WASTE MANAGEMENT

800 Capitol
Houston, TX 77002

March 14, 2023

Doug Coenen
Wisconsin Department of Natural Resources
Douglas.Coenen@wisconsin.gov

SUBJECT: Application for License Renewal
Revised Feasibility and Plan of Operation Report
WM Waste, Inc.
Union Grove, WI

Dear Mr. Coenen:

WM Waste Inc. (WM Waste) is providing this Revised Feasibility and Plan of Operation Report (FPOR) in response to the recommendations provided by the Wisconsin Department of Natural Resources (DNR) on December 20, 2022. The recommendations were based on DNR's review of the FPOR which was submitted by WM Waste on June 28, 2022 concerning the application for renewal of License #6027 (hazardous waste container storage) for its facility located at 21211 Durand Avenue in Union Grove, WI 53182, EPA ID# WIR000000356.

For reference, key dates and milestones during this license renewal application process are provided below:

February 21, 2020 – DNR issued a call-in letter which stated that WM Waste (formerly WM Mercury Waste, Inc.) needed to submit an application to renew License # 6027 and License # 6028 (treatment of hazardous waste in tanks) by March 2, 2021 should it plan to maintain its licensed hazardous waste facility beyond August 29, 2021, the expiration date of its current license.

February 25, 2021 – DNR received the application from WM Waste (dated February 8, 2021) to renew License # 6027. In the cover letter for the application, WM Waste noted that it was not seeking to renew License # 6028 and that is was no longer operating the onsite mercury retort units.

May 26, 2021 – DNR issued a Notice of Incompleteness (NOI) for the renewal application dated February 8, 2021.

August 13, 2021 – WM Waste submitted a request to extend the due date of the response to the NOI until October 25, 2021.

August 19, 2021 – DNR approved the August 13, 2021 extension request.

October 14, 2021 - WM Waste submitted a proposal for an alternative format for the response, which would consist of WM Waste's draft response or approach to each

DNR comment, and an extension to the due date.

October 15, 2021 – DNR approved the October 14, 2021 request and extended the due date for the response to the NOI until November 1, 2021.

October 29, 2021 – WM Waste submitted a draft response to the NOI. Subsequently, DNR provided informal feedback on the response via several communications.

June 28, 2022 – WM Waste submitted the formal response to the May 26, 2021 NOI. Subsequently, DNR provided informal feedback on the response via several communications.

December 20, 2022 – DNR provided a recommendation that the June FPOR be revised and resubmitted to address several information items.

January 24, 2023 – WM Waste submitted a Class 1 License Modification Request to note a property ownership change.

March 14, 2023 – WM Waste submitted this revised FPOR in response to the December 20, 2022 recommendations.

In addition to the revised FPOR, please find that following documents which have been uploaded to a shared drive which may be accessed here: WM Waste FPOR March 2023

1. FPOR Transmittal Letter
2. Response to Recommendations Crosswalk – This document includes a reproduction of each DNR recommendation followed directly by WM Waste's response to each recommendation in bold. These responses may serve as a "crosswalk" that identifies the location within the revised application where each comment is addressed. In addition, the Crosswalk describes other minor revisions, such as typographical error corrections, made to the FPOR.
3. WM Waste Revised FPOR March 2023 – This is an electronic version of the revised application in a readable PDF format amenable to text recognition.

Based on recent discussions, we understand that hard copies of the revised application are not required at this time. However, DNR may request hard copies of oversize drawings if needed.

Finally, as noted above, WM Waste is not seeking to renew License # 6028. This license addressed hazardous waste tanks: Treatment Tank # 1, Treatment Tank # 2, Storage Tank #1, and Storage Tank # 2. The tanks have been removed from the facility and WM Waste is in the process of demolishing the secondary containment area associated with the tanks. After closure has been completed, WM Waste will submit a closure certification report for the units. It is anticipated that this report will be submitted in April 2023.

We would like to reiterate our appreciation of your help with this renewal process. Please do not hesitate to contact us if you have questions or concerns.

Regards,

Sixto Ortiz Jr

Sixto Ortiz Jr.
Senior Manager, Corporate Environmental Protection

cc: Steve Smolko, WM Waste, smolko@wm.com
Mark Noel, Waste Management, mnoel@wm.com
Brooks Ray, CK Associates, brooks.ray@c-ka.com

FEASIBILITY AND
PLAN OF OPERATION REPORT

WM WASTE, INC.
21211 DURAND AVE.
UNION GROVE, WISCONSIN
EPA ID No. WIR000000356

FEBRUARY 2023

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1.0 NR 670.010 and 670.011Application Certification by Property Owner

Not Applicable. The parcel on which the East, West, and South Buildings are located was previously owned by Durand Properties, LLC and required a separate application certification. On December 12, 2022, WM Waste, Inc. (WM Waste) purchased this parcel and is now the owner of the entire property. The application certification by WM Waste is provided in Section 2.0 of this Feasibility and Plan of Operation Report (FPOR).

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2.0 NR 670.010 and 670.011 Application Certification by Owner/Operator

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Brandon Shaw
Name

Title: President, WM Waste, Inc.

Signature

Date: 3/10/23

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3.0 NR 670.013 Part A Application

A copy of the USEPA Part A Form (EPA Form 8700-23, expiration 4/30/2024) is included in Appendix 1. This Part A Form consists of the "Hazardous Waste Permit Information Form (8700-23)" and the "RCRA Subtitle C Identification Form (8700-12)," plus associated attachments. All pieces of information required by this section are included on the form except for the following items which are included here to satisfy the regulations.

3.1 NR 670.013(2) Latitude/ Longitude of the Facility

Latitude:	42° 40’ 52” N	(42.681)
Longitude:	88° 04’ 3l” W	(-88.075)

3.2 NR 670.013(3) SIC Codes

SIC Code: 4953

3.3 NR 670.013(5) Land Ownership

The land that comprises the WM Waste site is owned by WM Waste. Figure A-2 of the Part A Application shows the property lines of the separate parcels. Signatures of the owner are included in the Part A form (Appendix 1) and in Section 2.0 NR 670.010(2) of this FPOR.

3.4 NR 670.013(6) Indian Lands

The facility is not located on Indian (aka tribal) lands.

3.5 NR 670.013(9) Description of Processes and Capacities

A description of the processes and capacities of the licensed units is provided in Section 6 of the Part A form. A more detailed description is provided in Section 4.1.1 NR 670.014(2)(a) of the FPOR

3.6 NR 670.013(14) Hazardous Debris

Hazardous debris, as defined in NR 668.02(7) & (8), will not be treated or disposed at the facility. Hazardous debris may be stored at the facility. The hazardous debris may contain any of the waste codes listed in Section 7 of the Part A form.

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4.0 NR 670.014 Contents of the Feasibility and Plan of Operation Report; General Requirements

4.1 NR 670.014(2) General Information Requirements

4.1.1 NR 670.014(2)(a) General Description of Facility

The facility (WM Waste, Inc., 21211 Durand Avenue, Union Grove, WI, EPA ID No. WIR000000356.), now referred to as WM Waste, previously operated under the names U.S. Technology, Inc., WM Mercury Waste, Inc., Mercury Waste Solutions, Inc., and Mercury Waste Solutions, LLC. The facility was sold on September 27, 2010 and operated under the name of WM Mercury Waste, Inc until the name was legally changed on November 12, 2020. Therefore, this application to renew License 6027 for Storage of Hazardous Waste in Containers, may contain residual documents referencing historical names of the company; construe these references as applying to the current WM Waste company.

4.1.1.1 Historical Operations

Mercury retorting operations were conducted at the site from 1994 – 2020. The intent of those operations was to recover metallic mercury from various mercury contaminated waste streams. The mercury recovery units included four stationary retort furnaces, one continuous-feed retort furnace and a four-tank treatment system used for mercury contaminated liquids. The mercury recovered at the site was considered a product and sold to customers. The retort furnaces were regulated under the legitimate recycling exemption of NR 661.02(3)(c).

The mercury recovery units and tank treatment system were located in the West Building. The northern side of the South building housed three roll-offs of outgoing materials: oven ash, retorted phosphor powder, and low-level mercury debris. It was also used for the storage of Universal Waste batteries. The East Building was used for lamp storage, recovered mercury storage, storage for trays of retorted ash, mercury purification, and as a maintenance shop. Figure A-3 in Appendix 1 depicts the locations of these buildings.

On July 6, 2000, the Wisconsin Department of Natural Resources (WDNR) issued the facility licenses to store hazardous waste in containers (License 6027) and tanks (License 6018). The licenses were re-issued by the WDNR on August 18, 2011.

4.1.1.2 Proposed Changes to Facility and Operations

The primary operation of the facility will be changed from a mercury recycling operation to a container storage and transshipment operation. As a result of this, the FPOR includes several changes to the facility since the previous Licenses were issued.

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Prior to conducting the operations addressed in this license renewal application, the mercury retort units and the three roll-offs in the South Building will have been removed from the site and the areas in which they were located decontaminated. The four treatment tanks used for mercury contaminated liquids are currently undergoing closure in accordance with the current Closure Plan.

Going forward, WM Waste will operate a commercial hazardous waste storage facility that stores various hazardous and universal wastes in licensed container storage areas prior to shipment to off-site, appropriately permitted/licensed facilities for treatment and/or disposal. Compatible hazardous waste debris may also be consolidated prior to offsite shipment. No other hazardous waste will be consolidated.

