UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
Waste Management of Wisconsin, Inc.	)	**RISK-BASED DISPOSAL APPROVAL TO**
Ridgeview Recycling and Disposal Facility,	)	**DISPOSE OF THE CEDAR CREEK SUPERFUND**
Southern Expansion	)	**PROJECT TSCA-REGULATED SEDIMENT**
6207 Hempton Lake Road	)	**CONTAINING POLYCHLORINATED**
Whitelaw, Wisconsin 54247-0227	)	**BIPHENYLS (PCBs) ISSUED PURSUANT**
WIW 000 145 193,	)	**TO 40 C.F.R. § 761.61(c)**
	)	
APPLICANT.	)	
	)	

AUTHORITY

The United States Environmental Protection Agency (EPA) is issuing this risk-based disposal approval (Approval) to Waste Management of Wisconsin, Inc. (WMWI), pursuant to Section 6(e)(1) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e)(1), and the federal regulations for disposal of Polychlorinated Biphenyls (PCBs) at 40 C.F.R. § 761.61(c).

Section 6(e)(1)(A) of TSCA, 15 U.S.C. § 2605(e)(1)(A), requires that the EPA promulgate rules to prescribe methods for the disposal of PCBs. The regulations at 40 C.F.R. § 761.61 set out the cleanup and disposal options for PCB remediation waste. PCB remediation waste is waste containing PCBs as a result of a spill, release, or other unauthorized disposal. *See* 40 C.F.R. § 761.3. PCB remediation waste includes environmental media containing PCBs, such as soil and gravel; dredged materials, such as sediments, settled sediment fines; and aqueous decantate from sediment. *Id*. PCB remediation waste also includes soil, rags, and other debris generated as a result of any PCB spill cleanup.

40 C.F.R. § 761.61(a) sets out the requirements for the self-implementing on-site cleanup and disposal of PCB remediation waste. The self-implementing procedures may not be used to clean up sediments in marine and freshwater ecosystems. *See* 40 C.F.R. § 761.61(a)(1)(B). Cleanup and disposal of dredged material must be approved under the risk-based disposal approval regulations at 40 C.F.R. § 761.61(c). *See* 40 C.F.R. § 761.61(c)(1).

40 C.F.R. § 761.61(c) prescribes the process by which an owner or operator of a landfill may obtain approval for a risk-based disposal method for PCB remediation wastes. 40 C.F.R. §

761.61(c)(1) requires any person wishing to dispose of dredged material to apply in writing to the EPA Regional Administrator, to include information described in the notification required by 40 C.F.R. § 761.61(a)(3), and to submit other information that the EPA believes necessary to evaluate the application. 40 C.F.R. § 761.61(c)(2) requires the EPA to issue a written decision on each application for a risk-based disposal method for PCB remediation wastes. The EPA approves a risk-based disposal application only if it finds that the method will not pose an unreasonable risk of injury to health or the environment.

EPA Headquarters Delegation 12-5 authorizes the re-delegation of approval authority for PCB disposal facilities from Regional Administrators to Regional Division Directors. Under the EPA, Region 5 Delegation 12-5, dated July 15, 2014, the approval authority for PCB risk-based approvals was delegated from the Regional Administrator to the Director, Land and Chemicals Division (LCD), EPA, Region 5.

None of the information required to be maintained under or submitted pursuant to this Approval is subject to the requirements of the Paperwork Reduction Act, 44 U.S.C. § 3501, *et seq.*, because such information is collected by the EPA from WMWI for the purpose of assuring compliance with this Approval.

EFFECTIVE DATES

This Approval is effective upon the signature of the Director of LCD, EPA, Region 5. This approval is valid only for the disposal of PCB dredged material generated from the Cedar Creek Superfund Project under the supervision of the Superfund Program. WMWI's authorization to dispose of PCB dredged material from the Cedar Creek Superfund Project is valid for the duration of the Cedar Creek Superfund Project unless such authorization is suspended or terminated, as provided herein, or unless the time period is modified by the EPA. Upon signature by the Director of LCD, EPA, Region 5, the issuance of this Approval shall be considered final agency action.

BACKGROUND

The WMWI Ridgeview Recycling and Disposal Facility Southern Expansion (Southern Expansion), located at 6207 Hempton Lake Road, Whitelaw, Wisconsin, is an existing Wisconsin Department of Natural Resources (WDNR) approved disposal facility that complies with the requirements of Subtitle D landfills as implemented under NR 500, Wisconsin Administrative Code (WAC). It is owned and operated by WMWI. WDNR approved the plan of operation for the Southern Expansion on April 28, 2008, and issued Amended Conditional Plan of Operation Approvals on May 9, 2011; April 16, 2012; and February 7, 2014. The Amended Conditional Plans of Operation allow, under certain conditions, acceptance of dredged sediments that contain less than 50 parts per million (ppm) PCBs at the Southern Expansion.

WMWI is requesting approval to accept dredged material from the Cedar Creek Superfund

Project with a PCB concentration less than 50 ppm after dewatering and processing. A risk-based application pursuant to TSCA and 40 C.F.R. § 761.61(c) is required because some of the Cedar Creek sediments that WMWI proposes to accept have in-situ PCB concentrations of 50 ppm or greater prior to removal from the waterway and dewatering and processing.

WMWI was granted a similar risk-based disposal approval to accept sediments from the Fox River Superfund Project. The Approval was issued on September 18, 2012. During the approval process, EPA performed a detailed review of the Southern Expansion's location, design, monitoring program, and closure requirements.

On July 22, 2016, WMWI, as owner and operator of the Southern Expansion, submitted to the EPA a risk-based application for the disposal of TSCA-regulated, PCB-contaminated dredged material from the Cedar Creek Superfund Project into the Southern Expansion. On September 19, 2016, EPA issued a Notice of Deficiencies letter to WMWI. On October 19, 2016, in response to EPA's letter, WMWI submitted additional information in support of their risk-based application.

FINDINGS

The following Findings are made pursuant to 40 C.F.R. § 761.61(c), and are based on the EPA's review of (1) information submitted by WMWI in its July 22, 2016 Application for a Risk-Based Disposal Approval; (2) the October 19, 2016 WMWI Response to the EPA Notice of Deficiencies letter and subsequent email correspondence with WMWI; (3) information submitted by WMWI in its March 24, 2011 Application for a Risk-Based Disposal Approval for Fox River sediment and the April 26, 2011 AECOM Response to EPA Request for Additional Information pursuant to 40 C.F.R. § 761.61(c)(1); and (4) the Risk-Based Disposal Approval for the Fox River Superfund Project issued by EPA on September 18, 2012.

Based on the geology, hydrogeology, construction design, and operating conditions presented in the following Findings, the EPA finds that the disposal of TSCA-regulated Cedar Creek dredged and processed sediment with PCB concentrations less than 50 ppm does not pose an unreasonable risk of injury to health or the environment under 40 C.F.R. § 761.61(c)(2).

1. WMWI currently owns and operates the Southern Expansion in Whitelaw, Wisconsin, which is a WDNR-approved disposal facility that complies with the requirements of Subtitle D landfills as implemented under NR 500, WAC. The landfill construction design requirements in NR 500, WAC are more stringent than the comparable requirements for a TSCA chemical waste landfill.

