# **Explanation of Significant Differences**

Sheboygan River and Harbor Superfund Site EPA ID: WID98099636 Sheboygan County, Wisconsin

> U.S. Environmental Protection Agency Region 5

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## **Executive Summary**

The U.S. Environmental Protection Agency (EPA) is issuing this Explanation of Significant Differences (ESD) #2 to document a significant change to selected remedy for the Sheboygan River and Harbor Superfund Site (Site), located in Sheboygan County, Wisconsin. EPA issued the Record of Decision (ROD) on May 12, 2000, and the first ESD in October 2010.

The purpose of this ESD is to document that EPA no longer requires annual bathymetry and breakwater monitoring as part of the selected remedy for both the Lower River and Inner Harbor portions of the Site.

# **Explanation of Significant Differences Sheboygan River and Harbor Superfund Site**

#### I. Introduction

#### A. Site Name and Location

The Sheboygan River and Harbor Site is located on the western shore of Lake Michigan, approximately 55 miles north of Milwaukee, Wisconsin, in Sheboygan County. The Sheboygan River and Harbor Site includes the lower 14 miles of the river from the Sheboygan Falls Dam downstream to, and including, the Inner Harbor. This segment of the river flows through Sheboygan Falls, Kohler, and Sheboygan before entering Lake Michigan. The Sheboygan River runs from west to east through east central Wisconsin, emptying into Lake Michigan. The U.S. Environmental Protection Agency (EPA) divided the river into three sections during the remedial investigations, based on physical characteristics such as average depth, width, and level of polychlorinated biphenyl (PCB) sediment contamination. The Upper River extends from the Sheboygan Falls Dam downstream 4 miles to the Waelderhaus Dam in Kohler. The Middle River extends 7 miles from the Waelderhaus Dam to the former Chicago & Northwestern (C&NW) railroad bridge. The Lower River extends three miles from the C&NW railroad bridge to the Pennsylvania Avenue Bridge in downtown Sheboygan. The Inner Harbor includes the Sheboygan River from the Pennsylvania Avenue Bridge to the river's outlet to the Outer Harbor. The Outer Harbor is defined as the area formed by the two breakwalls. In addition to PCB-contaminated sediment in the river and harbor, some floodplain soils were contaminated with PCBs.

Land use along the river is highly variable, with a mix of industrial, residential, and recreational uses. Primary land uses are discussed below, along with general information about the primary sources of PCBs to the river.

- The primary source of PCB contamination was in the Upper River area at the former Tecumseh plant in Sheboygan Falls. Tecumseh was a manufacturer of refrigeration and air conditioning compressors and gasoline engines. The company's Diecast Division manufacturing processes used PCB-containing hydraulic fluids which were discharged via sewer lines to the river. Erodible PCB-contaminated soils along the riverbank were also a source of PCBs to the river. Tecumseh closed the plant in 2003. Structures at the facility have been demolished; the property is currently vacant, and much of the property is fenced to restrict access. The future use of the property is unknown. While property use has historically been industrial, an adjacent property is a city park and the City of Sheboygan Falls has expressed interest in expanding the park to include the former Tecumseh property. However, PCB contamination is still present in soils at the property that require remediation.
- The Middle River area includes a horse farm, tree nursery, the historic Kohler Riverbend Estate, the Black Wolf Run golf course, and the 800-acre, Kohler-owned River Wildlife Area, which is used as a private hunting and fishing club. The Middle River area is also the location of the Kohler Company and Kohler Co. Landfill Superfund site. The landfill was also a source of PCB contamination to the floodplain and sediments. No significant changes in land use are anticipated in this area.

- The City of Sheboygan's central business district is on the north bank of the river in the Inner Harbor area. Offices, restaurants, marinas, parks, and a boardwalk are located within this area. No significant changes in land use are anticipated in this area.
- There are no public beaches along the river or harbor. The Lower River and Inner Harbor are navigable, but the Upper and Middle River traffic is typically restricted to smaller craft (i.e. canoes and kayaks) which can be portaged around shallow areas and the dams in Kohler and Sheboygan Falls.

The purpose of this Explanation of Significant Differences (ESD) is to document that EPA no longer requires the annual bathymetry and breakwater monitoring as part of the selected remedy for both the Lower River and Inner Harbor portions of the Site.

## **B.** Lead and Support Agencies

EPA is the lead agency responsible for overseeing the implementation of the potentially responsible party (PRP) -led remedial action. Wisconsin Department of Natural Resources (WDNR) is the support agency.