The existing licensed facility consists of four (4) enclosed buildings with roofs and brick/metal walls and concrete floors, in addition to a paved outdoor roll-off box container storage area under roof that is enclosed by a security fence. The enclosed buildings are known as the West Building, the East Building, the South Building, and the Administrative Building. The layout of the entire facility is depicted in Figures A-3 and A-4 of the Part A Application in Appendix 1 and will not change from the previous license.

The West Building will be organized into areas designated for hazardous waste storage and universal waste. It will also be used for consolidation, shipping and receiving, and offices. The West Building includes licensed hazardous waste container storage areas S-1, S-2, S-3, S-7, and S-8. The location and dimensions of these units will not change from the previous license. Curbing will be added to S-3, S-7, and S-8 such that each unit will have adequate secondary containment as depicted in Figures 16-3, 16-7, and 16-8, respectively.

The former mercury recycling area that was located in the West Building will be used for universal waste storage. The areas in the West and East Buildings that were used for mercury recycling related activities will be used for storage of equipment and materials. S-8 will be used for the consolidation of hazardous waste debris.

The East Building includes licensed hazardous waste container storage areas S-4 and S-5. The locations and dimensions of these units will not change from the previous license. Curbing will be added to S-4 and S-5, as depicted in Figures 16-4 and 16-5, such that each unit will have adequate secondary containment. The East Building also includes a less than 90-day hazardous waste container accumulation area. The East and West Buildings are connected by an enclosed hallway.

The South Building, which comprises approximately 6,000 square feet, was previously used to store roll-offs of hazardous wastes and universal waste storage for batteries which were shipped off-site. Under this license, the South Building will be used for non-regulated purposes.

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The Admin Building comprises 7,000 square feet and is located on the western side of the facility property. This building will continue to house WM Waste maintenance operations and serve as the facility command center.

S-9, S-10, and S-11 were proposed as licensed container storage areas in the previous license. These units were never constructed or operated and are no longer proposed.

Under the previous license, there were three licensed storage areas for roll-off box containers of hazardous waste outdoors under a covered roof (S-12 through S-14). These units will be combined into one unit and named S-12. The trenches in each of the former units will be connected, as depicted in Figure 16-9, to provide adequate secondary containment calculated assuming 100% liquids stored.

A comparison of the storage capacities of the licensed units addressed in this renewal application to the capacities identified in the August 18, 2011 license is provided below:

Licensed Unit	2011 Licensed Capacity	Proposed Capacity
Container Storage Area S-1	29,040 gallons	33,000 gallons*
Container Storage Area S-2	7,535 gallons	7,480 gallons*
Container Storage Area S-3	14,080 gallons	14,080 gallons*
Container Storage Area S-4	15,840 gallons	14,080 gallons*
Container Storage Area S-5	8,800 gallons	8,800 gallons*
Container Storage Area S-6	2,200 gallons	2,035 gallons*
Container Storage Area S-7	40 cubic yards	4,400 gallons*
Container Storage Area S-8	140 cubic yards	120 cubic yards & 8,800 gallons
Container Storage Area S-9	120 cubic yards	0 (no longer proposed)
Container Storage Area S-10	120 cubic yards	0 (no longer proposed)
Container Storage Area S-11	120 cubic yards	0 (no longer proposed)
Container Storage Area S-12	120 cubic yards	320 cubic yards
Container Storage Area S-13	120 cubic yards	0 (combined into S-12)
Container Storage Area S-14	120 cubic yards	0 (combined into S-12)
Treatment Tank #1	500 gallons	0 (undergoing closure)
Treatment Tank #2	500 gallons	0 (undergoing closure)
Storage Tank #1	3,000 gallons	0 (undergoing closure)
Storage Tank #2	3,000 gallons	0 (undergoing closure)

* The majority of hazardous waste containers managed in S-1 through S-7 will contain liquids. Therefore, the capacity of these units is listed in gallons. S-8 will manage roll-off box containers as well as non-roll-off box containers. Containers containing solids that may be typically measured in in cubic yards will be converted to gallons using a conversion

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factor of 1 cubic yard = 202 gallons. This conversion is implemented as part of the inventory management procedure.

4.1.1.3 Other Waste Activities

Household Hazardous Waste

The Admin Building may also be utilized to house a Household Hazardous Waste Collection Facility. The scope of this operation is not known at the time of this license submittal. WM Waste commits to an operation that would operate under the requirements of *NR 666, Subchapter HH — Household and Very Small Quantity Generator Hazardous Waste Collection Facilities.*

The HHW Collection Site would receive wastes collected from households that would be brought in by trucks. The waste would be transshipped to other facilities for processing or recycling after being received at the facility.

Hazardous Waste Generator Activities

WM Waste is classified a Large Quantity Generator (LQG) of hazardous waste. Hazardous waste generated at the site may include hazardous waste contaminated debris such as PPE and sampling equipment; media that may be contaminated such as rainwater or snow melt, spill cleanup residues; and discarded chemical products. Hazardous waste that is generated by the facility will be stored in satellite accumulation areas, licensed container storage areas, or in the 90-day container storage area which is shown on Figure A-3 of Appendix 1.

Universal Wastes

WM Waste is classified as a Large Quantity Handler of Universal Wastes. Universal Wastes will be managed in the former mercury recycling area of the West Building as depicted in Figure A-3 of Appendix 1. Universal Wastes managed at the facility will include both those generated by WM Waste and those received from off-site.

10-Day Transfer Facility Operations

WM Waste does not anticipate operating a 10-day transfer facility at the site. If WM Waste intends to operate such a facility, it will notify WDNR.

Exempt Treatment

WM Waste does not anticipate conducting exempt treatment, such as elementary neutralization, at the site.

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Hazardous Secondary Materials

WM Waste does not anticipate handling hazardous secondary materials at the site. If the facility intends to handle such materials, it will submit a request to modify its hazardous waste license.

Wastes Conditionally Exempted Due to Recycling or Reclamation

WM Waste does not anticipate handling wastes that are conditionally exempted due to recycling or reclamation.

Continued Use Materials

WM Waste does not anticipate handling wastes that are conditionally exempted due to recycling. If the facility intends to handle such materials, it will ensure that the Continued Use Determination Criteria described in WDNR PUB WA-1594 2012 is documented.

Solid Wastes

WM Waste will not process solid waste. Solid waste may be received and stored at the facility prior to shipment offsite. The solid waste will be managed in accordance with Solid Waste License 4381. A copy of the approved Plan of Operation and approval letter for License 4381 is provided in Appendix 11**.**

Trucking Terminal Activities

WM Waste does not anticipate conducting trucking terminal activities that generate hazardous waste. WM Waste is not a transporter of hazardous waste. All hazardous waste will arrive at the site in containers. The facility does not intend to clean out trucks or containers.

Manufacturing Activities

WM Waste will not conduct manufacturing, material processing activities or other activities not related to incoming waste management that may involve hazardous waste generation.

Hazardous Waste Imports

WM Waste may accept imported hazardous waste at the facility but will not export hazardous waste.

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Used Oil

WM Waste will not accept used oil at the facility. Used oil may be generated at the site, but it will be managed by a third-party vendor.

Empty Containers

WM Waste will manage containers that have been emptied of hazardous waste debris. RCRA-empty containers will be managed as scrap or sent offsite for disposal in a properly permitted facility or reuse. Non-RCRA empty containers will be managed as hazardous waste containers. WM Waste does not intend to use the drum crusher depicted on the site plan**.**

On-Site Laboratory

An on-site laboratory will be located in the East Building as depicted on Figures A-3 and A-4 in Appendix 1. The laboratory will be utilized for Level I analysis of incoming waste as well as compatibility testing of debris that will be consolidated. Samples collected for analysis will be managed as facility generated waste (i.e., profiled and managed accordingly) or placed back into the container from which they were collected. A more detailed description of the analysis to be conducted in the lab, including the triggers for the Level I analysis, is provided in the WAP (Appendix 2).

4.1.1.4 Process Description

This process description summarizes the process flow for hazardous wastes received by WM Waste. Areas referenced in this description may be located on Figures A-3 and A-4 of Appendix 1. Detailed descriptions of waste acceptance procedures are provided in the Waste Analysis Plan (Appendix 2). Detailed descriptions of the licensed container storage areas are provided in Section 5.0 NR 670.015 of the FPOR.

1. Waste Prequalification (see Section 2.0 of the Waste Analysis Plan for details)
   a. Customer submits a Waste Information Profile (WIP) (see Appendix 2, Attachment 2-1), including chemical and physical analysis, to the WM Approvals Department.
   b. The WM Approvals Department reviews the information and determines whether WM Waste can accept the waste based on WM Waste's license. During this step, the Approvals Department may request additional information to ensure that they have adequate data to make an acceptance determination. Based on the review, the Approvals Department will approve or reject the WIP.
   c. Upon approval of a WIP, the waste will be assigned an approval code.
   NOTE: The WIP must be recertified by the generator annually or immediately if the process generating the waste changes.