2. The Southern Expansion is located immediately south of the existing Ridgeview Landfill.

3. The mailing address and physical address of the Southern Expansion is 6207 Hempton Lake Road, P.O. Box 227, Whitelaw, Wisconsin 54247-4473.

4. The Southern Expansion is located about 1.8 miles north of State Trunk Highway 10 (STH 10) and approximately 1.6 miles northwest of the Village of Whitelaw. It is located in the SE ¼ and SW ¼ of Section 26, T20N, R22E, Town of Franklin, Manitowoc County, Wisconsin.

5. The area south of the Southern Expansion is agricultural land bordered by Sunny Slope Road. The area to the east is agricultural land bordered by Madson Road. The area to the west is the facility's offices and maintenance buildings and agricultural land bordered by Hempton Lake Road. The area to the north is bounded by Reif Mills Road.

6. The Southern Expansion lies on a 701 acre parcel of land owned by WMWI. The WMWI property is within the Eastern Ridges and Lowlands Physiographic Province of Wisconsin, and is located approximately one mile east, south and west of the Branch River. The landscape has been extensively glaciated and, as a result, the land surface is hilly with closed depressions. Wetlands have formed in some of these depressions where low permeability soils are present.

7. The closest residence is located to the south, approximately 1,260 feet from the Southern Expansion proposed Cell 2 footprint.

8. The Southern Expansion occupies 60.3 acres within the 701 acres owned by WMWI. It has an approved waste disposal capacity of 10.16 million cubic yards. The projected closure date for the Southern Expansion is 2022.

9. The Southern Expansion is being developed in four Cells approximately 200+ feet south of the existing Ridgeview landfill. Cell progression will be from east to west, with Cell 4 adjacent to and south of Cell 3. Clay for the liner for each Cell will come from within the footprint of the Southern Expansion.

10. Cell 1 and Cell 2A, the eastern half of Cell 2, are completely constructed. Cell 2B will be constructed in 2018. Cell 1 will be the depository for the material dredged from the Cedar Creek Superfund Project in 2017 and in 2018 if dredging should continue later than anticipated. The Southern Expansion has a remaining capacity of approximately 8 million cubic yards and Cell 1 has already been utilized for placement of TSCA-regulated sediment from the Fox River Superfund Project. The remaining cells will be utilized as the depository for the dredged material as the Cedar Creek cleanup progresses. When the dredged material from the Cedar Creek Superfund Project is placed in the Southern Expansion, human or environmental exposure to PCBs currently found in the Cedar Creek will decrease significantly.

11. The Southern Expansion will accept the same waste types as the existing landfill, namely non-hazardous municipal, commercial, and industrial solid waste, including utility ash

and sludge, pulp and paper manufacturing waste, foundry waste, wastewater treatment sludge, high volume industrial waste, and treated contaminated soil. Under certain conditions, dredged sediments that contain less than 50 ppm PCBs can be accepted.

12. In general, the site consists of 58 to 107 feet of unconsolidated Pleistocene deposits, primarily glacial in origin, overlying Silurian dolomite. The surficial deposit at the site is predominantly clay till, with a discontinuous, unconsolidated unit of glacial fluvial deposits interbedded with the clay till.

13. The site soil profile from top to bottom is made up of four units:

    a. The Valders Member (Vctm) consists of a reddish-brown to yellowish-red silty or sandy clay glacial till (27.4% clay), interbedded with fluvial sand, silt and, rarely, some gravels. Fluvial facies are relatively common in this unit, and in some areas the clay till appears reworked and sorted. At the site, the contact with the Valders Member (Vtm) is diffuse and not always sharp. This unit is found in all borings at the site.

    b. The Valders Member (Vtm) consists of a yellowish-red to reddish-yellow silty sand glacial till. There is significantly less clay in this member (9.7%) than the Vctm (27.4%) member. Fluvial facies, such as silt and sand seams, are much less common in Vtm but still encountered. The unit is found throughout the site and the contact with the underlying Valders Member (Vgm) is sharp and distinct.

    c. The Valders Member (Vgm) consists of interbedded sand and gravel. The gravel consists mainly of dolomite fragments, although igneous rock fragments are not uncommon. The unit is found in the north half of the proposed site. North-south cross sections show Vgm appears to be deposited where the bedrock is lower in elevation suggesting it may have been deposited in a channel-like feature. The contact with the underlying Haven Member is distinct. It also has relatively high hydraulic conductivity with respect to the Haven Member.

    d. The Haven Member (Hm) is a brown to gray-brown clayey silty basal till. It is a very dense unit with less clay and more gravel than Vtm. The thickest deposits are in the southern part of the proposed site, and it thins to the north. Thin beds of fluvial sand and silt are rare, but present.

14. The bedrock at the site is Silurian dolomite and is at least 100 feet thick. Regionally, the Silurian dolomite is 400 to 500 feet thick.

15. The site hydrostatic units from top to bottom are:

    a. The Valders Member (Vctm) and Valders Member (Vtm) combine to form a 50 to

70 foot thick aquitard beneath the Southern Expansion. The vertical hydraulic conductivity ranges from 6.8 x 10^{-8} centimeters/second (cm/sec) to 1.21 x 10^{-8} cm/sec. This unit is not amenable for use as a water supply unit.

b. The Valders Member (Vgm) and Silurian Dolomite are in hydraulic contact in the northern part of the Southern Expansion. The Valders Member (Vgm) ranges from 0 to 49 feet thick in this area but pinches out to the south. The in-situ hydraulic conductivity ranges from 1.3 x 10^{-3} cm/sec to 4.7 x 10^{-5} cm/sec. This hydrostatic unit does have the potential to be a water supply unit, although the majority of private wells in the area extend significantly deeper into the dolomite in order to have a reliable water source. The aquifer is recharged from slow infiltration through the clayey tills above the undifferentiated outwash or from direct precipitation.

c. The Haven Member (Hm) and Silurian Dolomite are in hydraulic contact on the southern half of the site. It ranges in thickness from 0 to 51 feet. The in-situ hydraulic conductivity ranges from 2.8 x 10^{-2} cm/sec to 6.8 x 10^{-6} cm/sec. Laboratory hydraulic conductivity ranges from 4.18 x 10^{-8} cm/sec to 3.17 x 10^{-8} cm/sec. The majority of private wells in the area extend significantly deeper than the Haven Member (Hm)/Silurian dolomite contact in order to have a reliable water source.

d. The Silurian Dolomite is the main water supply in the area. In general, wells screened near the top of the bedrock surface exhibit higher hydraulic conductivity than those deeper in the dolomite.

16. The foundation soils below the base grades of the disposal facility are dense clays and silty clays and are suitable for landfill foundation support. The landfill base mainly is situated in the Haven Member with portions in the Valders Member (both Vtm and Vctm). There are portions of the sideslope liner that contact the Haven Member, but the liner mainly contacts the Valders Member (both Vtm and Vctm).

