

Notice: Use this form to request a **written response (on agency letterhead)** from the Department of Natural Resources (DNR) regarding technical assistance, a post-closure change to a site, a specialized agreement or liability clarification for Property with known or suspected environmental contamination. A fee will be required as is authorized by s. 292.55, Wis. Stats., and NR 749, Wis. Adm. Code., unless noted in the instructions below. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records law [ss. 19.31 - 19.39, Wis. Stats.].

Definitions

"Property" refers to the subject Property that is perceived to have been or has been impacted by the discharge of hazardous substances.

"Liability Clarification" refers to a written determination by the Department provided in response to a request made on this form. The response clarifies whether a person is or may become liable for the environmental contamination of a Property, as provided in s. 292.55, Wis. Stats.

"Technical Assistance" refers to the Department's assistance or comments on the planning and implementation of an environmental investigation or environmental cleanup on a Property in response to a request made on this form as provided in s. 292.55, Wis. Stats.

"Post-closure modification" refers to changes to Property boundaries and/or continuing obligations for Properties or sites that received closure letters for which continuing obligations have been applied or where contamination remains. Many, but not all, of these sites are included on the GIS Registry layer of RR Sites Map to provide public notice of residual contamination and continuing obligations.

Select the Correct Form

This form should be used to request the following from the DNR:

- Technical Assistance
- Liability Clarification
- Post-Closure Modifications
- Specialized Agreements (tax cancellation, negotiated agreements, etc.)

Do not use this form if one of the following applies:

- Request for an **off-site liability exemption or clarification** for Property that has been or is perceived to be contaminated by one or more hazardous substances that originated on another Property containing the source of the contamination. Use DNR's Off-Site Liability Exemption and Liability Clarification Application Form 4400-201.
- Submittal of an Environmental Assessment for the **Lender Liability Exemption**, s 292.21, Wis. Stats., **if no response or review by DNR is requested**. Use the Lender Liability Exemption Environmental Assessment Tracking Form 4400-196.
- Request for an **exemption to develop on a historic fill site** or licensed landfill. Use DNR's Form 4400-226 or 4400-226A.
- **Request for closure** for Property where the investigation and cleanup actions are completed. Use DNR's Case Closure - GIS Registry Form 4400-202.

All forms, publications and additional information are available on the internet at: dnr.wi.gov/topic/Brownfields/Pubs.html.

Instructions

1. Complete sections 1, 2, 6 and 7 for all requests. Be sure to provide adequate and complete information.
2. Select the type of assistance requested: Section 3 for technical assistance or post-closure modifications, Section 4 for a written determination or clarification of environmental liabilities; or Section 5 for a specialized agreement.
3. Include the fee payment that is listed in Section 3, 4, or 5, unless you are a "Voluntary Party" enrolled in the Voluntary Party Liability Exemption Program **and** the questions in Section 2 direct otherwise. Information on to whom and where to send the fee is found in Section 8 of this form.
4. Send the completed request, supporting materials and the fee to the appropriate DNR regional office where the Property is located. See the map on the last page of this form. A paper copy of the signed form and all reports and supporting materials shall be sent with an electronic copy of the form and supporting materials on a compact disk. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>

The time required for DNR's determination varies depending on the complexity of the site, and the clarity and completeness of the request and supporting documentation.

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 10/21)

Page 2 of 7

Section 1. Contact and Recipient Information

Requester Information

This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.

Last Name	First	MI	Organization/ Business Name		
Schlichholz	Sarah		Miller Compressing (MCC)		
Mailing Address			City	State	ZIP Code
1640 W. Bruce St.			Milwaukee	WI	53204
Phone # (include area code)	Fax # (include area code)		Email		
(314) 872-2406			Sarah.Schlichholz@altertrading.com		

The requester listed above: (select all that apply)

- ☒ Is currently the owner ☐ Is considering selling the Property
- ☐ Is renting or leasing the Property ☐ Is considering acquiring the Property
- ☐ Is a lender with a mortgagee interest in the Property
- ☐ Other. Explain the status of the Property with respect to the applicant:

Contact Information (to be contacted with questions about this request)

☐ Select if same as requester

Contact Last Name	First	MI	Organization/ Business Name		
Bartelme	Alex	B	Ramboll Americas Engineering, Inc.		
Mailing Address			City	State	ZIP Code
234 W. Florida St., Fifth Floor			Milwaukee	WI	53204
Phone # (include area code)	Fax # (include area code)		Email		
(414) 531-0093			Alex.Bartelme@Ramboll.com		

Environmental Consultant (if applicable)

Contact Last Name	First	MI	Organization/ Business Name		
Bartelme	Alex	B	Ramboll Americas Engineering, Inc.		
Mailing Address			City	State	ZIP Code
234 W. Florida St., Fifth Floor			Milwaukee	WI	53204
Phone # (include area code)	Fax # (include area code)		Email		
(414) 531-0093			Alex.Bartelme@Ramboll.com		

Section 2. Property Information

Property Name			FID No. (if known)		
Miller Compressing Burnahm Canal (Alt SF)			241213720		
BRRS No. (if known)			Parcel Identification Number		
02-41-552940			4269988110		
Street Address			City	State	ZIP Code
1640 W. Bruce St.			Milwaukee	WI	53204
County	Municipality where the Property is located		Property is composed of:		Property Size Acres
Milwaukee	<input checked="" type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village of Milwaukee		<input checked="" type="radio"/> Single tax parcel <input type="radio"/> Multiple tax parcels		

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 10/21)

Page 3 of 7

1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

☐ No ☒ Yes

Date requested by: 01/31/2025

Reason: Ramboll is seeking Wisconsin Department of Natural Resources technical assistance related to the Proposed Financial Assurance Plan at Burnham Canal SAS. This includes but is not limited to the financial assurance amount and consideration with future MMSD construction activities at the site.