2. Schedule Shipment – After approval, the customer and WM Waste schedule the date that the waste will be received by the facility. The date will be determined based on facility inventory, customer needs, and other scheduled waste receipts.
3. Receipt of Waste
   a. Waste shipments will proceed through the Main Gate into the Receiving Yard.
   b. WM Waste personnel will review the hazardous waste manifest or shipping papers to ensure that the shipment has been approved for receipt. Non-approved shipments will be rejected and the customer will be contacted to inform them of the rejection.
   c. WM Waste personnel will review the manifest or shipping papers for accuracy and completeness.
   d. Containerized waste (i.e., those containers that can be moved manually or with a forklift (e.g., U.S Department of Transportation ("U.S. DOT") approved shippable containers, drums, pails, bags, boxes, pallets, ton sacks) will be unloaded into the Shipping and Receiving Area. Incoming containers will be segregated from outgoing containers within the Shipping and Receiving Area; however, the exact location of incoming and outgoing container staging areas may vary depending on logistical needs. Signage will be used to distinguish incoming and outgoing shipments. Roll-off box containers will be unloaded in the Receiving Yard.
   e. WM Waste personnel will visually inspect each container using the screening procedures described in Section 5.0 of the Waste Analysis Plan. The initial screening evaluation will ensure that the shipment is consistent with manifest/shipping papers and the pre-approved WIP. It will also ensure that each container is in acceptable condition, closed and properly labeled.
   f. In order to minimize the potential of spills or accidents, all unloading operations are conducted by personnel trained in accordance with the Facility Training Plan (Appendix 7). Forklift operators must be trained and internally certified prior to operating forklifts. All unloading occurs on concrete to minimize the impact of any spills. Spill kits are located by each of the unloading areas as indicated by Figure 4-1 of Appendix 4. All spills will be cleaned up immediately.
   g. WM Waste will assign a unique container number and affix a label to each container.
   h. WM Waste personnel will conduct a Level I analysis of each shipment as described in Section 5.1 of the Waste Analysis Plan. During the Level I analysis, each container will be opened to verify that the contents match the WIP. With the exception of multiple containers of the same waste, lab packs, and other "non-sampleable" wastes (e.g., fluorescent lamps, batteries, PPE, debris), a sample will be collected from each container in accordance with the waste sampling procedures described in Section 5.1 of the Waste Analysis Plan. In the case of multiple containers of the same waste, only a single sample will be collected from one of every ten containers received. The samples will be analyzed in the onsite lab for liquid content, color, and pH (except for solid and non-aqueous waste). If the evaluation of the waste or WIP indicates that the waste is potentially ignitable or corrosive, then the facility screens the waste for flash point and/or corrosivity.

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Waste streams that are potentially subject to flash point and/or corrosivity screening include:

- Waste containing liquids;
- Waste having a petroleum- or solvent-like odor; and,
- Wastes that are not already characterized as exhibiting the characteristic of ignitability (D001) or corrosivity (D002).

i. The results of the Initial Screening and Level I analysis will be compared to the WIP. If the results indicate a discrepancy that cannot be resolved as described in Section 5.1 of the Waste Analysis Plan, then WM Waste will perform a Level II analysis of the waste (see Section 5.2 of the Waste Analysis Plan), reject the waste back to the generator, or ship the waste to an alternative facility that is permitted to accept the waste in accordance with the Rejection Policy described in Section 11.0 of the Waste Analysis Plan.

j. If the results of the Initial Screening and Level I analysis are consistent with the WIP, WM Waste personnel will accept the containers and terminate the manifest (i.e., sign the certification of receipt on the manifest as the designated facility). If the load or part of the load is rejected, WM Waste will document the rejection in the Discrepancy Section of the manifest.

k. Containers that are immediately rejected during Initial Screening and not accepted will remain in the shipping/receiving area until promptly loaded back on the truck.

l. Containers that are undergoing Level II analysis or that are rejected (i.e., non-conforming containers) but not immediately shipped back to the generator or other permitted facility will be staged in the quarantine area located in S-3 (containerized wastes) or in S-8 (roll-off box containers) until the discrepancy is resolved or the waste is shipped offsite. Labels describing the status of the containers (e.g., "Undergoing Level II Analysis" or "Non-Conforming") will be affixed.

m. Upon verification that a containerized waste or roll-off box waste is acceptable, WM Waste will review the results of the verification analyses to determine the safe management of the wastes. Containerized waste will be segregated with respect to liquid content, ignitability, corrosivity, and compatibility. (Reactive wastes, explosives and compressed gases are not accepted at the facility.) Based on the initial hazard determination and final identification of the waste, the containers are organized into segregated storage areas. Containers will be affixed with a color-coded label based on the compatibility group of the waste material and whether the container contains free liquids. (If a container contains free liquids, it is assumed that 100% of the contents of the container consist of free liquids.) Flammable, corrosive and oxidizing waste materials are kept separate from incompatible materials by storage in separate areas within each container storage area or by storage in different container storage areas. The compatibility evaluation will be conducted as described in Section 6.1 of the Waste Analysis Plan.

4. Inventory Management

a. After each container has been assigned an inventory tag and color-coded label, it will be entered into the WM Waste inventory tracking database, which is designed to track each container from receipt to its ultimate destination. The database

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documents information for each container including but not limited to contents, waste codes, compatibility group, size, weight/volume (converted to appropriate units of measure), type, date received, manifest number, and generator EPA ID number.

b. Each container will then be transferred to one of the following container storage areas depending on its contents, compatibility group (see Section 5.4 of the FPOR), and the available capacity of the unit:

Storage Area Name	**ID**	**Description**	**Indoors (I) or Outdoors (O)**	**Capacity (Basis)**
Containerized wastes				
Licensed Container Storage Area #1	S-1	Container storage area on west wall of West Building	I	33,000 gal (600 55-gal drums or DE)*
Licensed Container Storage Area #2	S-2	Container storage area in West Building	I	7,480 gal (136 55-gal drums or DE)*
Licensed Container Storage Area #3	S-3	Container Storage on east wall of West Building	I	14,080 gal (256 55-gal drums or DE)*
Licensed Container Storage Area #4	S-4	Container Storage on west wall of East Building	I	14,080 gal (256 55-gal drums or DE)*
Licensed Container Storage Area #5	S-5	Container Storage on north wall of East Building	I	8,800 gal (160 55-gal drums or DE)*
Licensed Container Storage Area #6	S-6	Flammable liquid containers storage shed adjacent to West Building in Receiving Yard	I	2,035 gal (37 55-gal drums or DE)*

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Licensed Container Storage Area #7	S-7	Container storage area in West Building	I	4,400 gal (80 55-gal drums or DE)*
Licensed Container Storage Area #8	S-8	Container storage area in West Building	I	8,800 gal (160 55-gal drums or DE)*
Containerized Wastes Total				96,675* (1,685 55-gal drums or DE)
Storage Area Name	**ID**	**Description**	**Indoors (I) or Outdoors (O)**	**Capacity (Basis)**
Roll-off box Containers				
Licensed Container Storage Area #8	S-8	Container storage (typically roll-off) in south end of West Building	I	120 cubic yards (3 40 yd^3 roll-offs)**
Licensed Container Storage Area #12	S-12	Container (roll-off) storage	O	320 cubic yards (8 40 yd^3 roll-off)**
Roll-off box Container Storage Total				440 cubic yards

* The majority of hazardous waste containers managed in S-1 through S-7 will contain liquids. Therefore, the capacity of these units is listed in gallons. S-8 will manage roll-off box containers as well as non-roll-off box containers. Containers containing solids that may be typically measured in in cubic yards will be converted to gallons using a conversion factor of 1 cubic yard = 202 gallons. This conversion is implemented as part of the inventory management procedure.

DE = Drum Equivalents

** Note: alternative capacity roll-off containers (i.e., 20 yd^3, 25 yd^3) may also be used

The location of each of the container storage areas is depicted on Figures A-3 and A-4 in Appendix 1. Additional details regarding the container storage areas are provided in Section 5.0 of the FPOR. Figures showing the details of each container storage area as well as container configuration layouts are provided in Appendix 16.

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c. After transferring the container to the container storage area, the storage location of the container will be entered into the database. Whenever a container is transferred to a different location at the facility, the database will be updated.
d. The inventory of each container storage area will be maintained in the database and reviewed prior to placement of each container to ensure that the licensed capacity is not exceeded. Weekly inspections will also be conducted in accordance with the Inspection Plan (Appendix 3) to confirm that capacities are not exceeded.
e. The database inventory of each container storage area will be reviewed *monthly* to ensure that no waste is stored for longer than one year from the date the waste was originally generated. The weekly inspections also include a check of container labels to ensure that the one-year time limit will not be exceeded.

5. Container Placement
   a. S-1
      i. Containers must be placed on the 3-tier racks with container label facing outward so it can be read from the aisle. When elevated above eye level, containers and labels must be made visible through easy and safe use of a ladder, scaffold, or other mechanism that is readily available at all times.
      ii. Containers no larger than 55-gallons may be placed in S-1.
      iii. No ignitable wastes may be stored in this area.
   b. S-2, S-3, S-4, S-5, S-7, S-8
      i. Containers must be placed on pallets or an equivalent method with container label facing outward so it can be read from the aisle. When elevated above eye level, containers and labels must be made visible through easy and safe use of a ladder, scaffold, or other mechanism that is readily available at all times.
      ii. No pallets or containers may be stored in the painted aisle spaces.
      iii. Containers shall not be stacked more than 2-high
      iv. Containers of equal or larger size shall be stored on the lower level, unless the containers stored on the bottom level are designed, maintained, and arranged to safely and securely support the containers on the upper level.
      v. When containers greater than twenty (20) gallons in size are stored two (2) high, pallets shall be used to separate the first level from the second level.
      vi. Containers shall not be stored or stacked in a manner that would compromise the structural integrity of the container.
      vii. All pallets shall remain stable and in sound integrity.
      viii. No ignitable waste may be stored in these areas.
   c. S-6
      i. Containers may be placed directly on grated floor but container label must be facing outward toward aisle.
      ii. No containers may be stored within painted aisle space.
      iii. Containers may be stacked only if less than twenty (20) gallons in size.
      iv. Containers shall not be stored or stacked in a manner that would compromise the structural integrity of the container.
   d. S-8, S-12
      i. Maximum container size is 40-yard roll-off box.