17. The Southern Expansion will be contained and isolated from groundwater by an engineered liner and a leachate collection system. These will prevent any hydraulic connection between the waste in the Southern Expansion and the groundwater below. In addition, a lysimeter will be utilized to monitor any potential leakage through the base liner. The landfill base stratigraphy from top to bottom will be as follows:

a. a leachate collection system consisting of a 12-inch thick, granular drainage layer with a hydraulic conductivity greater than 1 x 10^{-2} cm/sec and leachate collection lines.

b. a 12 oz/yd^2 non-woven geotextile.

c. a 60 one thousandth of an inch (mil) thick smooth (base) or double-sided textured (sideslopes) high density polyethylene (HDPE) geomembrane.

d. a 4-foot compacted clay liner, constructed in a herringbone design, with a hydraulic conductivity less than or equal to 1×10^{-7} cm/sec.

i. The tested hydraulic conductivity for the base liner averaged 3×10^{-8} cm/sec.

ii. The clay liner meets or exceeds the WDNR requirement for a minimum of 50% by weight passing the No. 200 sieve. *See* WAC NR 504.06(2)(a)1.

iii. The average liquid limit and plasticity index values for the constructed clay liner is approximately 27 and 15 respectively. WAC requires greater or equal to 25 and 12 with no plasticity index less than 10. *See* NR 504.06(2)(a)3 and 4.

e. base lysimeters (20 x 60 feet) below each cell to detect whether there are leaks through the base liner. Each lysimeter will be constructed below the subbase elevation adjacent to the toe of the slope at the low end of each Cell. A solid-walled, 4-inch diameter SDR 17 HDPE sampling riser will be connected to a 4-inch diameter, perforated, SDR 17 HDPE within a sump and extend to the top of the sidewall berm. Each lysimeter is designed, from top to bottom, with the following components:

i. 10-oz/yd² non-woven geotextile;

ii. 1.5 foot layer of ASTM C-33 coarse aggregate;

iii. 4-inch diameter, perforated, SDR 17 HDPE pipe covered with a geotextile sock;

iv. 60-mil HDPE geomembrane;

v. 4-oz/yd^2 non-woven geotextile;

vi. one foot of compacted clay or a soil barrier layer with geosynthetic clay liner (GCL).

18. The Southern Expansion is not within 1000 feet of a navigable lake, pond, or flowage or within 300 feet of a navigable river or stream. There is no water course in proximity to the facility that has direct connection to the facility.

The separation distance from the base of the landfill to the groundwater is about ten feet as required by NR 504.06(2), WAC. NR 812, WAC does not allow drinking water wells within 1200 feet of a landfill, without a variance. Issuance of the variance includes a hydrogeologic review of the setting and frequently requires minimum casing lengths and special well construction. These requirements serve to protect potential human receptors from contaminated ground water. In addition, WDNR has identified Special Casing Depth Areas numbers 18 and 19 for Townships 20 North and Range 22 East that require 250' minimum casing lengths and WDNR approval for all construction/reconstruction of drinking water wells.

19. Neither the Southern Expansion, nor any portion of the existing landfill, is within a 100-year floodplain or on shoreland.

20. The Southern Expansion has a perimeter berm that extends completely around the waste limits to prevent runoff from a 25-year, 24-hour storm event from entering the landfill. It is at least 20 feet wide and no less than 10 feet above the surrounding land grades.

21. The topographic relief in the area of the landfill is slight with gradual slopes of 2 to 15 percent. Surface elevations within the footprint of the proposed Southern Expansion vary between +860 and +910 feet mean sea level (msl). Locally, the highest elevations are at the existing landfill which rises to about +1045 feet msl.

22. The Southern Expansion is a solid waste disposal facility with no requirement to sample ground or surface water for PCBs. Therefore, there was no sampling of ground or surface water for PCBs prior to commencing disposal of solid waste at the site. WMWI does not plan to sample the groundwater or surface water for PCBs prior to acceptance of TSCA-regulated PCB contaminated sediments from the Cedar Creek Superfund Project.

23. Environmental and performance monitoring (required by WDNR) for the Southern Expansion will extend through the period of active site operation and long-term care period. Media to be monitored include groundwater, leachate, air, landfill gas, and surface water. As part of the long term care obligations for the Southern Expansion, WMWI will manage, monitor and repair leachate systems, groundwater wells, landfill gas wells, surface water control features, final cover, and fencing. Environmental monitoring of groundwater, leachate, air, landfill gas and surface water will continue, and leachate will be trucked to the City of Manitowoc WWTP (or subsequently approved Publically Owned Treatment Works [POTW]) or recirculated, as allowed under the conditions of this Approval.

24. The WDNR approved monitoring system for the Southern Expansion includes four upgradient wells (MW-203, MW-203A, MW-224, MW-225), four sidegradient wells (MW-208, MW-208A, MW-209A, MW-212A) and six downgradient wells (MW-201,

MW-201A, MW-202R, MW-202A, MW-210A, MW-211A). The wells are constructed in accordance with WDNR requirements. Each well has an individual cap and the pipe protector installed over each well is locked. The groundwater is monitored annually and semi-annually. WDNR requires semi-annual groundwater monitoring for all of these wells. For some of the wells, WDNR requires annual groundwater monitoring for certain additional parameters. WDNR does not require WMWI to sample these wells for PCBs.

25. The leachate environmental monitoring program includes measuring the depth of leachate over the liner (leachate head) quarterly, tracking the volume of leachate collected from the system monthly, and monitoring of the leachate for various chemical parameters including PCB congeners. Some of the parameters are monitored semi-annually and others are monitored annually. WDNR requires WMWI to perform, at a minimum, semi-annual analyses for the following specific PCB congeners: Nos. 8, 15, 26, 28, 37, 44, 49, 52, 60, 66, 70, 74, 77, 81, 82, 87, 95, 99, 101, 105, 110, 114, 118, 123, 126, 128, 132, 138, 149, 151, 153, 156, 157, 158, 166, 167, 169, 170, 177, 180, 183, 187, 189, 201 and 206. The leachate quality sampling points are SRM-1, SRM-2, SRM-3 and SRM-4. The leachate head monitoring points are LH-C1A, LH-C1B, LH-C2A, LH-C2B, LH-C3A, LH-C3B, LH-C4A and LH-C4B. There are two head wells per cell.

26. The base lysimeter monitoring points are LSY-1, LSY-2, LSY-3, and LSY-4. The environmental monitoring program includes monthly monitoring of the volume of leachate collected from the lysimeters and semi-annual and annual monitoring of the lysimeter leachate for various chemical parameters. WDNR does not require WMWI to sample the lysimeter for PCBs.

27. The Southern Expansion leachate collection system is used to collect, monitor and remove leachate above the base liner. Cell 1 contains two leachate collection trenches and Cell 2A contains one leachate trench. Cell 2B will contain one leachate collection trench when its construction is completed in 2018. Each trench will have leachate collection lines (6-inch diameter perforated piping) that are connected to a single sump per cell. Leachate will drain to the sumps and be pumped up the sidewalls into manholes where a gravity conveyance line will transport the leachate to on-site storage tanks. There are two 30,000-gallon tanks and a 14,000 gallon leachate tank providing a total of 74,000 gallons of storage capacity. Leachate that is disposed off-site is pumped into tanker trucks and transported to the City of Manitowoc POTW.

28. Leachate will be collected at the sump riser manhole in each of the four cells. Samples may be collected at the leachate tank if the tank is dedicated to a particular southern expansion cell. If PCBs are detected in the leachate, it will be treated to acceptable limits for discharge in accordance with a state or federal permit or disposed by another state or federally approved method. As required by WDNR, WMWI must provide PCB test results to all wastewater treatment facilities receiving leachate from the landfill within 15

days of receiving results that identify total PCBs at a concentration greater than 1.5 micrograms/liter (µg/l).