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

☒ No. **Include the fee that is required for your request in Section 3, 4 or 5.**

☐ Yes. **Do not include a separate fee.** This request will be billed separately through the VPLE Program.

Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:

Section 3. Technical Assistance or Post-Closure Modifications;

Section 4. Liability Clarification; or Section 5. Specialized Agreement.

Section 3. Request for Technical Assistance or Post-Closure Modification

Select the type of technical assistance requested: **[Numbers in brackets are for WI DNR Use]**

- ☐ No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - Include a fee of \$350. Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.
- ☐ Review of Site Investigation Work Plan - NR 716.09, [135] - **Include a fee of \$700.**
- ☐ Review of Site Investigation Report - NR 716.15, [137] - **Include a fee of \$1050.**
- ☐ Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - **Include a fee of \$1050.**
- ☐ Review of a Remedial Action Options Report - NR 722.13, [143] - **Include a fee of \$1050.**
- ☐ Review of a Remedial Action Design Report - NR 724.09, [148] - **Include a fee of \$1050.**
- ☐ Review of a Remedial Action Documentation Report - NR 724.15, [152] - **Include a fee of \$350**
- ☐ Review of a Long-term Monitoring Plan - NR 724.17, [25] - **Include a fee of \$425.**
- ☐ Review of an Operation and Maintenance Plan - NR 724.13, [192] - **Include a fee of \$425.**

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

- ☐ Schedule a Technical Assistance Meeting - **Include a fee of \$700.**
- ☐ Hazardous Waste Determination - **Include a fee of \$700.**
- ☒ Other Technical Assistance - **Include a fee of \$700.** Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

- ☐ Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. **Include a fee of \$1050, and:**
 - ☐ Include a fee of \$300 for sites with residual soil contamination; and
 - ☐ Include a fee of \$350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

Section 4. Request for Liability Clarification

Select the type of liability clarification requested. Use the available space given or attach information, explanations, or specific questions that you need answered in DNR's reply. Complete Sections 6 and 7 of this form. **[Numbers in brackets are for DNR Use]**

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 10/21)

Page 4 of 7

☐ "Lender" liability exemption clarification - s. 292.21, Wis. Stats. [686]

❖ **Include a fee of \$700.**

Provide the following documentation:

- (1) ownership status of the real Property, and/or the personal Property and fixtures;
- (2) an environmental assessment, in accordance with s. 292.21, Wis. Stats.;
- (3) the date the environmental assessment was conducted by the lender;
- (4) the date of the Property acquisition; for foreclosure actions, include a copy of the signed and dated court order confirming the sheriff's sale.
- (5) documentation showing how the Property was acquired and the steps followed under the appropriate state statutes.
- (6) a copy of the Property deed with the correct legal description; and,
- (7) the Lender Liability Exemption Environmental Assessment Tracking Form (Form 4400-196).
- (8) If no sampling was done, please provide reasoning as to why it was **not** conducted. Include this either in the accompanying environmental assessment or as an attachment to this form, and cite language in s. 292. 21(1)(c)2.,h.-i., Wis. Stats.:
 - h. The collection and analysis of representative samples of soil or other materials in the ground that are suspected of being contaminated based on observations made during a visual inspection of the real Property or based on aerial photographs, or other information available to the lender, including stained or discolored soil or other materials in the ground and including soil or materials in the ground in areas with dead or distressed vegetation. The collection and analysis shall identify contaminants in the soil or other materials in the ground and shall quantify concentrations.
 - i. The collection and analysis of representative samples of unknown wastes or potentially hazardous substances found on the real Property and the determination of concentrations of hazardous waste and hazardous substances found in tanks, drums or other containers or in piles or lagoons on the real Property.

☐ "Representative" liability exemption clarification (e.g. trustees, receivers, etc.) - s. 292.21, Wis. Stats. [686]

❖ **Include a fee of \$700.**

Provide the following documentation:

- (1) ownership status of the Property;
- (2) the date of Property acquisition by the representative;
- (3) the means by which the Property was acquired;
- (4) documentation that the representative has no beneficial interest in any entity that owns, possesses, or controls the Property;
- (5) documentation that the representative has not caused any discharge of a hazardous substance on the Property; and
- (6) a copy of the Property deed with the correct legal description.

☐ Clarification of local governmental unit (LGU) liability exemption at sites with: (select all that apply)

- ☐ hazardous substances spills - s. 292.11(9)(e), Wis. Stats. [649];
- ☐ Perceived environmental contamination - [649];
- ☐ hazardous waste - s. 292.24 (2), Wis. Stats. [649]; and/or
- ☐ solid waste - s. 292.23 (2), Wis. Stats. [649].