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ii. Containers must be placed within painted yellow line with label facing outward.

6. Waste Consolidation and Bulking
   a. Other than certain hazardous waste debris, no hazardous waste may be removed from containers and placed in other containers for the purpose of consolidation. Waste may be removed from the customer container only if the container is in poor condition or to collect samples in accordance with the Waste Analysis Plan.
   b. Compatible hazardous waste debris from customer containers (e.g., 55-gallon drums) may be consolidated into larger containers (e.g., roll-off boxes) in order to make it more efficient and cost effective to transport the waste. All waste codes associated with the waste from the smaller containers will apply to the consolidated waste. No ignitable or reactive debris will be consolidated. All waste debris consolidation will occur in S-8. Prior to consolidating waste debris, the waste debris mixture will be tested for compatibility in accordance with Section 6.1 of the Waste Analysis Plan.
   c. Other containers, such as lab packs, may be bulked into larger containers; however, the individual containers within the lab packs will not be opened.
7. Outbound Container Handling
   a. When a sufficient quantity of hazardous waste containers has been accumulated to facilitate proper recovery, treatment, or disposal, an outbound shipment of containers will be scheduled.
   b. Outbound containers will be removed from a container storage area and staged in the Receiving and Shipping Area. These containers will be segregated from incoming containers within the Shipping and Receiving Area; however, the exact location of incoming and outgoing container staging areas may vary depending on logistical needs. Roll-off box containers will be staged in the Receiving Yard or directly loaded from their Container Storage Area.
   c. Prior to loading, each container will be inspected to ensure it remains in good condition. If a container is in poor condition, it will be placed in an overpack until the contents can be placed in a container that is in good condition. Each container will then be marked and re-labeled in accordance with DOT specifications and hazardous waste regulations.
   d. A manifest will be prepared for the shipment and the inventory database will be updated.
   e. Containers will then be loaded upon the truck. All loading shall be conducted by trained personnel to minimize the potential for spills. All loading shall be conducted upon concrete to minimize the impact from any spills and observed by WM Waste personnel. Any spills will be immediately cleaned up. Spill kits are located in the loading area.
   f. Transporter will sign the manifest; WM Waste will retain a copy.
   g. If a copy of the manifest has not been received from the receiving facility within 35 days of shipping the waste, WM Waste will contact the transporter and/or the receiving facility to determine the status or location of the waste. If a signed copy

of the manifest has not been received within 45 days, WM Waste will file an exception report with the WDNR.

8. Container Staging - The following staging protocols apply to all hazardous waste containers at WM Waste.
   a. Containers received from off-site must be placed into an appropriate licensed storage area by the end of the day following receipt at the facility.
   b. Containers prepared to be shipped off-site via the loading dock may be staged until loaded onto an outbound truck by the end of the day following the day they were staged for no more than 24-hours.
   c. Placement of a container for more than 24-hours constitutes storage, and storage in an unlicensed area (such as an unlicensed staging, loading, or unloading area) is not allowed.

4.2 NR 670.014(2)(b)- Hazardous Waste Stream Characterization

WM Waste is licensed to store RCRA hazardous waste with the waste codes identified in the Part A Application shown in Appendix 1 to this application.

A description of the chemical and physical analyses of the hazardous waste managed at the facility is included in the Waste Analysis Plan (WAP) included in Appendix 2. The WAP identifies all of the information that must be known to treat, store, or dispose of the waste properly.

4.3 NR 670.014(2)(c)- Waste Analysis Plan

A copy of the WAP is included in Appendix 2 to this application.

4.4 NR 670.014(2)(d) - Security Procedures

The facility has provided security that meets the requirements of NR 664.0014. The security measures are designed to prevent the unknowing entry, and to minimize the possibility for the unauthorized entry, of person or persons into the active portion of the facility. The facility is walled and fenced to prevent entry onto the portions of the facility in which hazardous waste management occurs other than through authorized gate locations.

A sign which reads “DANGER- UNAUTHORIZED PERSONNEL KEEP OUT" is posted at each entrance to the active portion of the facility, and at other locations in a quantity sufficient to be seen from any approach to the active portion of the facility. These signs are in English and are able to be read from a distance of at least 25 feet. No other languages are prominent in the area of the facility.

The facility is may operate up to 24 hours per day, 7 days per week; however, normal operating hours are from 6:30 am to 5 pm, Monday through Friday. All entrances to the

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active portion of the facility are locked to prevent unauthorized entry. The facility has a fire and intrusion detection system.

Access to the facility by customers, employees and the general public is through the front office of the West Building. All visitors to the facility are required to register at the front desk.

Admittance to the active operating processing area of the facility or hazardous waste storage areas is done only with the presence of a qualified WM Waste representative after receiving appropriate personal protective equipment and instruction on chemical hazards, safety, and evacuation.

All employees are trained on plant security measures and a monthly inspection form verifies plant security measures.

4.5 NR 670.014(2)(e)- General Inspection Schedule

WM Waste has developed a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are important to preventing, detecting, and responding to environmental or human health hazards per the requirements of NR 664.0015(2). Inspections are conducted on a daily, weekly, and monthly frequency. Details of the general inspection schedules are included in Appendix 3.

- Daily - The loading/unloading areas subject to spills (when in use) are inspected on a daily basis.
- Weekly - The container storage areas are inspected at least weekly.
- Monthly - Safety, security, emergency, and monitoring equipment are inspected at least monthly.

The inspections are conducted by employees trained in the completion of the forms. The inspections are recorded on forms that note what is to be inspected and identifies potential deficiencies to be inspected for. It also notes any deficiencies that are identified during the course of the inspection. The inspection forms also record the inspector's name, date, and time of inspection.

Any noted deficiencies identified during the course of the daily, weekly, or monthly inspections are documented and corrected. Documentation is performed on the individual inspection forms. If a noted deficiency presents an imminent hazard or a major compliance issue has already occurred, corrective action is immediately implemented.

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Records of the inspections and corrective actions are maintained as paper copies or may be maintained as electronic images of the same. Records of inspections and deficiency corrections are maintained for at least three (3) years at the facility.

4.6 NR 670.014(2)(f) - Preparedness and Prevention

Waiver Request - WM Waste has not requested a waiver from the requirements of subchapter C of NR 664.

Design and operation of the facility required by NR 664.0031. The WM Waste facility has been designed and is operated in a manner to minimize the possibility of fire, explosion, or unplanned sudden and non-sudden releases of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

Fire prevention in the container storage units consists of Class ABC fire extinguishers located as shown in Figure 4-1 in Appendix 4. Response to larger fire events is provided by the local fire department.

The WM Waste facility may operate up to 24 hours a day 7 days a week however, normal operating hours are from 6:30 am to 5 pm, Monday through Friday. The facility is monitored remotely 24 hours a day 7 days a week.

Explosions and unplanned sudden releases are minimized by preventing the accumulation of excessive pressure in containers, preventing fires by not allowing smoking in the facility, and controlling sources of ignition.

Sudden and non-sudden releases of hazardous waste constituents to air, soil, and water from the licensed operations are minimized by conducting loading and unloading operations under roof; all storage areas are provided with containment to prevent escape of wastes from the licensed areas; all hazardous waste is stored in containers that are in good condition; all storage areas are inspected in an accordance with the Inspection Plan and any discrepancies are addressed in a timely manner; employees are trained in hazardous waste operations so that they may respond to any releases in a timely and sound manner.

Emergency equipment required by NR 664.0032 consists of several methods to demonstrate compliance. An internal communication system consisting of a paging system from the generalized phone system and an additional 2-way radio system is employed to allow workers and supervisors to communicate with each other in the event of an emergency. Telephones are located in the control room and at the main dock to allow summoning emergency assistance from local fire, police, or state and local emergency response teams. Additional spill control and decontamination equipment is identified in Table 4-3.1.4 and Figure 4-1 in the Integrated Contingency Plan (ICP) (Appendix 4**)**.

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Testing and maintenance of emergency response equipment required by NR 664.0033 is incorporated into the periodic inspections described in the Inspection Schedules included in Appendix 3.

Access to communication or alarm systems required by NR 664.0034 is available whenever containers are being moved, emptied, or filled through the communication equipment described above. In addition, at least two employees are always in the area when containers are being loaded, unloaded, or moved.

Aisle space within the licensed container storage areas required by NR 664.0035 is specified in the individual storage area descriptions in Section 5.1 NR 670.015(1) of this FPOR. Each storage area is generally supplied with aisle spaces between rows of containers that are at least 2 feet wide.

Aisles at WM Waste are kept clear to ensure against accidental blockage that would deter or prevent the movement of emergency equipment (emergency personnel, fire equipment, spill control equipment, and decontamination equipment) to locations in the facility.

On October 21, 2021, a WM Waste representative met with the primary response authority, the Kansasville Fire & Rescue Department, to familiarize them with the layout of the facility (including aisle spaces), properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility and possible evacuation routes, and to review the proposed container configurations for each container storage area (see Figure A-3 in Appendix 1 and Figures 16-1 through 16-9 in Appendix 16). The Kansasville Fire & Rescue Department provides fire and emergency medical services to the Town of Dover, in which the Facility is located. The Fire Department evaluated whether the layout provides unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation in an emergency.

