

October 21, 2025

Ms. Emily Storm
Waste Management Engineer – Waste and Materials
Management Program
Wisconsin Department of Natural Resources –
Northeast Region
2984 Shawano Avenue
Green Bay, WI 54313

Subject: Request for Landfill Permit Modification, Chaudoir's Dock County Park Harbor Dredging, Door County, Wisconsin -- AECOM Project No. 60751170

Dear Ms Storm,

On behalf of the Door County Facilities and Parks Department, and the Door County Highway Department, AECOM is providing information in support of this request for a landfill permit modification. The purpose of this permit modification request is to use the closed-Door County Landfill (License #2937) for specific reuse of dredged sediment from the Chaudoir's Dock County Park. Chaudoir's Dock County Park is located 4 miles west of the Town of Brussels, in Door County, WI. Other sites have previously been considered for disposal of this sediment but have been ruled out due to potential for groundwater contamination. The Door County Landfill site is an existing landfill with a clay liner and leachate collection system which provides greater confidence of mitigating risks to groundwater contamination. Please find attached information and figures in support of this request. A summary table with reference to NR720 standards of the sediment analytical report from the 2013-2014 dredging project at this harbor is enclosed.

The primary contacts for this project are the directors of Door County Facilities and Parks Department, directed by Mr. Wayne Spritka, and the Door County Highway Department, directed by Mr. Thad Ash. In early 2014, it was determined the Door County Landfill may serve as more appropriate location for the long-term disposal of this sediment, as compared to other sites. The Highway Department takes responsibility for long-term operation and maintenance of the landfill.

The primary contact for the harbor dredge project is:

Mr. Wayne Spritka, Director
Door County Parks & Airport Department
421 Nebraska Street, 3rd Floor
Sturgeon Bay, WI 54235
(920) 746-9959

The primary contact for the landfill (long-term slope maintenance) is:

Mr. Thad Ash, PE, Highway Commissioner
Door County Highway Department
1001 South Duluth Avenue
Sturgeon Bay, WI 54235-3812
(920) 746-2500

The project will include mechanical removal of sediment from the harbor and entrance channel at Chaudoir's Dock County Park. The estimated volume of sediment removal ranges from approximately 8,000 CY to 12,000 CY. The sediment will be dredged from the harbor and channel using a clamshell bucket-equipped crane, set on a barge. Sediment will be temporarily stored on the barge and moved to

sealed dump-trucks. Dump-trucks will transport the sediment to the temporary storage cell, as depicted on the enclosed map. The sediment will be periodically graded by County equipment and personnel to form a berm. The temporary stockpile of sediment will be seeded (WisDOT Mix 75 or similar) by County personnel at the completion of this dredging project. If the project is completed after September 1st (likely), a temporary cover of winter wheat or annual rye will be initially used, followed by the WisDOT seed mix the following spring.

In the future, the temporary stockpile of sediment will be used for cap/cover slope maintenance of the closed landfill. No immediate plan or schedule has been established by the County for slope maintenance, but the County reasonably anticipates use of this sediment material within 5 years (by end of 2031). When the slope maintenance project is initiated, the clean topsoil cover of the landfill will be stripped and stockpiled separately. Fill materials, including the subject sediment will be moved from the temporary holding cell to the landfill to fill depressions as necessary. Following re-grading of the landfill, the clean topsoil cover will be returned, regraded to uniform thickness, and reseeded.

In 2013, attempts were made to quantify the available volume capacity of the landfill. AECOM reviewed historic survey data records collected by another engineering company and used cross section end-area methods to estimate the available capacity. Results of these calculations indicate capacity at that time was in excess of 37,000 CY. We expect there remains ample capacity for the proposed 2026 dredge volume.

Please let us know if you need any additional information regarding this request.

Sincerely,

AECOM Technical Services, Inc.



Peter J. Diemer, P.E., C.H.
Project Engineer

Attachments:

Figure C-01 Landfill Cover Topography
Figure C-02 Temporary Holding Cell
Sediment Analytical Results Summary Table with Reference to NR720 standards

LANDFILL COVER TOPOGRAPHY
DOOR COUNTY LANDFILL
ODAGARD RD. STURGEON BAY, WI

Issued

Rev	Date	Description

Designed:
 Drawn: TNH 07/30/2014
 Checked: PJD 07/30/2014
 Approved: PJD 07/30/2014

PROJECT NUMBER

60302765

SHEET REFERENCE NUMBER

C-01

SHEET 1 OF 1



PROJECT

CHAUDOIRS DOCK COUNTY PARK
DREDGING 2014 LANDFILL PERMIT
MODIFICATION REQUEST

CLIENT

DOOR COUNTY PARK
DEPARTMENT

3538 Park Drive
920.746.9959 tel
<http://map.co.door.wi.us/parks/>
CONSULTANT

AECOM
1035 Kepler Drive
Green Bay, WI 54311
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REGISTRATION