## C. Summary of Circumstances Necessitating this ESD

The change to the remedy being documented in this ESD is the removal of the annual bathymetry and breakwater monitoring requirements contained in the remedy selected for the Lower River and Inner Harbor in the ROD.

Since the issuance of the ROD, the Site PRPs have been compliant with ensuring that annual bathymetry and breakwater maintenance is performed in accordance with the selected remedy for both the Lower River and Inner Harbor portions of the Site. Annual bathymetry was performed to identify areas of the Site susceptible to scour and breakwater maintenance was performed to ensure that the breakwall continues to protect Inner Harbor sediment from Lake Michigan wave action and keep the highest levels of PCB-contaminated sediment at depth. This ESD documents that EPA no longer requires the annual bathymetry and breakwater monitoring as part of the selected remedy for both the Lower River and Inner Harbor portions of the Site. The rationale for the removal of these requirements are:

- The Lower River and Inner Harbor dredging that has been performed eliminated the contaminated sediments at depths that could be released if scour occurred. The additional Lower River and Inner Harbor dredging removed the sediments that contained in excess of 26 parts per million (ppm) of PCBs; there are no PCBs to be released requiring protection from scour and no need for a bathymetry survey to check the sediments for a vulnerability to scour.
- Unrestricted dredging of Lower River and Inner Harbor sediments is now allowed because the residual sediment is not impacted.
- The breakwaters were not installed by EPA as part of the removal action. In 1992, the City of Sheboygan built a marina, and per Army License

DACW35-3-92-3006, they are owned and maintained by the United States Army Corps of Engineers (USACE). Any necessary inspection and maintenance for the breakwaters is conducted by USACE.

## **D.** Agency Determination

EPA, in consultation with WDNR, has determined that the changes to the Lower River and Inner Harbor portions of the remedy are significant but do not fundamentally alter the overall remedial action for the Site. The modified remedy complies with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the statutory requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and remains protective of human health and the environment.

#### E. Administrative Record

In accordance with Sections 300.435(c) and 300.825(a) (2) of the NCP, this ESD and supporting documentation will become part of the administrative record for the Site. The administrative record is available for public review on the Site's website

(https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.docdata&id=05051 88#AR). Once COVID-19 restrictions are lifted, the ESD will also be accessible at the following location:

EPA Region 5 Records Center 77 West Jackson Boulevard – 7<sup>th</sup> Floor Chicago, IL 60604 Hours: Monday through Friday, 8:00 a.m. – 4:00 p.m.

An information repository is also located at:

Mead Public Library 710 N. 8<sup>th</sup> Street Sheboygan, WI 49007 Hours: Mon. - Thurs - 10:00 a.m. - 6:00 p.m. Fri - Sat - 10:00 a.m. - 5:00 p.m. Sunday – Closed

## F. Site History

Site History

The Sheboygan Harbor was constructed at the mouth of the Sheboygan River in the early 1920s. In 1954, the lower Sheboygan River, namely the channel upstream of the 8th Street Bridge, was added as a portion of the Sheboygan Harbor for USACE maintenance dredging. Between 1956 and 1969, a total of 404,000 cubic yards of sediment were dredged downstream of the 8th Street Bridge. The channel above 8th Street has not been dredged since it was first dredged in 1956.

Prior to 1969, the USACE disposed of the dredged material from the harbor in an authorized deep-water disposal area in Lake Michigan. However, between 1969 and 2012 there was no

maintenance dredging within the Sheboygan Harbor since the EPA and WDNR determined that the sediment was unsuitable for open-water disposal. Maintenance dredging resumed in 2012 after contaminated sediment removal within the Sheboygan River and Harbor was completed.

#### Site Contamination

The primary contaminants of concern for the Site were determined to be PCBs, polycyclic aromatic hydrocarbons (PAHs), and several heavy metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc). The PCB contamination was the primary driver of risk, and, as a result, the cleanup was primarily focused on removing PCB-contaminated sediments and soils.

In June 1979, the USACE collected 11 sediment cores from the harbor area ranging in depth from 1.5 to 9 feet. The USACE analyzed samples for lead, zinc, copper, chromium, and PCBs. The study revealed greater PCB and metal levels in the sediment of the Inner Harbor than in sediment from the Outer Harbor. In October 1979, the USACE collected a second round of samples consisting of 21 sediment cores. The USACE's analysis of these cores generally indicated an increase in PCB concentrations with the distance upstream from the harbor and with the depth of the sediment. The Sheboygan River and Harbor are designated as an Area of Concern by the International Joint Commission on the Great Lakes due to impairment of the beneficial uses of the waterway.