❖ **Include a fee of \$700, a summary of the environmental liability clarification being requested, and the following:**

- (1) clear supporting documentation showing the acquisition method used, and the steps followed under the appropriate state statute(s).
- (2) current and proposed ownership status of the Property;
- (3) date and means by which the Property was acquired by the LGU, where applicable;
- (4) a map and the ¼, ¼ section location of the Property;
- (5) summary of current uses of the Property;
- (6) intended or potential use(s) of the Property;
- (7) descriptions of other investigations that have taken place on the Property; and
- (8) (for solid waste clarifications) a summary of the license history of the facility.

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 10/21)

Page 5 of 7

Section 4. Request for Liability Clarification (cont.)

- ☐ Lease liability clarification - s. 292.55, Wis. Stats. [646]
- ❖ **Include a fee of \$700 for a single Property, or \$1400 for multiple Properties and the information listed below:**
 - (1) a copy of the proposed lease;
 - (2) the name of the current owner of the Property and the person who will lease the Property;
 - (3) a description of the lease holder's association with any persons who have possession, control, or caused a discharge of a hazardous substance on the Property;
 - (4) map(s) showing the Property location and any suspected or known sources of contamination detected on the Property;
 - (5) a description of the intended use of the Property by the lease holder, with reference to the maps to indicate which areas will be used. Explain how the use will not interfere with any future investigation or cleanup at the Property; and
 - (6) all reports or investigations (e.g. Phase I and Phase II Environmental Assessments and/or Site Investigation Reports conducted under s. NR 716, Wis. Adm. Code) that identify areas of the Property where a discharge has occurred.

General or other environmental liability clarification - s. 292.55, Wis. Stats. [682] - Explain your request below.

- ❖ **Include a fee of \$700 and an adequate summary of relevant environmental work to date.**

- ☐ No Action Required (NAR) - NR 716.05, [682]

- ❖ **Include a fee of \$700.**

Use where an environmental discharge has or has not occurred, and applicant wants a DNR determination that no further assessment or clean-up work is required. Usually this is requested after a Phase I and Phase II environmental assessment has been conducted; the assessment reports should be submitted with this form. This is not a closure letter.

- ☐ Clarify the liability associated with a "closed" Property - s. 292.55, Wis. Stats. [682]

- ❖ **Include a fee of \$700.**

- Include a copy of any closure documents if a state agency other than DNR approved the closure.

Use this space or attach additional sheets to provide necessary information, explanations or specific questions to be answered by the DNR.

Section 5. Request for a Specialized Agreement

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: dnr.wi.gov/topic/Brownfields/Igu.html#tabx4.

- ☐ Tax cancellation agreement - s. 75.105(2)(d), Wis. Stats. [654]

- ❖ **Include a fee of \$700, and the information listed below:**

- (1) Phase I and II Environmental Site Assessment Reports,
- (2) a copy of the Property deed with the correct legal description.

- ☐ Agreement for assignment of tax foreclosure judgement - s. 75.106, Wis. Stats. [666]

- ❖ **Include a fee of \$700, and the information listed below:**

- (1) Phase I and II Environmental Site Assessment Reports,
- (2) a copy of the Property deed with the correct legal description.

- ☐ Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]

- ❖ **Include a fee of \$1400, and the information listed below:**

- (1) a draft schedule for remediation; and,
- (2) the name, mailing address, phone and email for each party to the agreement.

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 10/21)

Page 6 of 7

Section 6. Other Information Submitted

Identify all materials that are included with this request.

Send both a paper copy of the signed form and all reports and supporting materials, and an electronic copy of the form and all reports, including Environmental Site Assessment Reports, and supporting materials on a compact disk.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

☐ Phase I Environmental Site Assessment Report - Date: _____

☐ Phase II Environmental Site Assessment Report - Date: _____

☒ Legal Description of Property (required for all liability requests and specialized agreements)

☒ Map of the Property (required for all liability requests and specialized agreements)

Analytical results of the following sampled media: Select all that apply and include date of collection.

☐ Groundwater ☐ Soil ☐ Sediment ☐ Other medium - Describe: _____

Date of Collection: _____

☐ A copy of the closure letter and submittal materials

☐ Draft tax cancellation agreement

☐ Draft agreement for assignment of tax foreclosure judgment

☒ Other report(s) or information - Describe: Proposed Financial Assurance Plan

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

☐ Yes - Date (if known): _____

☐ No

Note: The Notification for Hazardous Substance Discharge Form - Non-Emergency Only (Form 4400-225) is accessible through the RR Program Submittal Portal application. Directions for using the form and the Submittal Portal application are available on the [Submittal Portal web page](#).

Section 7. Certification by the Person who completed this form

☐ I am the person submitting this request (requester)

☒ I prepared this request for: Sarah Schlichholz, MCC
Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.


Signature

12/20/2024
Date Signed

Senior Project Scientist
Title

(414) 531-0093
Telephone Number (include area code)

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 10/21)

Page 7 of 7

Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a [DNR regional brownfields specialist](#) with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.