Based on the results of the evaluation, the Kansasville Fire & Rescue Department issued a letter stating that “the layout of the facility would allow for the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility operation in the event of an emergency.” A copy of the letter is provided in Appendix 19.

Upon issuance of the renewal license, arrangements with local authorities required by NR 664.0037 will be updated with local fire, police, and emergency response teams to familiarize them with the properties of the hazardous waste managed at the facility, the associated hazards, and places where facility personnel would normally be working. In addition, these organizations are familiarized with entrances to roads within the facility and possible evacuation routes. This is done by including these groups in the distribution of the ICP and working with them during periodic emergency response reviews.

Arrangements will be updated with the local hospital to familiarize them with the properties of the hazardous waste handled at the facility and the types of injuries or illnesses that could result from fires, explosions, or releases at the facility. Upon issuance of the renewal license, the updated ICP will be distributed to the local hospital as the primary means of information sharing.

An example of the standard arrangement letter that will be sent to each organization for their signature is included in Appendix 19. Where state or local authorities decline to enter into such an arrangement, WM Waste will document the refusal in the operating record.

4.7 NR 670.014(2)(g) - Integrated Contingency Plan

The ICP has been incorporated into a "One Plan" that addresses the requirements of both the RCRA Contingency Plan and the Spill Prevention, Countermeasure and Control (SPCC) requirements of the Clean Water Act. The ICP presents systematic procedures to minimize hazards to human health or the environment from fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water, in addition to similar response requirements dictated under other regulatory regimes. The ICP enables the emergency coordinator to act quickly and efficiently in order to mitigate the effects of an incident. A copy of the ICP is included as Appendix 4**.** The ICP includes a cross-reference table identifying which sections of the Plan satisfy the requirements of subchapter D of NR 664. Changes to sections of the ICP that are not subject to the applicable NR 664 requirements do not require modifications to the hazardous waste license to be implemented.

4.8 NR 670.014(2)(h) - Hazard Prevention

The WM Waste facility is designed to safely and efficiently handle incoming waste to prevent the possibility of contamination of the facility, personnel, or outside environment.

1) Hazard prevention in unloading areas

Waste is received at the facility via appropriate DOT specification roll-off box containers and containerized wastes. Containerized wastes are received in the dock loading/unloading areas (see Figure A-4 in Appendix 1), transferred from the truck and placed in licensed storage areas via forklifts designed to carry these drums, minimizing the possibility of rupture. Drums may also be received and placed into storage locations while remaining on pallets. Ramps entering and leaving storage areas are designed to provide minimum slope to avoid accidental dislodgement of containers. Roll-off box containers are received into the roll-off storage areas S-8 and S-12.

All loading/unloading must be observed during the process by WM Waste personnel. If any spills of waste are observed during the process, the spilled material will be immediately recovered and cleaned up.

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2) Prevention of run-on and run-off

The licensed container storage areas S-1 through S-8 are indoors under roof where no run-on of stormwater can occur. The land surrounding the active portion of the facility is sloped to divert rainwater away from the building and storage areas.

There is one licensed storage areas for roll-off box containers of hazardous waste outdoors under a covered roof (S-12). The roof has three walls, which, when combined with the slope of the surrounding property and slope of the truck entrance to these storage areas, prevents run-on into these areas. The area is also sloped to prevent runoff from this area.

All storage areas licensed for the storage of hazardous wastes are bermed and designed to contain quantities of liquid and to prevent stormwater run-off.

Further information on the design and construction of the licensed container areas can be found in Section 5 of this FPOR.

3) Prevention of contamination to water supplies

Processing operations occur indoors, under roof, preventing the release of contaminants. The outdoor storage area is sloped such that accumulated precipitation is not discharged to surface waters.

The WM Waste facility is located within the Des Plaines River Watershed. Domestic water wells identified in the WDNR database within one- quarter mile of the facility are depicted on Figure 10-1 in Appendix 10. There are no monitoring or injection wells on the WM Waste property.

The licensed container storage areas are inspected on a weekly basis, and any accumulated liquid, snow, or ice is removed on a timely basis, but in no case more than 24 hours after the inspection. Accumulated precipitation is not anticipated in the indoor storage areas (S-1 through S-8). Precipitation that may accumulate in the licensed storage area that is located under the shed roof (S-12) is managed by collecting the water for shipment off-site to a licensed disposal facility. Snow and ice that may accumulate in these areas will be containerized and shipped off-site as snow melt to a licensed disposal facility. Rainfall and melted snow that falls in the yard areas outside of the licensed storage areas of the facility are captured by the on-site stormwater collection system and directed via underground piping to the stormwater pond on the west side of the facility.

Precipitation may enter into the loading docks (see Figure A-3 for locations). Each loading dock is constructed of concrete and is provided with a drain valve that is kept closed to contain and hold storm water until it can be released after inspection demonstrating no visible sheen, solids or other evidence that hazardous waste is present in the storm water.

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The loading dock drains are connected to underground storm water sewer lines, which carry the storm water to the retention basin. WM Waste ensures that no hazardous waste is present in the drainage sump prior to opening the valve by observing whether there is physical evidence of waste such as discoloration or sheens (see Section 3-2.4 of the Inspection Plan in Appendix 3).

Precipitation that may fall on the yard area (outside the licensed container storage and loading areas) within the fence line of the facility is directed to the on-site stormwater system, which drains to the stormwater pond on the western portion of the facility. Stormwater discharges associated with industrial activities are covered by the Wisconsin Tier 1 Stormwater General Permit --WPDES Permit WI-S067849-5 and the facility's Storm Water Pollution Prevention Plan (SWPPP). WM Waste also conducts annual stormwater sampling and analysis for total mercury in accordance with its current Hazardous Waste License.

Additional information on the stormwater sewer system is provided in the ICP (See Section 4-1.1 and Figure 4-1 in Appendix 4).

Sanitary wastewaters at the facility are discharged into a holding tank and transported offsite for treatment and disposal. There are no sanitary sewer drains with the licensed hazardous waste units or the laboratory.

4) Mitigation of power and equipment failures

In the event of power outages, normal operations stop. Power outages do not adversely affect the storage of material in the licensed storage areas. However, an emergency generator automatically starts to allow continued operation of the ventilation system, emergency lights, essential office equipment, air compressor, and portable pumps in the event of a power outage. The generator is designed to handle these loads.

To mitigate equipment failures, WM Waste will maintain duplicate equipment and an inventory of spare parts to fix equipment such as the forklifts and pumps. For example, the facility maintains four electric pumps, two pneumatic pumps, and four propane forklifts. If necessary, WM Waste will rent equipment.

5) Prevention of undue exposure of personnel

All personnel are trained on the hazards associated with the types of contaminants present in the hazardous waste received at this facility. Measures have been taken to prevent undue exposure to personnel during the handling or coming in contact with the hazardous waste through training, engineering controls and use of appropriate personal protective equipment (PPE).

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WM Waste also provides PPE in the form of supplied air and air purifying respirators, cover-alls, gloves, and site-restricted steel-toed boots to employees to minimize the chance of exposure to excess contaminants, or tracking those contaminants out of the work area.

Employees are trained in these prevention measures and use of PPE as described in the Training Plan (Appendix 7).

6) Prevention of releases to atmosphere

All containers of hazardous waste are kept closed except when adding or removing wastes from the containers (e.g., collecting samples). This minimizes the amount of releases that may occur to the ambient air.

Hazardous waste handling and management includes training for employees on spill containment and clean up, proper forklift handling to reduce container damage, safe handling of containers to reduce container damage and spill possibilities, and emergency actions to take to protect the environment from container rupture.

4.9 NR 670.014(2)(i) - Precautions to Prevent Ignition, Reaction, Incompatible wastes

In accordance with NR 664.0017(2) precautions will be taken during the storage of ignitable or incompatible waste to prevent the mixing of incompatible wastes and other materials to prevent reactions that could lead to or cause the following:

1. Generation of extreme heat, pressure, fire, explosions, or violent reactions;
2. Production of uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment;
3. Production of uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
4. Damage to the structural integrity of a container or Facility; or
5. Threat to human health or the environment through other similar manner.

Ignitable and flammable wastes at the facility, which are stored in S-6, are separated and protected against ignition or reaction by prohibiting smoking, welding, cutting, friction-producing materials that may produce sparks, spontaneously combustible material, or any other ignition source. Compliance is documented through periodic inspections.

Incompatible wastes are identified via color coded containers and stored in different container storage areas or different designated areas of a container storage area (see Section 5.4 of the FPOR).

Reactive wastes, explosives, and compressed gases will not be accepted at the Facility.

"No Smoking" signs are posted throughout the facility in prominent locations.

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Containers accepted at the site are compatible with the material or hazardous waste contained. Generators certify to WM Waste that all waste has been packaged and contained according to DOT specifications prior to pick up. WM Waste employees screen all incoming wastes in accordance with the WAP to ensure that containers are compatible with the waste or liners have been installed that are compatible with the material handled. Should waste be found to be in containers that are not compatible with the waste, the waste will be immediately transferred to a compatible container by WM Waste personnel.

Only compatible hazardous waste debris will be consolidated at the Facility. Prior to consolidation, compatibility testing will be conducted in accordance with the WAP.

Addition information regarding these precautions may be found in Section 5.4 of the FPOR and the WAP (Appendix 2).