Tecumseh, a manufacturer of refrigeration and air conditioning compressors and gasoline engines whose plant was located adjacent to the Sheboygan River in Sheboygan Falls, is a PRP at the site. Tecumseh is considered a PRP because PCBs were found in sewer lines that lead to the river from Tecumseh and in hydraulic fluids used in Tecumseh Products Company's Diecast Division manufacturing processes. The contamination level was high in the sediments immediately surrounding the Tecumseh Plant, but decreased in concentration downstream. Tecumseh, prior to the issuance of regulations governing PCBs, used PCB-contaminated soils to construct a dike located along the river downstream of the Sheboygan Falls Dam. Tecumseh voluntarily excavated and replaced the dike following EPA's issuance of regulations governing PCBs in the late 1970s. Tecumseh undertook cleanup actions, but not before PCBs were released into the Sheboygan River.

EPA placed the Sheboygan River and Harbor Site on the National Priorities List in 1986. In August 1990, EPA and Tecumseh entered into an Administrative Order on Consent (AOC) to conduct interim actions to address imminent risks at the Site. In response, Tecumseh removed approximately 6,000 cubic yards (yd³) of contaminated sediment that was stored in two containment facilities at Tecumseh's Sheboygan Falls plant. In addition, Tecumseh capped or "armored" approximately 1,200 square yards of highly contaminated sediment to keep contaminated sediment from eroding further down river and to reduce ecological risks associated with elevated PCBs in surface sediment.

## **G.** Selected Remedy

A ROD was signed on May 12, 2000. The remedy outlined specific actions to address PCB-contaminated sediment, PCB-contaminated floodplain soil, and groundwater contamination. The major components of the selected remedy in the 2000 ROD included:

- Upper River sediment characterization, removal of approximately 20,774 yd<sup>3</sup> of PCB-contaminated sediment to achieve a soft sediment surface weighted average concentration (SWAC) of 0.5 ppm in the Upper River, and fish tissue and sediment sampling to document natural processes and ensure that over time the entire river will reach an average PCB sediment concentration of 0.5 ppm or less and that over time fish consumption advisories will be phased out. Soft sediment is defined as an area containing a sediment depth of one foot or greater.
- Middle River sediment characterization, removal of sediment if necessary to achieve a soft sediment SWAC of 0.5 ppm in the Middle River, and fish and sediment sampling to document natural processes and to ensure that over time the entire river will reach an average PCB sediment concentration of 0.5 ppm or less.
- Lower River sediment characterization, removal of sediment if necessary to achieve a soft sediment SWAC of 0.5 ppm or less over time in the Lower River, annual bathymetry surveys to identify areas susceptible to scour, and fish tissue and sediment sampling to document natural processes and ensure that over time the entire river will reach an average PCB sediment concentration of 0.5 ppm or less.
- Inner Harbor sediment characterization, removal of approximately 53,000 yd<sup>3</sup> of PCB-contaminated sediment to achieve a SWAC of 0.5 ppm in the Inner Harbor, annual bathymetry surveys to identify areas susceptible to scour, fish and sediment sampling to document natural processes and ensure that over time the entire river will reach an average PCB sediment concentration of 0.5 ppm or less, and maintenance of the Outer Harbor breakwalls.
- Removal of floodplain soils to reach an average PCB soil concentration of 10 ppm or less. Upon completion of the soil removal activities, the affected areas will be restored via replacement of the excavated soil, seeding, restoration of any fencing, and planting of trees. The removal of PCB contaminated soil will be balanced with maintaining existing high-quality ecological habitat. Long-term monitoring of the floodplain soil will be conducted.
- Investigation and mitigation of potential groundwater contamination and possible continuing sources at the former Tecumseh Plant in Sheboygan Falls.
- Placement of institutional controls (ICs) to limit access to Tecumseh's Sheboygan Falls plant groundwater as a drinking water source and reliance on existing WDNR waterfowl and fish consumption advisories to limit human exposure to contaminated waterfowl and fish.