DNR NORTHERN REGION

Attn: RR Program Assistant
Department of Natural Resources
223 E Steinfest Rd Antigo, WI 54409

DNR NORTHEAST REGION

Attn: RR Program Assistant
Department of Natural Resources
2984 Shawano Avenue
Green Bay WI 54313

DNR SOUTH CENTRAL REGION

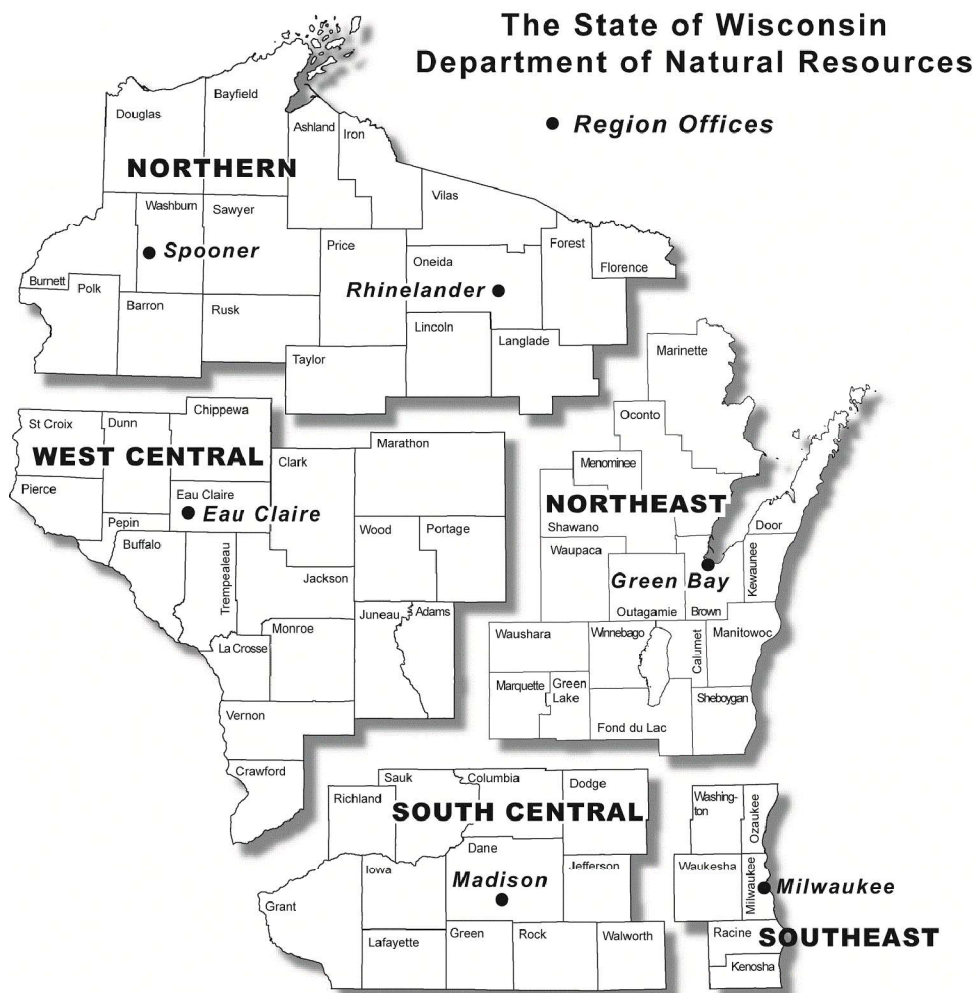
Attn: RR Program Assistant
Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg WI 53711

DNR SOUTHEAST REGION

Attn: RR Program Assistant
Milwaukee DNR Office
1027 West St. Paul Ave
Milwaukee WI 53233

DNR WEST CENTRAL REGION

Attn: RR Program Assistant
Department of Natural Resources
1300 Clairemont Ave.
Eau Claire WI 54702



Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.

DNR Use Only			
Date Received	Date Assigned	BRRTS Activity Code	BRRTS No. (if used)
DNR Reviewer		Comments	
Fee Enclosed? <input type="radio"/> Yes <input type="radio"/> No	Fee Amount \$	Date Additional Information Requested	Date Requested for DNR Response Letter
Date Approved	Final Determination		

Intended for

Wisconsin Department of Natural Resources

Date

December 20, 2024

Project No.

1940108877

PROPOSED FINANCIAL ASSURANCE
BURNHAM CANAL SUPERFUND ALTERNATIVE SITE
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN
MILLER COMPRESSING COMPANY
WDNR BRRTS #: 02-41-552940
EPA ID: WIN000510222

PROPOSED FINANCIAL ASSURANCE BURNHAM CANAL SUPERFUND ALTERNATIVE SITE

Project name **Burnham Canal Superfund Alternative Site**
Project no. **1940108877**
Recipient **Wisconsin Department of Natural Resources**
Document type **Proposed Financial Assurance**
Revision **0**
Date **December 20, 2024**
Prepared by **Alex Bartelme**
Approved by **Jennifer Hagen, PE**

Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
USA

T 414-837-3607
F 414-837-3608

<https://ramboll.com>



Alex Bartelme
Senior Project Scientist



Jennifer Hagen, PE
Regional Director, Midwest Central

CONTENTS

1. INTRODUCTION 1

1.1 Site Description.....1

2. CAP DESIGN AND CONSTRUCTION SUMMARY 2

3. CURRENT MONITORING AND MAINTENANCE OF CAPPING AREAS 3

4. PROPOSED FINANCIAL ASSURANCE..... 4

4.1 Factors in Determining Financial Responsibility Costs.....4

4.2 Proposed Financial Assurance Amount.....5

5. REFERENCES 7

FIGURES

Figure 1 Burnham Canal Site Layout

1. INTRODUCTION

This document is the Proposed Financial Assurance Plan (PFAP) for long-term monitoring and maintenance of a remedial subaqueous aggregate cap (cap) which addresses elevated metals and polycyclic aromatic hydrocarbon (PAHs) impacts at the Burnham Canal Superfund Alternative Site (Site) in the City of Milwaukee, Milwaukee County, Wisconsin. Per Wisconsin Administrative Code (WAC) Ch. NR 756 Financial Responsibility at Contaminated Sediment Sites with Engineering Controls (NR 756) and Wisconsin Department of Natural Resources (WDNR) Publication RR-0124 Guidance on Addressing Contaminated Sediment Sites in Wisconsin (RR-0124), the WDNR requires proof of financial responsibility at sediment sites such as Burnham Canal.

Miller Compressing Company (Miller) contracted Ramboll Americas Integrated Solutions, Inc. (Ramboll) to prepare a remedial design (RD) and execute a remedial action (RA) as set forth in the Record of Decision (ROD). The ROD was signed by the United States Environmental Protection Agency (USEPA) with concurrence from the Wisconsin Department of Natural Resources (WDNR) in September 2011 (USEPA, 2011). The ROD was modified by the Explanation of Significant Differences (ESD) (USEPA, 2016).

The Final Design Report Revision 1 (NRT, 2017), referred to herein as the Final Design Report, was completed on September 21, 2017. The RA was completed between October 12, 2020 and June 8, 2021. RA activities are documented in the Construction Documentation Report (Ramboll, 2021a), submitted October 5, 2021, approved by WDNR on January 7, 2022, and summarized in Section 2 herein. A revised Cap Operations, Maintenance, and Monitoring Plan (COMMP (Ramboll, 2021b)) was conditionally approved by WDNR on August 27, 2021, pending upload of the final version to the WDNR's submittal portal, which was completed on September 7, 2021. The WDNR-approved COMMP (Ramboll, 2021b) is summarized in Section 3.

The remedial action that is subject to financial assurance, consists of the following components:

- Cap in the Unpaved Cover Area on the west end of the Canal, above the water line, including the 12-inch Scrape Area
- Placement of a stabilization layer and a cap from the 11th Street Bridge to the west terminus of the Canal

The project also included construction of a Voluntary Betterment (Betterment) to provide a base for the anticipated construction of an urban wetland by the Milwaukee Metropolitan Sewerage District (MMSD) while further isolating contaminated sediment in the Canal. The Betterment portion of the project does not require financial assurance.

1.1 Site Description

Project Contacts:

Jennifer Hagen, P.E.
Ramboll Americas Engineering Solutions, Inc. (Ramboll)
234. West Florida St., Fifth Floor
Milwaukee, WI 53204

Facility Address:

1640 West Bruce St.
Milwaukee, WI 53204

Construction Address:	471 South 11 th St. Milwaukee, WI 53204
Site Location:	Section 31 and 32, T7N, R22E City of Milwaukee, Milwaukee County, Wisconsin
Current Use of Property:	The Miller property surrounding the Canal is used for trailer and container storage. Limited recreational activities occur on the Canal, and occasionally boats will use the Canal as a turnaround spot. Boat traffic is limited to small craft due to the low clearance of the 11th Street Bridge.
Past Use of Property:	The portion of the Miller property adjacent to the western bank of the Canal was a former wire reclamation furnace area.
USEPA ID #	WIN000510222
WDNR BRRTS #	Bureau for Remediation and Redevelopment Tracking System (BRRTS) # 02-41-552940
WDNR FID #	Facility ID (FID) 241213720

The Site consists of Miller's former wire reclamation furnace area and a portion of the canal from its western terminus to the 11th Street Bridge. The Site is within Township 7 North, Range 22 East, Sections 31 and 32. The canal is located east and south of Miller's metal recycling facility. Land adjacent to and north of the canal is owned by Miller and is currently used for trailer and container storage. The southwest part of the Site is partially owned by Miller, with other portions of the south bank being occupied by a foundry, a former lime processing plant, a building supply company, an automobile scrap yard, and a plumbing company (not owned by Miller).

The canal extends approximately 1,500 feet from its west end to the 11th Street Bridge and ranges from 95 to 125 feet wide. Water depths in the canal range from a few feet near the western boundary and up to 10 to 15 feet at some locations. The northern and southern canal banks are generally reinforced seawalls made from steel, concrete, or wood timbers. The western canal bank consists of Medium Riprap and a submerged steel sheet pile wall is present at the eastern terminus of the Site. Both of which were installed and/or modified in 2021 during remedial action. There are two combined sewer outfalls (CSOs) located along the canal as shown in Figure 1.