The Southern Expansion is authorized by WDNR to recirculate leachate from the storage tanks into the Cells.

29. The final grades for the cover for the Southern Expansion will be a 4:1 slope from the crests to the toe. The cover will be constructed with two crests, and the cover stratigraphy, from top to bottom, in one approved design is as follows:

    a. Vegetation;

    b. Minimum 6 inch topsoil layer;

    c. Rooting zone, minimum 30 inch thickness;

    d. Geocomposite drainage layer;

    e. 40-mil polyethylene textured geomembrane;

    f. 2 foot thick compacted clay liner (with a hydraulic conductivity of $\leq 1 \times 10^{-7}$ cm/sec) or geosynthetic clay liner (gcl);

    g. Minimum 6 inch grading layer.

30. WDNR requires WMWI to install the final cover over the Southern Expansion within five years after initially reaching final waste grades. Areas receiving final cover must be vegetated as soon as practical. WDNR is requiring WMWI to propose a landfill cap monitoring method to be conducted on an annual basis.

31. Stormwater runoff will be controlled by drainage ditches, diversion berms, downslope flumes, perimeter drainage channels and storm sewers, culverts, and sedimentation basins. All stormwater control structures have been designed using a 25-year, 24-hour storm event. Perimeter drainage ditches will surround the entire landfill and direct all collected stormwater to Sedimentation Basin No. 2R or Sedimentation Basin B. Eventually, the stormwater is discharged to existing drainageways and surrounding wetlands under the facility's WDNR operating permit. Currently, only Sedimentation Basin No. 2R is active. WDNR does not require WMWI to sample the sedimentation basins for PCBs.

32. Surface water samples will be collected semi-annually from sedimentation basin 2R for pH and specific conductance. WDNR requires sampling for Biological Oxygen Demand

if an overflow occurs. The sedimentation basins will be cleaned when sediment reaches two feet in depth.

33. The waste acceptance and disposal procedures at the Southern Expansion consist of the following:

a. The Cedar Creek dredged material accepted at the Southern Expansion must be able to support itself and the material over it and pass the paint filter test. The dredged material is required to have a minimum undrained shear strength of 600 pounds per square foot. WMWI may use ash, absorbents, soil or waste to stabilize the sediment.

b. No ignitable waste will be disposed of in the landfill, as hazardous material is not allowed to be disposed of in the landfill.

c. WMWI will segregate remediation waste that contains petroleum wastes from the TSCA dredge solids, since WDNR does not allow the Cedar Creek dredged material to be commingled or covered with any potentially incompatible waste (i.e., waste containing organic solvents, including petroleum compounds and other oil- or solvent-containing wastes).

d. WDNR does not allow the dredged material to be placed within ten feet of the liner system on the facility's base or interior sidewalls or within ten feet of the sub-base of the capping layer of the final cover system.

e. WDNR requires WMWI to limit the amount of dredged material accepted on any day to what can be effectively managed that day.

f. WMWI will contain daily operations to the smallest area possible. The sediments will be pushed into place in approximately four foot thick lifts (lifts may vary due to material properties) and leveled with low ground pressure equipment. Compactors will be used if the sediment is of sufficient strength to further consolidate the fill.

g. WMWI will use global positioning system (gps) surveying equipment to document the Cedar Creek dredged material placement.

h. WDNR requires placement of daily cover over the waste. WMWI has proposed using soil, or alternate daily cover materials, such as foundry wastes, geotextile tarps, bioremediated soils, paper mill waste, or power plant ash. WDNR requires WMWI to remove certain types of alternative daily cover material as much as possible at the beginning of the next operating day to minimize barriers to the downward percolation of leachate and the outward movement of gas. Completed

or interim areas that will remain inactive for at least six months must be covered to minimize erosion. The May 9, 2011 amended conditional plan of operation approval eliminated the requirement to apply daily cover to the dredged sediment in accordance with the February 28, 2011 plan modification request.

i. WMWI must notify WDNR at least 14 days prior to beginning any new project involving disposal of dredged material containing PCBs. The notification must include the approximate volume of dredged material to be disposed of, the results of the testing performed to determine the concentrations of PCBs in the dredged material, the planned method of disposal, and any design features needed to accommodate the generation of gas or leachate from the dredged material after disposal or to prevent clogging of the leachate collection system by fine particles. WDNR can waive the 14 day notification.

34. WMWI controls windblown dust and dust from vehicular movement by wetting with water or commercially available compounds.

35. WDNR does not allow truck traffic to be routed over dredged materials, and all landfill equipment that contacts dredged materials must be adequately cleaned when leaving the limits of waste filling. A portable truck tire wash station was constructed and will be placed below the crest of the slope on the access road inside the landfill. When needed, the truck tires and under carriage will be washed and undergo a visual inspection after washing. Wash water will be handled as leachate.

36. WDNR requires WMWI to prepare and submit annual and five-year reports. These reports must include the following information:

a. Amount of waste placed;

b. Amount of leachate collected and recirculated;

c. Gas volumes collected;

d. Verification of the attainment of a k value of 0.077;

e. Settlement assessments and data used to make the assessment;

f. Quality assessments of leachate, gas, and condensate and a comparison between recirculation and non-recirculation areas.

37. WMWI will record operational and maintenance activities, including waste volumes, leachate volumes handled, and monitoring results during Cedar Creek dredged material disposal operations. These records will be maintained at the site office. A waste disposal

log will be maintained at the landfill office on a daily basis.

38. The Southern Expansion has the following features and security measures:

a. Access is from State Trunk Highway 10 (STH 10) then north two miles on Hempton Lake Road to the landfill, which is located on the east site of Hempton Lake Road.

b. Access is controlled by a perimeter fence and a lockable gate at the entrance. The access gate is closed and locked when an attendant is not on duty. Additional fencing exists along the landfill boundary to control access to the site. Perimeter fencing has been constructed around the expansion.

c. Access to the site is limited to the site operator, engineer, WMWI personnel, and approved waste haulers. Public access to the site is limited to public disposal areas, as directed by the landfill operator. Visitors are required to arrange visitation to the site through the site office and must be accompanied by WMWI personnel while on site.

d. The Southern Expansion is open for disposal Monday through Friday from 6:30 am to 4:30 pm and on Saturday from 6:30 am to 12:00 noon. Operation hours can be adjusted to accommodate the dredging operations or special circumstances. An operator is on duty during all hours of operation.

e. The access road within the landfill is surfaced with gravel to provide full season access. The road will be periodically graded to eliminate ruts and remove any impacted soils, keeping the road clean. Temporary roads will be constructed to the disposal site as the landfill is developed. The temporary roads will be maintained to prevent tracking of PCB material out of the landfill.

f. Staffing requirements for the operation of TSCA-level waste disposal may include: certified site manager/operator, staff engineer and technician(s), office attendant, equipment operators, and mechanic. Employees will be equipped with the appropriate training and personal protective equipment for waste handled in accordance with TSCA and OSHA.

g. Police, fire protection, and emergency services are available from Manitowoc County and surrounding cities. On-site vehicles have some fire equipment, and the water truck or leachate tankers could be implemented if needed. Soil stockpiles are available on site for use in addition to water from on-site sediment basins. Fire extinguishers will also be available on the equipment.