On December 15, 2010, EPA issued an ESD to amend the May 2000 ROD. The ROD estimated that 53,000 yd³ of contaminated sediment were to be removed from the Pennsylvania Avenue Bridge to just past the 8th Street Bridge in specific areas. As part of the evaluation of the predesign investigation data and the development of the Lower River Remedial Design, it was determined that PCB concentrations were highest in the Lower River, with the greatest surface impact in the area upstream of Boat Island. The Lower River Remedial Design proposed that, instead of removing 53,000 yd³ of contaminated sediment from the Inner Harbor in the ROD-specified areas, the remedy would be more effective in achieving the 0.5 ppm SWAC over time in the Middle River, Lower River, and Inner Harbor reaches if 16,158 yd³ of contaminated sediment were removed from the Lower River and 34,390 yd³ of contaminated sediment were removed from the Inner Harbor between the Pennsylvania Avenue Bridge and the 8th Street Bridge.

The pre-design investigation data demonstrated that, compared to the estimates in the ROD, more heavily-contaminated sediment was present in the upper soft sediment layers within the Lower River, just upstream of and around Boat Island, and less contamination was present in the upper soft sediment layers in the Inner Harbor, between the Pennsylvania Avenue Bridge and the 8th Street Bridge. The cost estimate of the ROD-selected remedy for the Lower River and Inner Harbor was \$12.1 million. The ESD cost estimate was \$12.6 million. In addition, the requirement for ICs to maintain site remedy components was also part of the ESD. The ICs were intended to protect the components of the groundwater portion of the remedy at the former Tecumseh Sheboygan Falls Plant and prevent access to the groundwater for drinking water purposes. Maintenance of the outer harbor breakwalls was also required to protect the river sediment portion of the remedy.

## H. Remedial Action

## Phases I and II

Because of the size of the Site and the complexity of the cleanup, the Remedial Action was divided into three phases. Phase I addressed groundwater, preferential pathways, source materials, and riverbank soils at the former Tecumseh plant facility. Phase II work addressed the Upper River, including near-shore sediments, a previously armored sediment area, Upper River soft sediments, and Upper River floodplain soils. Phase III addressed the Middle River, Lower River, and Inner Harbor.

In 2004, Tecumseh entered into a Consent Decree (CD) with EPA for the Phase I and II work. On March 25, 2003, Tecumseh and Pollution Risk Services, LLC (PRS) entered into a "Liability Transfer and Assumption Agreement" under which PRS assumed specified obligations and liabilities for remediation of the Site and associated costs for which Tecumseh is responsible under the Upper River CD, which included the obligation to perform Phase I and II work under the CD.

PRS performed the remedial design/remedial action for the Tecumseh plant facility area and the Upper River area. Following completion of the remedial design, the remedial action was implemented in two phases from September 2004 to October 2007. The final Site inspection of the remedial action was conducted on November 7, 2007. EPA and WDNR determined that the following remedial action activities were completed according to the 2000 ROD and design

specifications for the Tecumseh property and the Upper River area. Work completed on the Tecumseh property included:

- Construction and installation of a Groundwater Monitoring/ Interceptor Trench (GMIT), which was required by the ROD if it was determined that groundwater under the Tecumseh plant could discharge to the river.
- Excavation of source materials and riverbank areas:
- Removal of preferential pathways which included the removal of soil in a 10-foot radius from two outfall locations at the former Tecumseh plant that could pose a threat of continued PCB loadings to the river system; and
- Installation of monitoring wells.

Work completed in the Upper River area included:

- Removal of 20,728 yd<sup>3</sup> of sediment, which included 552.45 pounds of PCBs from the Upper River portion of the Sheboygan River from the Sheboygan Falls Dam down to Waelderhaus Dam; and
- All Phase I and II Areas Site restoration.

The Phase II sediment removal noted above included removal of sediment from nine (9) previously armored Remedial Management Units (RMUs) and 122 Soft Sediment RMUs. The previously armored RMUs and Soft Sediment RMUs contained the majority of the PCB mass within the Upper River. PCB mass removal of each Soft Sediment RMU was deemed complete when 3 to 4 inches (or less), on average, of residual sediment remained in the deposit as determined by sediment probing after dredging, or after three passes with conventional dredging equipment. At completion, the Phase II remedial action removed 20,728 yd³ of sediment from the Upper River and 552 pounds of PCBs for a total mass removal percentage of 94.1%, exceeding the PCB mass reduction objective of 88%. No backfill or cover material was placed within the dredged areas.