2. CAP DESIGN AND CONSTRUCTION SUMMARY

To address elevated metals and polycyclic aromatic hydrocarbons (PAHs) impacts, a remedial action (RA) was implemented in 2020 and 2021, consisting of:

- Maintaining the Paved Cap Area at the historic location of the wire reclamation furnace
- Installation of a submerged steel sheet pile wall at the eastern terminus of the Site
- Sediment removal in the west end of the canal
- Placement of a stabilization layer and a Remedial Subaqueous Aggregate Cap (Cap) from the 11th Street Bridge to the Paved Cap Area
- Placement of a Voluntary Betterment (Betterment) atop the Cap to provide a base for the anticipated construction of an urban wetland by the Milwaukee Metropolitan Sewerage District (MMSD) while further isolating contaminated sediment in the canal.

- Establishment of institutional controls to minimize the potential for exposure to contamination and protect the integrity of the remedy

As defined in the ROD/ESD (USEPA, 2011, 2016) and Construction Documentation Report (Ramboll, 2021a) the average thickness of the Cap is greater than 12 inches with no areas less than nine-inches thick. The Betterment thickness is approximately 2 feet from the western limit of the Unpaved Engineering Control Area to 300 feet east of the western limit and approximately 5 feet elsewhere throughout the Site. The Cap and Betterment were designed to permit flow through CSO-194, located in the northwestern portion of the canal.

3. CURRENT MONITORING AND MAINTENANCE OF CAPPING AREAS

The WDNR-approved September 7, 2021 COMMP (Ramboll, 2021b) sets forth the post-construction requirements to monitor, maintain, and properly respond to changes in the capped areas of the Site that may pose a threat to human health or the environment.

The COMMP addresses the three capped areas that exist at the Site, as described below:

- Paved Engineering Control Area (west of the Burnham Canal, is the historic location of the wire reclamation furnace). This paved area will be monitored to ensure that the existing asphalt integrity is not compromised. The condition of this area is documented through annual visual inspection by Miller Compressing Company (Miller) or their designated representative in accordance with the existing facility-wide WDNR-approved Cap Maintenance and Hard Surfacing Plan (WDNR, 2009). If issues are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Paved Engineering Control Area inspection logs will be submitted to WDNR.
- Unpaved Engineering Control Area (between the Paved Engineering Control Area and the Subaqueous Engineering Control Area, including the western bank of Burnham Canal above the ordinary high-water mark). Reviews of this area will be performed during monitoring events for the Subaqueous Engineering Control Area as discussed below. Monitoring of portions of this area that are above the Burnham Canal water level during monitoring consists of visual inspection and focus on erosion control. If needed, the Medium Riprap along the west bank of the Canal will be scheduled for repair as soon as possible. Monitoring of portions of this area that are below the Burnham Canal water level during monitoring is conducted in the same manner as the monitoring of the Subaqueous Engineering Control Area. A form will be completed for each inspection event and submitted to WDNR with the Post-Construction Monitoring Reports.
- Subaqueous Engineering Control Area (from the 11th Street Bridge to the west terminus of the Burnham Canal). Monitoring of this area is designed to verify that the Cap remains in place by examining the Betterment. Verification of the presence of the Betterment will confirm that the Cap is in place and, thus, the ROD/ESD [USEPA, 2011, 2016]) remedy remains protective of human health and the environment.
 - Poling surveys are the primary method to demonstrate that the Betterment is intact. Poling surveys are conducted at least annually and also after rainfall greater than the 25-year, 24-hour storm event. Storm-related monitoring events satisfies the annual monitoring event requirement, but if an annual event has already been performed, additional event(s) must be conducted that year if rainfall greater than the 25-year, 24-hour storm event occurs. If poling confirms the

presence of Medium Riprap or Select Crushed aggregate in the west end of the Canal and the presence of Select Crushed aggregate throughout the rest of the Canal, no further action will be taken. If poling indicates the absence of this material, further evaluation or repair will be conducted.

- In addition to poling surveys, bathymetric surveys are performed and associated isopach maps created three years from the date of the as-built Betterment survey (May 11, 2021), and every five years thereafter (i.e., 2024, 2029, 2034, etc.). Due to consolidation of the underlying sediment, a post-construction bathymetric survey surface that is lower than the Betterment as-built survey surface is not indicative of a loss of Betterment or Cap material. Bathymetric survey data collected from post-construction monitoring events are compared to the as-built Cap surface established in Ramboll's WDNR-approved October 5, 2021 Construction Documentation Report (Ramboll, 2021a). If the post-construction bathymetric survey surfaces are above the as-built Cap surface, no further action will be taken. If post-construction bathymetric survey surfaces are below the as-built Cap surface, additional evaluation will be completed as necessary. Additional evaluation will include post-survey poling in these areas to confirm that the riprap or Select Crushed Betterment aggregate atop the Cap remains intact. If poling does not decisively indicate that the riprap or Select Crushed Betterment aggregate atop the Cap remains intact, coring (push core and/or vibracore) may be attempted to verify the thickness of the Betterment and/or Cap. If exposed underlying Canal sediment is discovered, a Cap repair will be conducted.

4. PROPOSED FINANCIAL ASSURANCE

Cost estimates for planned Cap monitoring activities, removal of impediments, and 5% of the original construction costs have been prepared to support the proposed financial assurance (FA) amount. These cost estimates have been prepared in accordance with WDNR's *Guidance on Addressing Contaminated Sediment Sites in Wisconsin*, RR-0124. Note that the planned Cap monitoring activities are based on the anticipated requirements of the Long-Term Care and Maintenance Plan (LTCMP) to be submitted for WDNR approval as an attachment to the forthcoming BRRTS case closure request. These planned monitoring activities are similar in nature and/or frequency to the current requirements summarized in Section 3, other than the plan to exclude poling from the LTCMP.