39. The Southern Expansion has the following current permits:

a. April 28, 2008 WDNR Conditional Plan of Operation Approval, Ridgeview RDF Southern Expansion Manitowoc County, Wisconsin;

b. May 9, 2011 WDNR Amended Conditional Plan of Operation Approval, Ridgeview RDF Southern Expansion Manitowoc County, Wisconsin, License No. 04292;

c. April 6, 2012 WDNR Feasibility Modification – Waste Management of Wisconsin, Inc. Ridgeview Recycling and Disposal Facility Southern Expansion;

d. February 7, 2014 WDNR Plan of Operation Modification Approval for Multiple Items, Ridgeview Recycling and Disposal Facility (RDF), Whitelaw, Wisconsin, WDNR License No. 4292;

e. September 15, 2014 WDNR Air Pollution Control Operation Permit Renewal, Waste Management of Wisconsin Inc. – Ridgeview, Permit No. 436020530-P20.

f. December 16, 2013 City of Manitowoc Wastewater Discharge Permit, Permit No. 00019.

40. As required by WDNR, WMWI is perpetually responsible for the long term care of the Southern Expansion. WMWI presently uses bonds for owner financial responsibility and proposes to continue use of bonds to provide proof of financial responsibility for closure and long-term care costs.

41. The in-place volume of impacted sediment above TSCA level concentration in the Cedar Creek is estimated at 30,000 cubic yards. The Southern Expansion has an approved waste disposal capacity of 10.16 million cubic yards with a remaining capacity of 8.27 million cubic yards. Therefore, it has sufficient capacity for the disposal of the Cedar Creek dredged material.

42. Some of the Cedar Creek sediments that WMWI proposes to dispose of in the Southern Expansion may have in-situ PCB concentrations of 50 ppm or greater. After dewatering and processing the dredged sediment, the PCB concentration in the dewatered sediment is expected to be lower than the in situ sediment concentration. If there is any dewatered dredged material that is above or at 50 ppm, it will be shipped to a TSCA landfill approved under 40 C.F.R. § 761.75 or other facility as allowed under 40 C.F.R. § 761.61(b)(2) to accept sediment with PCB concentrations of 50 ppm or greater.

43. WMWI and the Potentially Responsible Party (PRP) for the Cedar Creek Superfund Project will work with the EPA on the development of an acceptable testing program to

ensure that WMWI does not dispose of dewatered dredged material with a PCB concentration of 50 ppm or greater.

CONDITIONS OF APPROVAL

The following Conditions, including specified requirements and provisions necessary to ensure that disposal of the Cedar Creek dredge material does not present an unreasonable risk of injury to health or the environment from PCBs, are authorized pursuant to 40 C.F.R. § 761.61(c). In addition, all requirements, conditions, and limitations regarding operation of the Southern Expansion and disposal of PCB waste, contained in (1) the April 28, 2008 WDNR Conditional Plan of Operation Approval, Ridgeview RDF Southern Expansion Manitowoc County, Wisconsin; (2) the May 9, 2011 WDNR Amended Conditional Plan of Operation Approval, Ridgeview RDF Southern Expansion Manitowoc County, Wisconsin, License No. 04292; (3) the April 6, 2012 WDNR Feasibility Modification – WMWI Ridgeview Recycling and Disposal Facility Southern Expansion; and (4) the February 7, 2014 WDNR Plan of Operation Modification Approval for Multiple Items, Ridgeview Recycling and Disposal Facility, Whitelaw, Wisconsin, WDNR License No. 4292; including, but not limited to, those provisions referenced below, are incorporated as Conditions of this Approval.

SCOPE OF WORK

44. WMWI may dispose of dredged material generated from the Cedar Creek Superfund Project in the Southern Expansion with a PCB concentration less than 50 ppm. The in-place volume of impacted sediment above TSCA level concentration in Cedar Creek is estimated at 30,000 cubic yards, and the Cedar Creek cleanup is projected to be completed in 2017 or 2018.

45. PCB disposal must be carried out entirely within the Southern Expansion.

WASTE IDENTIFICATION AND PLACEMENT

46. Any Cedar Creek dredged material that fails the RCRA paint filter test (SW-846 Method 9095B), for reasons other than incidental liquids, shall not be disposed of in the Southern Expansion. Incidental water produced during transport may be handled according to the TSCA regulations.

47. Wastes placed in the Southern Expansion must be capable of attaining sufficient strength to prevent subsidence, ponding on the waste or on the cap, and slope movement or creep. Cedar Creek dredged material accepted at the Southern Expansion must be able to support itself and the material over it and pass the paint filter test. The dredged material is required to have a minimum undrained shear strength of 600 pounds per square foot. The facility may use ash, absorbents, soil, or waste to stabilize the sediment.

48. Ignitable waste, as defined in 40 C.F.R. § 761.75(b)(8)(iii), shall not be disposed of in the Southern Expansion.

49. WMWI will segregate remediation waste that contains petroleum wastes from the TSCA dredge solids. The Cedar Creek dredged material may not be commingled or covered with any potentially incompatible waste (i.e., waste containing organic solvents, including petroleum compounds and other oil- or solvent-containing wastes).

50. Indications of slope failure or leachate escape from portions of the Southern Expansion cells that have accepted Cedar Creek dredged material shall trigger all emergency notification processes and shall subject WMWI to immediate corrective action, including possible work stoppage, drainage control, emergency berm construction, soil reinforcement, and possible closure of the cell.

51. Each load of Cedar Creek dredged material received at the Southern Expansion must be inspected, compared, and reconciled with the waste manifest and recorded in the daily waste disposal log.

52. WMWI must document and record the location of Cedar Creek dredged material placed in the Southern Expansion.

53. Vehicles that have come in contact with the Cedar Creek dredged material (including trucks delivering the Cedar Creek dredge material), must be washed clean of soil (as necessary) before entering the public road so as to prevent dredge material from tracking onto public roads.

54. All Cedar Creek dredged material waste transport vehicles must be inspected upon entering and exiting the Southern Expansion. Vehicles that leak PCB waste must be contained immediately and not leave the Southern Expansion until the leak is stopped.

GROUNDWATER MONITORING

55. WMWI is not required to monitor the groundwater for PCBs at the Southern Expansion unless PCBs have been detected in the Southern Expansion base lysimeter.

56. If PCBs are confirmed to be present (i.e., defined as two or more consecutive detections) above the practical quantitation limit (PQL) in the Southern Expansion base lysimeter, WMWI must sample the wells identified below for PCBs, pH, specific conductance and chlorinated organics beginning with the next scheduled sampling event.

    a. upgradient wells MW-203, MW-203A, MW-224, MW-225;

b. sidegradient wells MW-208, MW-208A, MW-209A, MW-212A;

c. downgradient wells MW-201, MW-201A, MW-202R, MW-202A, MW-210A, MW-211A.

57. WMWI shall maintain all data and records of the groundwater sampling and analysis as required in 40 C.F.R. § 761.180(d)(1), and current EPA sampling methods and analytical procedures shall be followed.

58. Wells used to measure water level elevations at the Southern Expansion must not be purged or otherwise disturbed prior to measuring the static water level.

AMBIENT AIR MONITORING

59. WMWI must conduct ambient air monitoring for PCBs as follows: Sample points around the perimeter of the Southern Expansion must be sampled for PCBs two times each year while Cedar Creek dredged material is being accepted, at times judged to be most likely to observe PCB emissions from the Southern Expansion. The sampling time should include at least one day just after sunset on a hot evening (in July or August) with low or no wind, and one high traffic day. The air sampling units must be located to capture the most dust possible over a 12-hour period.