The Upper River post-dredge baseline SWAC was calculated to be 1.96 ppm as documented in PRS's 2007 Construction Documentation Report. Where hardpan existed or PCBs were not detected, a value equal to the laboratory's detection limit was used in the SWAC calculation. This approach continues with routine sediment monitoring that is conducted every three years. Samples from the previously dredged RMUs are collected and analyzed for PCBs. If sufficient sediment is found to qualify the area as "soft sediment", the analytical result is used in the calculation. If insufficient sediment depth is found, then the laboratory detection limit is used in the calculation.

## Phase III

On October 6, 2009, PRS entered into an AOC with EPA to perform recharacterization and remedial design activities for the Middle River, Lower River, Inner Harbor, and floodplain soils.

In determining what concentration of PCBs or what mass of PCBs would constitute a substantial threat to achieving an overall sediment SWAC of 0.5 ppm, EPA developed a geostatistical sediment sampling design. EPA determined that a substantial threat to achieving the 0.5 ppm

SWAC would be a release that would recontaminate a surface area representing 20% or more of the Inner Harbor. EPA determined that it would be unacceptable if a release would lead to an overall Inner Harbor PCB surface sediment concentration of 2.0 ppm in the biologically active zone.

The geostatistical sampling design was used to develop the "trigger level" that would guide dredging decisions. Each sediment sample utilized in the model represented an 8,432 square foot (ft²) area. Dividing the calculated mass by the representative volume of each sample (8,432 ft² to a depth of 2 ft), equals a sediment sample concentration of 26 ppm. This means that if a sediment sample was taken and had a PCB concentration of 26 ppm or higher, the 16,864 ft³ (625 yd³) volume needed to be addressed. The action was either removal of the 625 yd³ area or a more detailed delineation of the sediment area to determine what volume of the area has PCB concentrations greater than 26 ppm. It was determined that this approach would lead to a post-dredging SWAC of 3.5 ppm, which correlates to a long-term recovery time of 30 years until the 0.5 ppm target SWAC would be met.

The approach to apply the 26 ppm trigger level was customized to each river segment. For the Lower River, PCB-contaminated sediment above 26 ppm within the top foot was to be removed where water depths were greater than five (5) feet, and PCB-contaminated sediment in excess of 26 ppm within the top two (2) feet was to be removed where water depths were less than five (5) feet. The Inner Harbor remedy included characterization and removal of two (2) feet of contaminated sediment from the Pennsylvania Avenue Bridge to just past the 8th Street Bridge. Four (4) feet was to be removed in those areas of the Inner Harbor where the bathymetry analysis showed scour greater than two (2) feet.

Remedy construction activities for Phase III were conducted in four main sub-phases: the 2010 Land-Based Mobilization, the 2011 Sediment Removal, the 2012 Sediment Removal, and the 2012 Floodplain Soil Removal.

<u>2010 Land-Based Mobilization</u> - Land-based mobilization activities were performed by PRS in 2010 (in advance of the 2011 Phase III Remedial Action Consent Decree) with approval from EPA to reduce the 2011 mobilization schedule. These activities included the construction of the dewatering and wastewater treatment plant (WWTP) infrastructure at 2025 Maryland Avenue.

In 2011, a CD was entered between PRS and the United States requiring PRS to implement the Phase III cleanup work, and the cleanup work began that same year. These areas were documented in the EPA-approved 100% Design dated November 2011 and the EPA-approved Remedial Action Work Plan (RAWP) dated March 2011 and revised in February 2012.

<u>2011 and 2012 Sediment Removal</u> - Mobilization for the Phase III work occurred between March 16 and April 11, 2011 and included all marine activities necessary to prepare the Site for sediment removal using 8-inch-diameter dredge equipment. From April 12 to August 19, 2011, Lower River dredging was performed with an 8-inch-diameter swinging ladder dredge, 8-inch dredge line and boosters, geotextile tubes for sediment dewatering, and the 2010-designed and installed WWTP system.

In June 2011, PRS investigated and initiated a second dredge mobilization, increasing the size of

the dredge equipment. Due to the daily removal volume inefficiency in the 8-inch-diameter dredge equipment from impassible objects, 10-inch-diameter dredge equipment and an enhanced WWTP were mobilized to the site between July 29 and September 5, 2011. The larger dredge and enhanced WWTP system worked from September 6 to December 3, 2011. PRS remobilized the 10-inch-diameter dredge equipment and made modifications to the WWTP between April 4, 2012, and May 7, 2012. Dredging began on May 8, 2012, and was performed through October 11, 2012. Dredging in 2011 and 2012 removed a total of 65,475.10 yd³ of contaminated sediment.