4.1 Factors in Determining Financial Responsibility Costs

Per Section 16 of WDNR's Guidance RR-0124, recommended factors in determining financial responsibility costs with site-specific characteristics of Burnham Canal are discussed below.

- Complexity of site – Burnham Canal is considered a simple site per an April 7, 2022 conference call with WDNR's Project Manager, Chris Dietrich. Therefore, the financial assurance starts with a baseline of \$100,000 that may be increased or decreased depending on site conditions.
- Proof period duration – The proof period is 30 years with review once every five years.

Construction of Burnham Canal cap was completed in 2021 so the proof period will extend through 2051. Annual visual inspections are assumed for the west riprap bank, above the water level (Unpaved Engineering Control Area) from 2025 through 2051 for a total of 27 years. Bathymetric surveys are assumed every five years starting in 2026 (Year Five of post-construction monitoring) through 2051 for a total of six bathymetric survey events. Bathymetric surveys prior to 2024 are not included in the financial assurance estimate.

Following completion of the surveys, monitoring reports will be submitted to WDNR for review and approval within 180 days.

- Robustness of cap and cap complexity – Based on the Chemical Isolation Effectiveness Calculations included in Appendix B of the agency-approved Final Design Report (NRT, 2017), the modeled concentrations of the contaminants of concern in the 12-inch cap are less than their respective Consensus-Based Sediment Quality Guidelines (WDNR, 2003) Threshold Effect Concentrations. The Betterment construction added up to five times the isolation layer thickness in some areas to substantially increase cap effectiveness. The cap does not include organic carbon, clay, or geocomposite liners. The 12-inch cap consists of aggregates entirely passing the 1.5-inch sieve with no more than 18% passing the No. 200 sieve, placed over stabilized sediments across the entire Canal. A non-woven geotextile is included in the western portion of the Canal. These materials are readily available should repairs be required.
- Velocity of the waterway – As discussed in the agency-approved Final Design Report (NRT, 2017), peak velocity throughout the Canal is expected to be 1 foot per second (ft/s) or less. Design calculations for the conveyance channel constructed at the end of combined sewer overflow 194 (CSO-194) estimate the maximum velocity through this section is 1.67 ft/s. CSO-194 is the primary inflow to the canal and discharges less than 2% of the year. Critical scour velocity was calculated at 7.65 ft/s. A 2-foot-thick medium rip-rap layer underlain by non-woven geotextile was placed in the area of the CSO-194 outlet to overcome any potential future erosion.
- Chance of failure – The chance of failure is considered low based on the Betterment construction, low velocities, and the site being confined on three sides by the Canal banks and downstream by the steel sheet pile wall.
- Level of risk – The level of risk to human health and the environment is considered low based on the following criteria:
 - No fish advisory for contaminants of concern (copper and PAHs)
 - Not an Outstanding Resource Water (ORW) or Exceptional Resource Water (ERW)
 - Not a drinking water source
 - No utility crossings
 - Not an authorized navigation channel
- Frequency of extreme weather events – During the 3-year post-Cap and Betterment construction period, one 25-year, 24-hour storm event, currently defined by NOAA PFDS (NOAA, 2024) as greater than 4.56 inches of rainfall within 24 hours, has occurred at the Site. Post-construction monitoring was conducted after this storm event, per COMMP requirements, and no evidence of Betterment or Cap erosion was observed. The six planned bathymetric survey monitoring events noted above may be adjusted to address future storm events.

4.2 Proposed Financial Assurance Amount

Per NR 756 and RR-0124, considerations for calculating the FA amount include evaluating costs associated with planned Cap monitoring activities, removal of impediments, and 5% of the original construction costs. When combined, these estimates provide the upper range of the FA amount. The proof period (through 2051) and associated activities, both planned (monitoring) and unanticipated (removal of CSO-194 pipe and/or Cap repair), are presented below.