ISSUE/REVISION

1	8/14/2014 ISSUED FOR CLIENT REVIEW
I/R	DATE DESCRIPTION

KEY PLAN

PROJECT NUMBER

60302765

SHEET TITLE

SEDIMENT STOCKPILE PLAN

SHEET NUMBER

C-01



Table 2
 Sediment Sample Analytical Summary
 Sawyer Creek Channel Improvements
 AECOM Project No. 60281037

Sample ID	Depth below water surface (ft)	CBSQ Guideline Values ^a	Metals (mg/kg)										PAHs (µg/kg)						Other Parameters					
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Benz(a)pyrene	Benz(a)anthracene	Benz(b)anthracene	Fluoranthene	Naphthalene	Pyrene	Total PAHs	Total PCBs (µg/kg)	Percent Moisture (%)	Total Organic Carbon (mg/kg)	Mean Total Organic Carbon (mg/kg)					
		Threshold Effect Concentration Midpoint Effect Concentration Probable Effect Concentration	9.8 21.4 33	NE NE NE	0.99 3.0 5.0	43 76.5 110	36 83 130	0.18 0.64 1.1	150 800 1,450	240 6,820 13,400	240 6,820 13,400	423 1,327 2,230	176 369 561	195 858 1,520	1,610 12,205 22,800	60 368 676								
		Non-Industrial DC RCL Industrial DC RCL GW-RCL	0.677 3 0.58	15,300 100,000 165	7.14 99.7 0.75	100,000 (1) 100,000 (1) 3.8	200 800 27	3.13 3.13 0.21	0.115 2.11 0.47	1.15 21.1 0.48	11.5 211 --	2,390 30,100 89	2.4 10.2 0.66	1,790 22,600 55	-- -- --	234 967 9.4								
A-1.1		Dry Weight Concentration Normalized to 1% TOC for Comparison With CBSQG Values	2.4 --	21.9	0.23	J	9.3	7.1	0.053		46.7 21.1	JB				46.7	76.4 34.6	J	51.6	20,400	23,800	22,100		
A-1.2		Dry Weight Concentration Normalized to 1% TOC for Comparison With CBSQG Values	3.3 --	32.5	0.24	J	22.1	8.2	0.031		17.0 4.3	JB				17.0	<37.7 4.3	33.7	44,400	35,300	39,800			
A-2.1		Dry Weight Concentration Normalized to 1% TOC for Comparison With CBSQG Values	2.5 --	22.9	0.22	J	9.3	7.6	0.043	21.1 6.7	JB 19.8	17.6 5.6	J	49.3 15.6	J	43.2 13.6	J	194.1 61.2	58.5 18.5	J	50.9	33,600	29,900	31,700
A-2.2		Dry Weight Concentration Normalized to 1% TOC for Comparison With CBSQG Values	1.7 --	14.8	0.13	J	5.8	4.4	0.032		13.6 4.9	JB				21.1 7.6	--	34.7 12.5	<31.0 --	19.3	27,700	27,600	27,700	
A-3.1		Dry Weight Concentration Normalized to 1% TOC for Comparison With CBSQG Values	1.0 --	4.4	<0.065		2.6	1.5	0.013		13.9 30.9	JB					13.9 30.9	<32.4 --	23.0	3,520	5,480	4,500		
A-3.2		Dry Weight Concentration Normalized to 1% TOC for Comparison With CBSQG Values	1.0 --	7.3	0.068	J	3.7	1.9	0.015		14.1 8.7	JB					14.1 8.7	<32.7 --	23.5	17,100	15,400	16,300		

Notes:
 Only detected compounds are listed.

PAHs = Polynuclear Aromatic Hydrocarbons
 PCBs = Polychlorinated Biphenyls

-- = Not detected at or above limit of detection (LOD)

B = Benzo(b)fluoranthene detects biased high due to detections in the associated laboratory method blank.

J = Estimated concentration above the LOD and below the limit of quantitation (LOQ)

NE = Not Established

Note: The dry wt. normalized value for the Total Organic Content (TOC) assumes a 1% TOC content.

^a As referenced in *Consensus-Based Sediment Quality Guidelines, Recommendations for Use & Application Interim Guidance*. WDNR, December 2003; WT-732 2003.

Bold text indicates the normalized concentration is above the Threshold Effect Concentration.

Outlined cells indicate normalized concentration is above the Probable Effect Concentrations

NR 720 Residual Contaminant Levels, per October 2024 RCL spreadsheet, WDNR.

Underline italic indicates a nonindustrial exceedance.

Bold indicates an industrial exceedance.

Shading indicates a GW-RCL exceedance (protection of GW).

(1) screening criteria for Chromium III listed.