4.10 NR 670.014(2)(j)-Traffic Patterns

All traffic arrives at the site from Wisconsin State Highway 11. State Highway 11 is a 2-lane highway without tum lanes, but a bypass lane exists at the entrance to the facility to allow vehicles to pass on the right when a truck is waiting to tum onto Haag Drive when approaching from the east. Traffic reaches Hwy. 11 from Interstate Hwy. 94. The truck entrance into the facility is from Haag Drive. All these roads are constructed of asphalt and equipped to safely handle the anticipated maximum weight arriving at the facility of 80,000 pounds. Traffic on these roads would follow designated traffic patterns on these public highways. All roads have a bearing capacity substantially in excess of 80,000 pounds. No overweight vehicles are expected at the facility. The facility expects several tractor-trailer trucks per day delivering hazardous waste to or shipping hazardous waste from the site in addition to the personal vehicles of the employees.

Trucks with containerized wastes enter the facility through the main gate from Haag Drive and travel on asphalt or concrete surfaces to the loading/unloading dock. Trucks carrying roll-off boxes may enter either through the same main gate or through the truck gate on the south side of the facility. All traffic registers at the main office before proceeding to the unloading area. There are no bridges or overpasses at the facility. Traffic leaving the facility is controlled by a stop sign at the Haag Drive and Highway 11 intersection. The referenced locations are depicted on Figures A-3 and A-4 in Appendix 1.

4.11 NR 670.014(2)(k)(3) - Flood Plains

WM Waste is not located within a 100-year flood plain; therefore, the requirements of NR 670.014(2)(k)(4) and (5) do not apply. See the FEMA Floodplain map in Appendix 5.

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4.12 NR 670.014(2)(k)(6) - Threatened or Endangered Species Habitats

The facility is not located in a habitat determined by the WDNR to be critical to the continued existence of any threatened or endangered species. See Appendix 6 for a copy of the determination by the WDNR that confirms this statement.

There are no areas of the WM Waste property that are identified as wetlands according to the WDNR Wetlands Indicator Mapping function. See Appendix 6 for a depiction of the WDNR wetlands areas in the vicinity of the WM Waste facility.

4.13 NR 670.014(2)(l) - Training Plan

A copy of the training program has been provided in Appendix 7 of this report.

All employees receive training outlined in Appendix 7 within the first six months of employment. Any personnel transferring between positions with new training requirements are trained on the new requirements within the first month after being transferred. At no time is a new or transferred employee allowed to work unsupervised until all training requirements are met.

Training is conducted by persons qualified in the areas they are teaching. On the job training for particular equipment or job tasks has been designed to cover safe operation and to ensure the avoidance of environmental contamination.

Training records and documentation of all current employees are kept for the life of the facility or 3 years, whichever is greater. Training records for former employees are kept at least 3 years from the date last worked at the facility.

The Training Plan includes job descriptions.

4.14 NR 670.014(2)(m) - Closure Plan

A copy of the Closure Plan and Closure Cost Estimate for the WM Waste facility is included in Appendix 8.

WM Waste will remove all hazardous waste and hazardous waste residues from all containment systems. Remaining equipment or structures containing or contaminated with hazardous waste residues will be decontaminated or removed. This includes discharge control equipment and confinement structures.

The Closure Plan cost estimates are based on an experienced third-party vendor to close the facility. The Closure Cost Estimate has been calculated using RSMeans. RSMeans is a web-based construction cost estimating tool and associated database. The database contains cost-related information for all phases of construction projects, including, but not

limited to, labor rates, material costs, and transportation costs. The data are continuously researched, validated, and revised, and are based on location. RSMeans data can be obtained for approximately 1,000 locations in North America, based on one recent Internet source. The same source stated that the RSMeans database contains over 85,000 unique line items, creating a high likelihood that estimates can be found for items that closely match the construction project line item of interest.

These cost assumptions can be found in Attachment 8-2 of the Closure Plan, which is in Appendix 8.

The long-term care requirements of NR 664.0118(1) do not apply to the WM Waste facility because it does not have a hazardous waste disposal unit (e.g., landfill, waste pile, surface impoundment). The hazardous waste tanks that comprised the wastewater treatment system (i.e., Treatment Tank #1, Treatment Tank #2, Storage Tank #1, and Storage Tank #2) are undergoing closure at the time of this submittal. A closure certification report will be submitted within 60 days of completion of closure of these units. WM Waste's Closure Plan only addresses requirements for container storage.

4.15 NR 670.014(2)(n) - Disposal Unit Closure Notifications

WM Waste does not operate any disposal units subject to this requirement, and, consistent with the Closure Plan described in Appendix 8, does not anticipate closing any units that will leave hazardous waste at the facility after closure. Therefore, the notification requirements to local zoning authorities and to the WDNR of a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal are not applicable.

4.16 NR 670.014(2)(o) -Closure Cost Estimate and Financial Assurance

A copy of the WM Waste Closure Cost Estimate prepared according to NR 664.0142 is included with the Closure Plan in Appendix 8. Documentation demonstrating financial assurance to meet this Closure Cost Estimate prepared according to NR 664.0143 is also included in Attachment 8-3 of Appendix 8.

4.17 NR 670.014(2)(p)-Long-Term Care Cost Estimate and Financial Assurance

Long-term care is not anticipated for the WM Waste facility, and thus a long-term care cost estimate is not required.

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4.18 NR 670.014(2)(q)- Insurance Documentation

A copy of the certificate of liability insurance demonstrating compliance with the insurance requirements of NR 664.0147 (sudden and non-sudden accidental occurrences) is included in Appendix 9.

4.19 NR 670.014(2)(s) - Maps

A topographic map showing a distance of at least 1,000 feet around the facility at a scale of 1 inch to 200 feet is included on Figure 10-1 of Appendix 10. This map clearly shows the map scale and date of the map, surface waters and intermittent streams, surrounding land uses, orientation of the map, legal boundaries, and buildings. Access control is shown in Figure A-2 of Appendix 1. Injection and withdrawal wells within a 1000-foot radius of the WM Waste facility are shown on Figure 10-1 of Appendix 10.

A copy of the wind rose showing frequency and direction of winds for the Milwaukee, Wisconsin, airport approximately 20 miles to the north is also included in Appendix 10.

The WM Waste facility is not located within a 100-year floodplain and the 100-year flood plain does not approach within 1,000 feet of the facility, so barriers for flood control are not required. See Section 4.11 NR 670.014(2)(k) for further flood plain discussions.

A site plan for the location of hazardous waste operational units and storage areas is also included in Figure A-3 to the Part A Form in Appendix 1.

4.20 NR 670.014(2)(u) - Notice of Approval for Extension or Petition

This requirement is applicable to a land disposal facility. Since WM Waste is not a land disposal facility, this requirement is not applicable to WM Waste.

4.21 NR 670.014(2)(v) - Pre-application Meeting

A pre-application meeting required under NR 670.431 (3) is not required since this is an existing licensed facility and no significant changes to facility operations are proposed.

4.22 NR 670.014(2)(w) - Local Approval Requirements

Documentation demonstrating compliance with the local approval requirements of NR 670.007(1) is not required since this is an existing licensed facility and no expansion of the facility operations is proposed.

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4.23 NR 670.410(10, 12) - Local Governments and Municipalities

The local governments having jurisdiction over the area where WM Waste is located include the Town of Dover and Racine County. Local municipalities having jurisdiction over the area include the Town of Dover, Racine County, Village of Union Grove, and Village of Yorkville.

4.24 NR 670.014(2)(x)(l)- WM Waste, Inc. Ownership

1. Identification of all persons owning a 10% or greater legal or equitable interest in the applicant or in the assets of the applicant, including shareholders of a corporation that is an applicant and partners of a partnership that is an applicant.

   WM Waste, Inc. is a wholly owned subsidiary of Waste Management Holdings, Inc. The facility previously operated under the name WM Mercury Waste, Inc., Mercury Waste Solutions, Inc., and Mercury Waste Solutions, LLC. The facility was sold on September 27, 2010 and operated under the name of WM Mercury Waste, Inc. until the name was legally changed on November 12, 2020 to WM Waste, Inc.

2. Identification of all other Wisconsin solid or hazardous waste facilities for which the applicant or any person identified in subd. 1.a. is named in, or subject to an order or plan approval issued by the WDNR.

   None.

3. Identification of all other Wisconsin solid or hazardous waste facilities which are owned by persons, including corporations and partnerships, in which the applicant or person identified in subpart a. owns or previously owned a 10% or greater legal or equitable interest or a 10% or greater interest in the assets.