60. WMWI must use the sampling and analytical methodology in EPA method TO-4A or equivalent. The analytical method must achieve a minimum method detection limit of two hundredths microgram per cubic meter (0.02 $\mu g/m^3$). Twenty-four hour time-weighted average perimeter monitoring using a notification level of three tenths microgram per cubic meter (0.3 $\mu g/m^3$) is acceptable.

LEACHATE MONITORING

61. Every quarter, WMWI must measure the depth of leachate over the liner at the following leachate head monitoring locations, unless the cells in which they are located have not been used for the disposal of Cedar Creek dredged material.

a. LH-C1A

b. LH-C1B

c. LH-C2A

d. LH-C2B

e. LH-C3A

f. LH-C3B

g. LH-C4A

h. LH-C4B

62. WMWI must monitor the volume of leachate collected from the leachate collection sumps monthly unless the cells in which they are located have not been used at any time for the disposal of Cedar Creek dredged material.

63. Leachate from each of the leachate collection sumps listed below must be sampled and analyzed semi-annually unless the cells in which they are located have not been used for the disposal of Cedar Creek dredged material.

a. SRM-1

b. SRM-2

c. SRM-3

d. SRM-4

64. Analysis of the samples from each of the leachate collection sumps for the cells that contain Cedar Creek dredged material must comply with the requirements of 40 C.F.R. § 761.75(b)(6)(iii) (*Water analysis*) and include the following parameters:

a. PCBs: reported as Aroclors or as required by WDNR, whichever is more restrictive (e.g. reporting of specific PCB congeners is more restrictive than reporting of Aroclors).

b. pH.

c. Specific conductance.

d. Chlorinated organics: VOCs semi-annually; semivolatile organic compounds annually.

e. Physiochemical characteristics necessary to characterize the leachate for treatment and disposal.

BASE LYSIMETER MONITORING

65. WMWI must monitor the volume of leachate collected from the base lysimeter monitoring points listed below on a monthly basis unless the cells in which they are located have not been used for the disposal of Cedar Creek dredged material.

    a. LSY-1

    b. LSY-2

    c. LSY-3

    d. LSY-4

66. WMWI is not required to sample leachate collected from the base lysimeter sampling points for the parameters listed below unless PCBs are confirmed to be present above the PQL in the leachate collection system associated or overlying the lysimeter. When required, the sampling is to be performed annually.

    a. PCBs: reported as Aroclors or as required by WDNR; whichever is more restrictive (e.g. reporting of specific PCB congeners is more restrictive than reporting of Aroclors).

    b. pH.

    c. Specific conductance.

    d. Chlorinated organics.

    e. Physiochemical characteristics necessary to characterize the leachate for treatment and disposal.

LEACHATE COLLECTION, HANDLING AND DISPOSAL

67. Dilution of leachate is prohibited, and all leachate must be sampled prior to mixing with leachate/water from other sources.

68. Leachate may be recirculated under the following conditions:

    a. Prior to recirculation the leachate must be sampled from the sump associated with the cell from which the leachate will be used for recirculation and analyzed for PCBs.

    b. Leachate may be recirculated if the total PCB concentration is less than or equal

to 0.5 µg/L.

c. During the recirculation event, the leachate will be sampled and analyzed quarterly to verify compliance with the total PCB concentration limit of ≤ 0.5 µg/L.

69. Disposal and/or treatment of leachate generated from the Southern Expansion shall be based on its concentration and shall be handled as outlined below:

a. Leachate with a detected PCB concentration of 50 ppm or greater must be stored and disposed in accordance with 40 CFR Part 761, Subpart D.

b. Discharges of leachate to a POTW must meet the discharge limits for PCBs established by the POTW (to comply with their state or federal discharge permit). Leachate will be pretreated as necessary or disposed of by another state or federally approved method. If the POTW will not accept the leachate due to the PCB concentrations, then WMWI must provide written notification to EPA specifying the management and ultimate disposal of the leachate. This notification must be provided within 5 working days of denial from the POTW.

70. If WMWI intends to treat the leachate before disposal, WMWI must prepare a treatment plan for the EPA's review and approval prior to treatment.

71. WMWI has constructed a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner.

72. WMWI may not recirculate leachate in any portion of the Southern Expansion cells that have been used for the disposal of Cedar Creek dredged material.

SEDIMENT BASIN MONITORING AND MANAGEMENT

73. WMWI must collect surface water samples semi-annually from Sedimentation Basin 2R as specified in the February 7, 2014, WDNR Plan of Operation Modification Approval for Multiple Items, Ridgeview RDF, Whitelaw, Wisconsin, WDNR License No. 4292. These samples must be analyzed for pH and specific conductance. Additional samples must be collected if an overflow occurs.

74. WMWI must collect a six part composite sediment sample from Sedimentation Basin 2R annually until two years following placement of interim cover over the final shipment of PCBs Cedar Creek dredged material. This sample must be analyzed for PCBs.

75. Sedimentation basins must be cleaned when sediment reaches two feet in depth.

76. If WMWI diverts surface water to another Sedimentation Basin, then conditions 73, 74,

and 75 will apply to the other Sedimentation Basin.

ANALYSIS

77. Chlorinated organics in the groundwater, leachate, and lysimeters to be monitored under this Approval are the chlorine containing compounds required in the WDNR Plan of Operation Approval as listed in Appendices III and IV of NR 507.

78. Chlorinated organics in the groundwater, leachate and lysimeter samples are to be analyzed by SW-846 Method 8260B (or future EPA updates) for the volatile compounds and by SW-846 Method 8270C (or future EPA updates) for the semivolatile compounds.

79. The PCB levels in any soil sample or solid sample required by this Approval must be determined by using:

    a. Appropriate procedures identified by SW-846 Method 3500B (or future EPA updates) for organic extraction and sample preparation;

    b. Procedures identified by SW-846 Method 3600C (or future EPA updates) for sample extract cleanup, when necessary or appropriate;

    c. SW-846 Method 8082A (as updated by EPA) for analytical measurement. The results must be reported as total PCBs, on a dry weight basis (103-105°C), calculated by comparison to Aroclor standards identified by SW-846 Method 8082A when Aroclors are present. Identified Aroclors used for calculation of total PCBs also are to be reported.

80. The PCB levels in any leachate sample required by this Approval must be determined by using:

    a. Appropriate procedures identified by SW-846 Method 3500 (or future EPA updates) for organic extraction and sample preparation;

    b. Procedures identified by SW-846 Method 3600C (or future EPA updates) for sample extract cleanup, when necessary or appropriate;

    c. SW-846 Method 8082A (as updated by the EPA) for analytical measurement.

81. The results of analyses of leachate samples required by this Approval must be reported as total PCBs calculated by comparison to Aroclor standards identified by EPA Test Method SW-846 Method 8082A or as required by WDNR, whichever is more restrictive. If Aroclor standards are used, the identified Aroclors used for calculation of total PCBs are also to be reported.

82. WMWI may not remove statistically significant increases from monitoring data unless the EPA has approved it.

83. Upon demand, WMWI must provide the EPA split sample material. The EPA will spike this material, and WMWI must arrange for its laboratory to analyze the spiked samples. The laboratory must be the one that WMWI utilizes to analyze samples of the same matrix. The laboratory must provide sample results to the EPA and to WMWI at the same time.