BURNHAM CANAL FINANCIAL ASSURANCE PROPOSAL					
Item	Quantity	Unit	Unit Price	Total	Notes
Cap Monitoring					
Bathymetric Survey	6	LS	\$ 11,300	\$ 67,800	Based on 2024 costs
Bathymetry Report	6	LS	\$ 4,000	\$ 24,000	Based on 2024 costs
Annual Bank Inspection	27	LS	\$ 500	\$ 13,500	Based on 2024 costs
Cap Monitoring, Total				\$105,300	
Removal of Structural Impediment (CSO-194)¹					
1-foot Cap Placement	10	CY	\$ 250	\$ 2,500	Based on 2024 costs
Bathymetric Survey	1	LS	\$ 2,500	\$ 2,500	Based on 2024 costs
Oversight and Documentation	1	LS	\$ 5,000	\$ 5,000	Based on 2024 costs
Removal of Structural Impediment (CSO-194), Total				\$ 10,000	
5% of Cap Construction Costs²					
Investigate/Survey/Define Repair Area	1	LS	\$ 10,000	\$ 10,000	Estimated based on 2024 costs
Cap Design	1	LS	\$ 3,000	\$ 3,000	Relies on existing design
Contractor Procurement	1	LS	\$ 1,000	\$ 1,000	Estimated based on 2024 costs
Permit/Work Plan	1	LS	\$ 2,000	\$ 2,000	Relies on existing Work Plan
Mobilization	1	LS	\$ 13,500	\$ 13,500	5% of 2020-2021 line item costs
Site Preparation	1	LS	\$ 7,800	\$ 7,800	5% of 2020-2021 line item costs
Repair Cap and Survey	1	LS	\$ 30,000	\$ 30,000	5% of 2020-2021 line item costs
Demobilization	1	LS	\$ 11,300	\$ 11,300	5% of 2020-2021 line item costs
Closeout	1	LS	\$ 900	\$ 900	5% of 2020-2021 line item costs
5% of Cap Construction Costs, Total				\$ 79,500	
TOTAL				\$194,800	
Notes:					
1. Assumes removal of CSO-194 by others and the cap is placed concurrently over an area equivalent to 6.5 feet (CSO-194 diameter) by 40 feet (CSO-194 length in canal) using construction unit rates.					
2. Assumes 5% of the Cap construction costs, excluding the Betterment using construction unit rates.					

Of the outcomes discussed herein, the planned monitoring activities will occur, removal of the CSO pipe is not planned to occur but is possible, and reconstruction/repair of a portion of the cap is unlikely based on the robustness of material placed over the cap and demonstration of the stability of the Betterment, and thus the Cap, during the post-construction monitoring period spanning three years to date.

The financial assurance estimate ranges between \$100,000 to \$195,000. The lower range is based on the amount provided in WDNR's Guidance Document RR-0124 for a simple site and discussions with WDNR indicating Burnham Canal is considered a "simple" site. The upper range is based on the planned monitoring scope, potential for structural impediment (CSO-194) removal, and 5% of Cap construction

costs. The upper range is conservative based on the Betterment, low velocity, and low level of risk as discussed in Section 4.1.

Miller proposes a financial assurance amount of **\$195,000**, which may be adjusted following construction of the wetland by MMSD. When the wetland is constructed atop the betterment, post-construction monitoring requirements may be reduced to visual inspection only and associated costs reduced considerably upon wetland construction atop the Betterment.

Pursuant to a Memorandum of Understanding between Miller and MMSD, the estimated costs of long-term care as determined by WDNR during the case closure process will be paid by Miller to MMSD and MMSD will thereafter conduct all long-term care (except for care associated with the upland Paved Engineering Control Area which will be conducted by Miller), for so long as required by WDNR or USEPA. MMSD will place the funds paid by Miller in a segregated account designated for long-term care and will not be used for any other purpose. MMSD will confirm the amount available in the account as requested by WDNR. Miller proposes that this separate, designated account serve as the method for demonstrating financial assurance.

5. REFERENCES

National Oceanic and Atmospheric Administration. NOAA's National Weather Service, Hydrometeorological Design Studies Center, Precipitation Frequency Data Server (PFDS). NOAA's National Weather Service. https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=wj. Accessed July 30, 2024.

NRT. September 21, 2017. *Final Design Report Revision 1. Burnham Canal Superfund Alternative Site, Milwaukee, Milwaukee County, Wisconsin.*

Ramboll. October 5, 2021a. *Construction Documentation Report, Burnham Canal Superfund Alternative Site, Milwaukee, WI.*

Ramboll Americas Integrated Solutions, Inc. (Ramboll). September 7, 2021b. *Revised Cap Operations, Maintenance, and Monitoring Plan, Burnham Canal Superfund Alternative Site, Milwaukee, Milwaukee County, Wisconsin, WDNR BRRTS #: 02-41-552940, EPA ID: WIN 000510222.*

Wisconsin Department of Natural Resources (WDNR), "Consensus-Based Sediment Quality Guidelines – Recommendations for Use & Application Interim Guidance." Developed by the Contaminated Sediment Standing Team, dated December 2003.

Wisconsin Department of Natural Resources. September 1, 2009. *Remedial Action / Hard Surfacing Plan, Miller Compressing Site – Bruce Street Facility, 1640 w Bruce Street, Milwaukee, WI, FID# 241213720, BRRTS# 02-41-246029.*

United States Environmental Protection Agency (USEPA). September 2011. *Record of Decision. Burnham Canal Superfund Alternative Site, Milwaukee County, Wisconsin.*

USEPA. February 2016. *Explanation of Significant Differences. Burnham Canal Superfund Alternative Site, Milwaukee County, Wisconsin.*

FIGURES



DRAWN BY:	DMD	DATE:	07/29/16
CHECKED BY:		DATE:	07/29/16
APPROVED BY:		DATE:	07/29/16
DRAWING NO: 2117-7.1-B02			
REFERENCE: See Info Block			

**BURNHAM CANAL
SITE LAYOUT**

PROPOSED FINANCIAL ASSURANCE PLAN
BURNHAM CANAL SUPERFUND ALTERNATIVE SITE
MILLER COMPRESSING COMPANY
MILWAUKEE, WISCONSIN

 NATURAL RESOURCE TECHNOLOGY	PROJECT NO. 21177.1
	FIGURE NO. 1