NAME	ADDRESS	CITY
Boundary Road	W124 N89255	Menomonee Falls
Brookfield Landfill	18860 Rivendell Drive	Brookfield
City Disposal Corp Landfill		Dunn
Eaton Landfill	Trestle Rd. approx. .75 miles south of Hwy 29	Eaton
Hagen Farm		Stoughton
Madison Prairie RDF	6002 Nelson Rd.	Sun Prairie
Metro RDF	10712 S. 124th St	Franklin
Muskego Landfill		Muskego
Neosho Landfill	Station Road approx. 1550 feet east of Hwy 67	Rubicon
Omega Hills Landfill	N29 W12730 County Lind Rd	Germantown

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Orchard Ridge RDF	W124 N9355 Boundary Rd.	Menominee Falls
Pheasant Run RDF	19414 60th St	Bristol
Polk Landfill	Hwy 175 at intersection Hwy 164	Slinger
Reclamation Landfill	43rd Street approx. 2760 feet north of 7 Mile Road	Raymond
Ridgeview RDF	6207 Hempton Lake Rd	Whitelaw
Rusk County Small C&D Landfill	County Road G at intersection with Old Airport Road	Ladysmith
Sawyer County Small C&D Landfill	14612 W County Road B	Hayward
Stone Ridge Landfill	S82W21595 Wauer Lane	Muskego
Timberline Trail RDF	N4581 Hutchinson Rd.	Weyerhaeuser
Valley Trail RDF	N9101 S. Willard Rd	Berlin
Clark County Small C&D Waste Facility		Thorp
WM - Ashland Transfer	510 Industrial Park Rd.	Ashland
WM - Green Bay TS	1861 Allouez Ave.	Green Bay
WM - Hayward Transfer	14612 W. County Hwy B	Hayward
WM - La Crosse	415 Island St.	La Crosse
WM - Lake Delton	S 2439 Highway 12	Baraboo
WM - Menasha Transfer	1860 Novak Dr	Menasha
WM - River Falls	250 Summit St.	River Falls
WM – Osceola TS	2312 Oak Dr.	Osceola
WM - Peshtigo	N3989 County E	Peshtigo
Phillips Transfer	310 S. Airport Rd	Phillips
Somerset Transfer Station	611 Laser Drive	Somerset
WMI of WI-Prairie du Chein	62949 Vineyard Coulee Rd	Prairie du Chein
WM – Antigo	1715 Deleglise St.	Antigo
WM - Chippewa Falls	11888 30th Ave.	Chippewa Falls
WM Darlington	11500 Ames Rd	Darlington
WM - Door County TS	1509 Division Road	Sturgeon Bay
WM-Janesville	304 W. Sunny Lane	Janesville
WM - Ladysmith Transfer Station	W8527 Gokey Rd	Ladysmith
WM - Madison	2418 W. Badger Rd	Madison
WM - Mosinee	1372 State Hwy 34	Mosinee
WM - Sheboygan Falls T/S	115 Birch Rd	Sheboygan Falls

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WM of Southeast Wisconsin	1508 S. Popple Avenue	Marshfield
Waupaca TS	E1571 Stratton Lake Road	Waupaca

a. A statement indicating whether or not all plan approvals and orders relating to all facilities identified in subparts b. and c are being complied with.

WM Waste, any person owning 10% or greater legal or equitable interest in WM Waste or the assets of WM Waste, and the facilities identified in subpart b above, are in compliance with plan approvals or orders issued by the WDNR for a solid or hazardous waste facility in Wisconsin.

4.25 NR 670.014(2)(x)(2)- Environmental Impact Statement

An analysis of the need for an environmental impact statement was performed by the WDNR as part of the initial WM Waste facility hazardous waste licensing in 2000. The analysis of the expected impacts of the WM Waste proposal for the initial facility concluded that it was not a major action that would significantly affect the quality of the human environment. As such, an environmental impact statement was not required for the initial license issuance for the current facility.

The WDNR conducted another analysis of the need for an environmental impact statement in 2011 during the renewal process for the current license. The application for renewal license included the proposed addition of container storage units within the existing structures and the addition of indoor and outdoor roll-off box container storage areas. The WDNR determined that no environmental impact statement was required.

The requirements of ch. NR 670, Wis. Admin. Code, establish the WDNR's programmatic procedures that provide for public involvement and include an environmental analysis that provides sufficient information to establish that an environmental impact statement is or is not required, as described in s. NR 150.03(12m), Wis. Admin. Code. The environmental assessment information required in s. NR 670.014(2)(x)2., Wis. Admin. Code, is necessary to support the integrated analysis contemplated in ch. NR 150, Wis. Admin. Code.

It has been noted that s. NR 150.20(2)(a)7s. identifies the 10-year renewal process as an Integrated Analysis Action where it states:

"7s. Except for facilities specified in s. 291.27, Stats., the approval of a feasibility and plan of operation report and issuance of a license for either a new or existing hazardous waste treatment, storage, or disposal facility or class 3 modification of an existing hazardous waste treatment, storage, or disposal facility under ch. NR 670 and s. 291.25, Stats".

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Assuming § NR 150.20(2)(a)7s., Wis. Admin. Code applies, the reissuance of a license for an existing hazardous waste storage facility is an integrated analysis action. The code provides that such an integrated analysis action:

"…means a department action for which department programmatic procedures provide for public disclosure and include an environmental analysis that provides sufficient information to establish that an environmental impact statement is not required." §NR 150.03(12m), Wis. Admin. Code.

Inherent in the classification by the Department of an action – in this case the reissuance of a license for an existing facility that is neither proposing an expansion nor any changes that can be considered significant—as an integrated analysis action is a determination by the Department that it necessarily does *not* require an EIS. Were this not the case, then such an action would be listed in § NR 150.20(4), which it is not.

Rather, integrated analysis actions have been determined by the Department to have inherent within the application review process sufficient environmental analysis and considerations to comply with the Department's obligations under the Wisconsin Environmental Policy Act. Particularly here, where this facility has undergone initial licensing, one 10-year renewal, and is now undergoing its second 10-year renewal with a significant operating history, performance of an EIS will provide no additional information to inform the Department's decision-making on this application. As noted above, the facility already exists and is not proposing an expansion nor significant changes. As such, no EIS is warranted.

In further support of the position that an EIS is not warranted, and in consideration of NR 670.014(2)(x)2.d.4, Wis. Admin. Code, WM Waste is providing a comparison of the demographic changes to the area since the last license renewal, a review of the U.S. Environmental Protection Agency's EJSCREEN report for the surrounding area, and more details regarding the social and environmental impacts and benefits of the facility to the surrounding community.

Demographic Data Comparison

In the analysis of need for an EIS that was included in the application for the last license renewal, demographic data was provided for a 3-mile radius surrounding the facility. The data, which was obtained from the USEPA's Enforcement Compliance History Online (ECHO) database (www.epa.gov/echo), was based on year 2000 U.S. Census statistics.

To evaluate the demographic changes since the last license renewal, an updated demographic profile of the surrounding area (3 miles) was obtained from the same ECHO database. The ECHO database utilized data from the year 2010 U.S. Census and the 2014-2018 American Community Service (ACS) 5-year summary to develop its statistics.

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Results from both demographic profiles and information sources are summarized in the table below.

Demographic Profile of the 3-mile Area Surrounding WM Waste
2000 Census vs. 2010 Census and 2014-2018 ACS 5-Year Summary

Demographic	Information Source		
	2000 Census[1]	2010 Census[2]	2014-2018 ACS 5-Year Summary[6]
Population density	260.90/sq. mi.	288/sq. mi.	Not provided
Percent minority	6.81%	Not provided	Not provided
Percent people of color	Not provided	11%	Not provided
Households in the area	2,414	2,685	Not provided
Housing units in area	2,548	3,095	Not provided
Households on public assistance	38	Not provided	147
Persons below poverty level	722	Not provided	Not provided
Persons with low income	Not provided	Not provided	1,738
Race breakdown			
White	94.47%	95%	Not provided
African-American	2.35%	2%	Not provided
Hispanic-origin	2.01%	3%	Not provided
Asian/Pacific Islander	0.63%	1%	Not provided
American Indian	0.52%	1%	Not provided
Other/multiracial	0.56%	2%	Not provided

Based on the data taken from the ECHO reports, the demographics have remained relatively similar; however, several demographic elements were not amenable to direct comparison as described below.

The statistic from the 2000 census, *persons below poverty level*, did not have a direct counterpart in the more recent report so a direct comparison cannot be made. Instead, the

[1] As reported in the 2010 WM Waste FPOR.
[2] As obtained from ECHO Detailed Facility Report on 12/13/2021

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more recent report provided a statistic for *persons with low income* which was defined in ECHO as "the number of people in the selected area that have an income less than two times the poverty level, based on the 2014-2018 ACS 5-Year Summary."

It is not clear how the statistic regarding *percent people of color* can be reconciled with the *race breakdown*. According to ECHO, the *percent people of color* "is calculated by subtracting the number of persons who are white (and not of Hispanic origin) from the total persons. The number is then divided by the total persons and multiplied by 100 to determine the percentage." It is not clear how the 11% percent minority figure can be reconciled with the stated white population of 95.07%.

The *households on public assistance* statistic increased from 38 to 147; however, it too may not be appropriate for a direct comparison. This is due to the methodology used to calculate the recent statistic which was based on "the number of households that are on any type of public assistance (including subsidized housing, welfare, aid to dependent children, etc.), based on the 2014-2018 ACS 5-Year Summary." It is not known what impact, if any, changes to the qualification requirements for public assistance since 2000 may have had on the measurement.

In any case, the continued operation of the facility is not anticipated to result in any significant negative impact to the surrounding community particularly since WM Waste is not proposing an expansion or increase in capacity for the facility; further WM Waste has ceased mercury retorting operations and is converting the site to a storage and transshipment facility.

EJ Screen

An EJ Screen was conducted on December 15, 2021. The resulting report described screening level indicators for eleven specific environmental justice indices for a 3-mile radius surrounding the facility. A 3-mile radius was chosen for EJ Screen to be consistent with the radius of the demographic profile discussed above.