RECORDKEEPING

84. WMWI must comply with the recordkeeping requirements set out at 40 C.F.R. § 761.75(b)(8)(iv) and 761.180(b), including the requirements to maintain annual records on the disposition of PCB waste at the Southern Expansion and a written annual document log containing the information required by 40 C.F.R. § 761.180(b)(2).

85. As required by 40 C.F.R. § 761.180(b)(1), the annual records for the Southern Expansion shall include:

    a. all signed and numbered manifests for each Cedar Creek dredged material waste shipment received at the Southern Expansion for the calendar year;

    b. all Certificates of Disposal generated by or received at the Southern Expansion for the Cedar Creek dredged material for the calendar year; and

    c. all records of inspections and cleanups at the Southern Expansion relative to the Cedar Creek dredged material for the calendar year.

86. As required by 40 C.F.R. § 761.180(b)(2), WMWI shall prepare, by July 1 for the previous calendar year, an annual document log that includes:

    a. the name, address, phone number, and the EPA identification number of the holder of the TSCA Approval, and the calendar year of the log;

    b. the unique manifest number of every manifest for the Cedar Creek dredged material received at the Southern Expansion during the calendar year, and from each manifest the following information:

        i. the generator's name for each shipment of PCB waste;

        ii. the quantity of PCB waste disposed of expressed in cubic yards of waste and kilograms of PCB waste;

        iii. the first date the PCB waste was removed from service for disposal; and

iv. the date the PCB waste was placed in the Southern Expansion.

c. the quantity and PCB concentration of leachate produced from the cells used for the disposal of Cedar Creek dredged material with a PCB concentration of one ppm or greater; and

d. the disposal destination of all leachate produced from the cells used for the disposal of Cedar Creek dredged material with a PCB concentration at or greater than one ppm.

87. As required by 40 C.F.R. § 761.180(b), WMWI must maintain the annual records and annual document logs for at least 20 years after the Southern Expansion is no longer used for the disposal of Cedar Creek dredged material. The required documents must be kept at one central location, and must be available for inspection by authorized representatives of the EPA.

88. As required by 40 C.F.R. § 761.180(d), WMWI shall collect and maintain for at least 20 years after the Southern Expansion is no longer used for the disposal of Cedar Creek dredged material, the following:

a. all water analyses obtained under this Approval and the applicable TSCA regulations; and

b. all operation records, including the burial coordinates of wastes, obtained under this Approval and the applicable TSCA regulations.

89. As required by 40 C.F.R. § 761.180(f), WMWI shall maintain for at least 20 years after the Southern Expansion is no longer used for the disposal of Cedar Creek dredged material, the following:

a. all documents, correspondence, and data provided by WMWI to State and local governmental agencies pertaining to disposal of Cedar Creek dredged material at the Southern Expansion;

b. all documents, correspondence, and data provided by State and local governmental agencies to WMWI pertaining to disposal of Cedar Creek dredged material at the Southern Expansion; and

c. all applications and related correspondence sent from WMWI to governmental agencies regarding specified permits for the Southern Expansion.

90. As required by 40 C.F.R. § 761.180(b)(3), WMWI must submit to the EPA an annual report by July 15 of each year for the previous calendar year and must include data for the previous calendar year. For each respective year, the annual report must contain a

summary of the written annual disposal log records and annual records, and the following additional information:

a. sample site locations for leachate/water, groundwater, air, surface water, storm water, and sediment samples must be posted/plotted on maps and cross sections;

b. a graphical time plot of all analytical data from groundwater quality sampling;

c. piezometric surface elevation contour maps and cross sections for each quarter, showing the Southern Expansion, flow paths, and flow rates;

d. a graphical time plot of all leachate/water analytical data produced from the Leachate Collection System for those cells used for the disposal of Cedar Creek dredged sediment and from the Base Lysimeter;

e. a summary of the final PCB concentration of each batch of leachate/water treated on-site;

f. a graphical comparison between leachate quantity pumped/generated during the reported year and the leachate quantities pumped/generated from previous years together with the concentration, treatment method, and disposition of leachate with greater than or equal to 1 ppm PCBs as pumped from the cells used for the disposal of Cedar Creek dredged material;

g. a summary of the number of cubic yards and kilograms of PCB waste disposed of in the calendar year, in addition to the requirements listed in 40 C.F.R. § 761.180(b)(3);

h. a graphical time plot of analysis of all TSCA surface water, sediment and air monitoring results;

i. closure and post-closure financial assurance estimates adjusted annually; and

j. any additional information as may be required by the Director of LCD, EPA, Region 5.

91. WMWI must provide to the EPA every PCB report sent to WDNR regarding the results of local air monitoring work around the Southern Expansion working faces, including any temporary air monitoring site locations and any interim cleanup action results.

NOTICE

92. If WMWI requests and receives an approval from WDNR to change the PCB congeners analyzed in the leachate samples, WMWI must submit the revised list of PCB congeners

to the EPA within 15 working days of WDNR's approval.

93. WMWI must notify the EPA if it disposes of leachate at a facility other than the City of Manitowoc POTW within 15 days.

94. Within one working day of when it knows or should have known of applicable analytical results, WMWI must notify the EPA by telephone of any statistically significant increase in monitored parameters (identified in this permit) in groundwater, the Leachate Collection System or the Base Lysimeter samples from the Southern Expansion. WMWI also must provide a written notification of such increase within 7 days.

95. Within one working day of when it knows or should have known of applicable monitoring results, WMWI must notify the EPA by phone if the leachate over the base liner of the cells that have been used for the disposal of Cedar Creek dredged material exceeds 1foot depth, or the volume of water or leachate from those cells exceeds the mean value plus 3 standard deviations calculated from the last two years records for the sample point.

96. WMWI will notify the EPA within 24 hours of discovery if PCB impacts are detected outside of the limits of the landfill liner and cover system.

97. If there is a spill or release of PCBs from the Southern Expansion which poses a threat to health or the environment, the event must be reported immediately to the EPA Regional Office. In addition, WMWI must abide by all other applicable federal, State, and local notification and reporting requirements regarding such an incident.

98. For the required notifications, WMWI must contact the EPA Region 5 Office, Chief of the RCRA/TSCA Program Section at (312) 886-7435. For spills and releases (Conditions 96 and 97), WMWI must contact the Region 5 PCB Coordinator at (312) 886-7435. Written correspondence may be sent to:

Chief, RCRA/TSCA Programs Section (L-8J)
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, Illinois 60604

SAFETY AND HEALTH REQUIREMENTS

99. Cleanups of PCB spills at the Southern Expansion must be completed in accordance with applicable TSCA PCB regulations and applicable safety and health requirements and regulations.

100. WMWI employees must be equipped with the appropriate training and personal protective equipment for handling the Cedar Creek dredged material in accordance with

TSCA and OSHA.

101. The Southern Expansion must remain secured to restrict public access at all times.

INSPECTION

102. The EPA reserves the right of its employees and authorized representatives to perform inspections, review records, and take samples at the Southern Expansion at any reasonable time.

CLOSURE AND POST-CLOSURE

103. The EPA reserves the right to review Closure and Post-Closure Plans for the Southern Expansion and, if necessary, impose conditions for closure and post-closure procedures.