<u>2012 Floodplain Soil Removal</u> - Remedial action work was performed in Floodplains 3, 4, and 6 within the Upper River during August and September 2012. The work performed was identified in an access agreement with the property owner, the Kohler Company. The soil removal activities were performed in accordance with the Floodplains 3 and 4 Remedial Action Work Plan, which was approved with comments by EPA in July 2012, and the Floodplain 6 Work Plan - Revision 3, which was approved by EPA in September 2012.

Management of Toxic Substances Control Act (TSCA)-Regulated Materials - For all remedial action work, including floodplain soils and sediment, excavated and dredged material was segregated by PCB concentration. Materials containing 50 ppm total PCBs or greater were managed consistent with requirements. For Phase III dredging, this was done having dedicated TSCA and non-TSCA geotextile tubes. River grids that had been determined to contain TSCA levels of PCBs in sediment were routed to the identified and dedicated geotextile tubes, whereas non-TSCA sediment was routed to other geotextile tubes. When switching from non-TSCA to TSCA grids or from TSCA to non-TSCA grids, the dredge slurry line was completely emptied of sediment and washed clean. The determination of TSCA applicability was based on the in-situ concentration found in the sediment during the 2009 pre-design investigation and additional delineation performed in 2011.

<u>Demobilization and Construction Completion</u> - PRS conducted demobilization activities between October 12 and November 6, 2012. A walkthrough of the dewatering pad and WWTP area was conducted on November 7, 2012, with EPA and WDNR in attendance to note any deficiencies. A punch list was generated. The punch list was substantially completed on November 16, 2012, and approved by EPA. Construction completion was documented in a September 30, 2013, Preliminary Close-Out Report. At completion, PRS removed approximately 65,475.10 yd<sup>3</sup> of sediment from the Lower River and Inner Harbor, which totals 13,927.10 yd<sup>3</sup> more than the estimated quantity included in the 100% Design (51,548.00 yd<sup>3</sup>). During 2011 and 2012 dredging, 67,492.97 tons of non-TSCA material and 7,795.70 tons of TSCA material was transported offsite and disposed of appropriately.

## **II.** Statement of Purpose

The purpose of this ESD is to document a decision to change the Lower River and Inner Harbor remedial components for the Site. The change to the remedy being documented in this ESD is the removal of the annual bathymetry and breakwater monitoring requirements contained in the remedy selected for the Lower River and Inner Harbor in the ROD.

EPA prepares an ESD when it is determined by the Agency that changes to the original remedy are significant, but do not fundamentally alter the remedy selected in the ROD with respect to scope, performance, or cost. The ESD is issued in accordance with § 117(c) of CERCLA,42 U.S.C. § 9601

et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the NCP, § 300.435(c)(2)(i). The Director of the Superfund and Emergency Management Division has been delegated the authority to sign this ESD.

#### **III.** State Comments

The WDNR has reviewed this ESD and concurs with the significant change to the remedy. The WDNR's concurrence e-mail dated July 5, 2021 has been added to the administrative record.

## **IV.** Statutory Determinations

EPA has determined that these significant changes comply with the statutory requirements of CERCLA § 121, 42 U.S.C. § 9621, are protective of human health and the environment, comply with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, are cost-effective, and utilize permanent solutions and alternative treatment technologies to the maximum extent practicable.

Since this remedy will result in hazardous substances, pollutants, or contaminants remaining on site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted no less often than each five years after the initiation of the remedial action to ensure that the remedy is, or will be, protective of human health and the environment. The most recent Five-Year Review, the fifth for this site, was signed on August 21, 2020.

## V. Public Participation Compliance

EPA shall publish a brief description of the ESD in the local newspaper as required by the NCP at 40 C.F.R. Section 300.435 (c)(2)(i)(B). This ESD will also be placed in the administrative record files and information repository, which are located at the Mead Public Library and in the EPA Region 5 office as required by the NCP Section 300.435(c)(2)(i)(A). See Section I, paragraph F, of this ESD for further details about the information repositories. An electronic copy of this ESD will be available online at

https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.docdata&id=0505188#AR.

## VI. Declaration by EPA

I have determined the remedy for the Site, as modified by this ESD, is protective of human health and the environment, and will remain so provided the actions presented in this report are implemented as described above.

This ESD documents the significant changes related to the remedy at the Site. U.S. EPA selected these changes with the concurrence of WDNR.

7/21/2021

Douglas Balloti, Director

Superfund & Emergency Management Division

Signed by: DOUGLAS BALLOTTI