
4. Dismantle polymer operation and remove from site.
5. Seed all areas disturbed during de-mobilization.
6. Remove Erosion Controls.

3.1.2 *Timing for Erosion Controls*

This section includes a description of appropriate erosion controls and measures that will be implemented during de-mobilization, as needed.

The erosion controls and measures listed are discussed below and will comply with the requirements of the Specifications, Wisconsin Construction Site Best Management Practice Handbook, and Wisconsin Department of Transportation Erosion Control Product Acceptability Lists (PAL). This section identifies the most commonly used control measures attainable but may not be all inclusive or limited to the measures identified in this plan.

Actual scheduling of the controls will be developed on a sequence with the planned activities for the project.

A record of dates when activities temporarily or permanently cease and when stabilization measures are initiated will be documented on daily reports.

3.1.2.1 *Stabilization Control Practices*

Stabilization controls will be used to minimize runoff and reduce the sediment loading in stormwater both temporarily and permanently. Stabilization measures (such as seeding, mulching,

etc.) to control erosion are required where de-mobilization activities have temporarily or permanently ceased. The timeframes for the temporary practices are as follows:

1. Any disturbed area will have temporary erosion controls as soon as practicable (end of day) but no more than 7 days of the most recent disturbance, if the area will remain idle for more than 21 days.
2. If areas lie dormant over the winter, apply temporary erosion controls prior to the onset of winter.

The timeframes for the permanent practices are as follows:

1. If areas will lie dormant for one year or more, permanent erosion controls will be applied within 14 days of the most recent disturbance.

The following are typical temporary and permanent erosion control methods that may be used during stabilization of the Site:

Vegetative Methods

1. Temporary or permanent seeding involves growing a vegetative cover over disturbed areas. Seeding will be performed to meet minimum SWPPP requirement and the property owners.
2. Sod Stabilization provides immediate ground cover to minimize erosion on disturbed areas that may be subject to erosion.

Non-vegetative Methods

1. Geotextile such as fabrics or other synthetic materials can be used to temporarily stabilize an area.
2. Erosion Control Matting is a temporary or permanent erosion control device used to stabilize easily erodible areas such as channels and steep slopes.
3. Rock Check Dams are small rock dams constructed in grassed swales to reduce the velocity of water.

3.1.2.2 Structural Control Practices

Sediment controls may be used to control erosion and trap sediment. Sediment control practices will be functional throughout the duration of de-mobilization and will be installed 7 days before disturbing activities are performed. Several practices may be used, as needed, to control sediment transport and improve the quality of stormwater. Some of these practices include hay bales, silt fence, earthen diversion berms and channels that direct flow to one of these features. Listed below are examples of sediment controls that will be used. Figure 3 provides the erosion control details.

1. Straw Bales should be used in drainage courses perpendicular to the direction of flow to reduce the velocity of flow, minimize stream scour, and capture sediment. At a minimum, straw bales shall be placed before culverts and around drains.
2. Silt Fence is a sediment trapping device that utilizes a geotextile fence and topography to cause sediment deposition from sheet flow, typically at the perimeter of a disturbed area. Silt fence should be placed on a level contour to maximize soil deposition and several feet away from the toe of a slope when possible.

3.1.3 Stormwater Management

Stormwater run-on that comes in contact with PCB-impacted materials will be isolated and/or collected. The water will be sampled and treated using the Wastewater Treatment Plant (WWTP).

3.1.4 Federal, State or Local Plans

Any required Federal, State or Local plans and permits will be submitted prior to establishing erosion control activities.

3.1.5 Inspection and Maintenance Report

Sediment runoff and erosion control measures installed will be inspected throughout the duration of the de-mobilization activities. This individual will have sufficient knowledge of the policies and procedures established under this plan and the technical ability to ensure that the pollution prevention practices are in good working order, and will be responsible for conducting inspections. A copy of the inspection Report form is provided in Appendix A.

This plan requires that disturbed areas that have not yet been finally stabilized be inspected at least once every seven calendar days and within 24 hours following the end of a storm event that is 0.5 inches or greater.

In general, the inspection will determine if the control measures have been installed correctly, whether or not damage has occurred to the control measure since it was installed, and what will be done to correct damages should they be identified.

If the inspection indicates that a control measure needs repair or maintenance, the repair or maintenance will be completed within 48 hours of the inspection.

If the inspection indicates that the control measure does not meet its intended function and that a more appropriate control measure is required, the new control device will be installed within seven days of the inspection.

If the inspection indicates that a control measure has not been installed or implemented in accordance with any permit requirements or specification, the control device must be installed and/or implemented prior to the next storm event that produces runoff from the Site, but in no

case later than seven days from the date of the inspection. If the inspection indicates that the control measure is not needed, the record must explain why this is the case.

Upon completion of the inspection, a copy of the inspection report will be included in the Production Report.