104. Upon closure, WMWI must remediate areas outside of the landfill contaminated by PCBs in excess of 25 ppm or 10 ug/100 cm^2 in accordance with the PCB regulations at 40 C.F.R. § 761.61(a). The 25 ppm cleanup standard is permissible as long as the property is classified as a low occupancy area. This means that occupancy for any individual not wearing dermal and respiratory protection cannot exceed 335 hours per calendar year (an average of 6.7 hours per week). If the Site can no longer be classified as a low occupancy area, WMWI must remediate the Southern Expansion to a risk based standard under 40 C.F.R. § 761.61(a)(4)(i)(A) or 761.61(c).

105. WMWI must care for the Southern Expansion and perform post-closure environmental monitoring and maintenance in perpetuity.

FINANCIAL ASSURANCE FOR CLOSURE AND POST-CLOSURE CARE

106. WMWI must maintain financial assurance for closure until release in accordance with 40 C.F.R. § 264.143(i).

107. WMWI must maintain financial assurance for post-closure in perpetuity in accordance with 40 C.F.R. § 264.145(i).

108. WMWI must adjust the closure and post-closure cost estimate(s) for inflation annually within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with Paragraphs 106 and 107 of this Approval. Adjustments must be made in accordance with 40 C.F.R. § 264.142(b) and 264.144(b). This may require an increase in the financial assurance funding mechanism.

109. WMWI must revise the closure and/or post-closure cost estimate(s) no later than 30 days after a request to modify the closure and post-closure plan under Paragraph 104 of this Approval has been approved by the Director, LCD, EPA, Region 5, in accordance with

the modifications section of this Approval, if the change in the closure and post-closure plan increases the cost of closure and/or post-closure.

TRANSFER OF OWNERSHIP

110. The requirements under this Approval for closure and post-closure care of the Southern Expansion shall transfer to any new owner of the landfill.

111. WMWI must notify the EPA, at least 180 days before transferring ownership of the Southern Expansion, where a new Approval must be issued, or 30 days before transferring ownership of the Southern Expansion where the Approval is current and the new owner's records are complete.

112. WMWI must similarly notify State and local agencies before transferring ownership of the Southern Expansion.

113. Should the transferor fail to timely provide the EPA with the required written documentation of sale or transfer of the Southern Expansion, this Approval may be terminated.

114. At least 60 days before the transfer of the Southern Expansion, the prospective transferee must submit to the EPA:

a. a written statement identifying the name, address and telephone number of the transferee;

b. copies of the transferee's last 4years of federal income tax returns, including all schedules;

c. a notarized affidavit signed by the transferee which states that the transferee will abide by the transferor's Approval;

d. a listing of past environmental violations by the transferee, its employees or assigns;

e. the qualifications of the principals and key employees;

f. proof of financial assurance acceptable to the EPA and funding in a manner similar to that set forth at 40 C.F.R. § 264.142 and 264.145; and

g. any other applicable materials to document compliance with the requirements of 40 C.F.R. § 761.61(c).

115. After reviewing the notification, affidavit, and background information, the EPA will

either issue an amended Approval in the transferee's name or require the transferee to apply for a new TSCA PCB disposal Approval. In the latter case, the transferee must abide by the transferor's Approval until the EPA issues a decision on the application.

116. If the transferee is required to apply for a new TSCA PCB Approval, the transferee must submit to the Director of LCD, the EPA, Region 5 a complete Application, pursuant to the requirements of 40 C.F.R. § 761.61(c).

BANKRUPTCY

117. In the event that WMWI, or its successor or assigns, declares bankruptcy, WMWI shall immediately provide written notice of such to the Director of LCD, EPA, Region 5.

MODIFICATIONS

Any major modification of this Approval requires the written approval of the Director of LCD, EPA, Region 5. If there is any question as to whether a change in operations at the Southern Expansion, or any other proposed modification, is a major or minor modification, such question should be submitted to an appropriate representative(s) of the EPA as soon as possible. In such cases, the EPA will determine whether a proposed change is major or minor. No oral modifications shall be granted.

Any minor modification of this Approval requires written approval of the Chief, RCRA Branch, LCD, EPA, Region 5. No oral modifications shall be granted.

APPROVAL EXPIRATION

WMWI's authorization to place Cedar Creek dredged material with a PCB concentration of less than 50 ppm in the Southern Expansion will expire upon placement of the material described in Condition 44.

SUSPENSION AND TERMINATION OF PCB DISPOSAL AUTHORIZATION

WMWI's failure to comply with any provision of this Approval, TSCA, the PCB regulations at 40 C.F.R. Part 761, or any other applicable federal, State or local requirement may constitute a sufficient basis for suspension or termination of WMWI's authorization to dispose of Cedar Creek dredged material in the Southern Expansion.

WMWI's PCB disposal authorization may also be terminated if the Director of LCD, EPA, Region 5 determines that the Southern Expansion poses an unreasonable risk of injury to health or the environment.

The Director of LCD, EPA, Region 5 may reinstate WMWI's authorization to dispose of Cedar Creek dredged material in the Southern Expansion or remove any disposal restrictions, if it is determined that any unsafe practices have been eliminated and unsafe conditions have been changed.

SEVERABILITY

All terms and conditions of this Approval are severable. If any provision of this Approval or any application of any provision, is changed, amended or held invalid, the remaining terms and conditions will still be valid and not affected thereby.

RESERVATIONS

Nothing in this Approval relieves WMWI from the duty to comply with all applicable federal and State laws and regulations, including, but not limited to CERCLA, RCRA, TSCA, and the regulations promulgated under those statutes.

Violation of the Approval, TSCA, or the PCB regulations may subject WMWI to civil or criminal enforcement action and associated penalties.

The EPA reserves the right to impose additional Conditions of Approval if the EPA finds such Conditions are necessary to ensure that operation of the Southern Expansion does not present an unreasonable risk of injury to health or the environment from PCBs, or if the EPA issues new regulations or standards for risk-based disposal of PCBs. This includes, but is not limited to, EPA's review of WDNR's Conditional Plan of Operation Modifications for the Ridgeview RDF Southern Expansion: EPA reserves the right to add or revise certain Conditions of this Approval based on reviews of these Plans to ensure that operation of the Southern Expansion does not present an unreasonable risk of injury to health or the environment.

The EPA may require the removal of some or all of the PCBs disposed of in the Southern Expansion if the EPA finds such actions are necessary to ensure that the landfill does not present an unreasonable risk of injury to health or the environment from PCBs.

WMWI is responsible for the actions of its agents, assigns, employees, and contractors regarding compliance with this Approval and all federal, State and local regulations applicable to operation of the Southern Expansion, including, but not limited to, emergency notification and reporting requirements.

APPROVAL

In accordance with 40 C.F.R. § 761.61(c) and the Findings above, the EPA has determined that WMWI's Application is consistent with TSCA, and that the Southern Expansion, when operated in compliance with the Conditions of Approval, does not present an unreasonable risk of injury to health or the environment from PCBs. Provided that the Conditions of Approval described above are met, WMWI's July 22, 2016 Application for Approval is granted.

WMWI is authorized to dispose of PCB contaminated Cedar Creek dredged material in the Southern Expansion.

_____ Date: _____

Ignacio L. Arrázola
Acting Director
Land and Chemicals Division
United States Environmental Protection Agency
Region 5