The indicators in the EJ Screen are provided as percentile values for comparison to the corresponding state, regional and national indices. EPA has indicated that further evaluation may be appropriate for those areas that are under consideration that are at or above the 75th or 80th percentile state-wide or nationally.[3,4] The highest indicator for the area surrounding the facility was at the 93rd state percentile value for PM2.5 and Ozone. However, as indicated in the above discussion of the demographics for the area, the

[3] In a video example explaining how EPA uses EJSCREEN, EPA stated that one of the initial steps in evaluating the results is to compare indices that "stood out." In doing so, EPA considered state percentiles that exceeded 75% as standing out. See How Does EPA Use EJSCREEN? | US EPA @11:07 minute mark.

[4] In technical guidance for assess EJ in regulatory analysis, EPA stated that "When using EJSCREEN, the 80th percentile is a suggested starting point for the purpose of identifying geographic areas in the United States that may warrant further consideration, analysis, or outreach." See page 43 of Technical Guidance for Assessing Environmental Justice in Regulatory Analysis - April 2016 (epa.gov)

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numbers showed a low minority population, and low numbers of people affected by poverty. The demographic evaluation outcome did not indicate the presence of a minority or low-income block group that would have been affected by the 93rd percentile outcomes. A copy of the EJ Screen Report is provided in Appendix 12 of the FPOR.

Continued operation of the facility is not expected to have significant adverse social and environmental impacts to the surrounding community particularly since WM Waste is not proposing an expansion or increase in capacity for the facility, and also because WM Waste has ceased mercury retorting operations and is converting the site to a storage and transshipment facility. In fact, WM Waste has taken significant steps which minimize its potential adverse community impacts as they relate to EJ indices, including but not limited to:

- Air Emissions Reductions and Respiratory Hazards (PM2.5, Ozone, Diesel PM, Air Toxics)

  Although an exempt recycling activity, elimination of the mercury retorting operation significantly reduced any potential community impact from air toxics. While the mercury retorting operations were well operated and managed in a manner that minimized emissions to the atmosphere, the potential, however remote, for exposure to mercury did exist. The termination of those operations minimizes such risks.

  Other measures that will be taken to mitigate the potential for air emissions are described below:
  - No large containers (i.e., >121 gallons) of hazardous waste will be accepted by WM Waste unless they have a low concentration (i.e., 500 ppm or less of volatile organics). This limitation significantly reduces the potential for adverse air emissions and respiratory impacts.
  - Although Wisconsin regulations require weekly inspections of containers to ensure they are in good condition and not leaking or open, WM Waste conducts inspection of all containers each operating day,

- Traffic
  - WM Waste expects several tractor-trailer trucks per day delivering hazardous waste to the site or shipping hazardous waste from the site in addition to employee personal vehicles. The impact from this traffic, if any, is not expected to be significant as a result of the continued operation of the facility given that the facility has been operating in similar traffic conditions for more than a decade.

- Lead Paint
  - The facility does not present exposure to lead paint.

- Superfund Proximity
  - The facility is not a Superfund site. The nearest Superfund site is located approximately 14 miles south of the facility in Illinois[5].

- RMP Proximity
  - The facility is not an RMP site. There is one RMP site located approximately two miles from the facility[6].

- Hazardous Waste Proximity
  - The facility is a hazardous waste storage facility. No hazardous waste treatment or disposal will occur at the site. The nearest Hazardous Waste Treatment Storage Disposal Facility is located approximately 30 miles from WM Waste in Waukesha, WI[7].
  - As a storage facility, WM Waste provides benefits to hazardous waste generators in the region so that they may transport hazardous waste in a more cost-effective manner while maintaining protection to the environment. Renewal of the license will allow a broader range of waste types than allowed under the previous license which will provide more and safer management options for hazardous waste generators in the area.

- Wastewater Discharges
  - All contact wastewater generated at the site will continue to be collected and transported offsite for disposal.
  - All storage of hazardous waste will continue to occur within licensed container storage areas upon sealed concrete floors.
  - All of the licensed container storage areas will continue to be provided with adequate secondary containment, using the conservative assumption that each container contains 100% free liquids.
  - WM Waste is in the process of closing four licensed hazardous waste tanks which further reduces the potential for spills or leaks of wastewater.

4.26 NR 670.014(2)(x)(3) - Determination of Need

WM Waste satisfies the "needs requirement" of § 289.39(1), Wis. Stats. because it is not a "proposed" facility nor is it proposing an expansion nor significant changes. The Department wrote:

> "In a case where a 10-year renewal application for an existing facility that is not proposing an expansion or any significant changes in its operations, the needs

[5] Superfund National Priorities List (NPL) Where You Live Map (arcgis.com)
[6] EPA Emergency Response (ER) Risk Management Plan (RMP) Facilities - Overview (arcgis.com)
[7] RCRAINFO Search | US EPA

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requirement may be satisfied by a statement that the facility already exists and is not proposing an expansion or significant changes."

The facility is an existing facility and there are no expansions nor significant changes proposed. In fact, there is a *reduction* of previously approved hazardous waste storage areas and capacity in that this response clarifies that storage areas S-9 through S-11 are no longer proposed to be licensed for hazardous waste storage in the reissuance. Additionally, the wastewater treatment system (a licensed hazardous waste treatment unit) has been removed from the license renewal application, indicating a further reduction, not expansion, of hazardous waste treatment activity. As noted above, the revised application also reduces the waste codes the facility proposes to manage from what was originally proposed. Lastly, the facility will store the fewer waste categories as currently managed, resulting in no significant change to existing management methods or practices. In fact, the current license allows WM Waste to receive and manage hazardous wastes that are characteristic and/or listed for ignitability, corrosivity, reactivity, and toxicity. The reactive waste category has been removed from the license renewal category.

Given that the facility is an existing facility which is not proposed by this license renewal application to be either expanded nor significantly changed, there is no requirement for a separate needs analysis.

4.27 NR 670.014(3) Additional Information Requirements for Groundwater Protection

The WM Waste facility does not include a landfill or surface impoundment, which are identified as "regulated units" under NR 664.0090(1)(b), so supplying this information is not required.

4.28 NR 670.014(4) Solid Waste Management Units

WDNR completed the RCRA Facility Assessment (RFA) in 2000 for the WM Waste facility, a copy of which is included in Appendix 13. WDNR then requested that WM Waste complete a RCRA Facility Investigation (RFI).

The RFI was completed in 2003, and eighteen (18) Solid Waste Management Units (SWMUs) and 2 Areas of Concern (AOCs) were identified. The SWMUs included the recycling ovens, the waste storage areas (both indoors and out), the loading docks, and several areas associated with the stormwater discharge system at the site. One of the AOCs grouped together several incidents that related to oven over-pressurizations in the Retort Room between 1998 and 2001. The other AOC was a mercury spill in 1999. A portion of the RFI is included in Appendix 14 (the supporting Appendices B through J have been omitted for brevity).

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WM Waste proposed a site-wide evaluation that incorporated all SWMUs and AOCs into a single investigatory effort. WDNR accepted the approach.

In late 2004 and 2005, WM Waste completed the RFI that included the collection of the following site-wide sampling efforts.

- Approximately 150 surface soil samples. Only 2 samples exceeded the WDNR site-specific clean-up standard for soil.
- Approximately 30 subsurface soil samples from 11 boring locations. The results of deep soil sampling showed only 4 samples that were above the level of detection for the sampling, of which none exceeded the site-specific clean-up standard for soil.
- Ground water samples from 4 ground water wells. The results of the ground water sampling from the perched units were almost two magnitudes below the drinking water standard.

In March 2007, WDNR assigned a site-specific clean-up standard of 10 mg/kg mercury.

In August 2007, WM Waste broke ground on a major capital improvement project that included the replacement of most paved surfaces on-site, and the installation of a new storm water retention pond. During this effort, WM Waste collected over 300 additional soil samples in areas in which pavement was replaced to confirm soil mercury levels. None of the samples exceeded the site-specific clean-up standard for soil.

WM Waste submitted the Final Project Report with a summary of all site characterization efforts to WDNR in August 2008.

On November 10, 2008, WDNR reviewed the report and provided WM Waste with a closure letter requesting that two items be completed before closure could be approved:

- Abandon on-site monitoring wells;
- Provide required information for WDNR GIS system;

WM Waste has abandoned the wells and completed the GIS registration requirement. A copy of the final WDNR sign-off letter indicating that no further action is required is included in Appendix 15.

Historical Monitoring Program

As part of the previous license issued on August 18, 2011, WM Waste was required to implement a monitoring program to monitor and minimize emissions of mercury to the environment associated with licensed operations (license conditions 59-63). The monitoring program included the following:

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- License Condition 59 - Soil Monitoring
  - Biennial soil sampling of site soils for mercury and comparison of the analytical results to the site specific standard for mercury of 10 mg/kg.
- License Condition 60 and 61 – Stormwater Monitoring
  - Annual monitoring of storm water retention basin for mercury in accordance with the approved sampling plan.
- License Condition 62 – Weekly Mercury Vapor Monitoring
  - Weekly monitoring from all process vents
- License condition 63 - Daily mercury vapor monitoring
  - Daily mercury vapor monitoring inside the East and West Buildings.

License condition 59.e requires the soil sampling results for mercury be recorded on a drawing and in a tabular format with the left most column showing the grid location that the sample was taken from and the top row indicating the year the sample was collected. A copy of this table summarizing all sampling results is included as Table 20-1 in Appendix 20. As shown in this table, concentrations of mercury were below the 10 mg/kg standard during all sampling events except for 2020 at seven locations. In accordance with License condition 59.f and 59.g, WM Waste notified WDNR of the exceedance on December 2, 2020. Upon further review of the analytical data, excavation of the impacted areas and confirmation sampling was recommended at the seven locations that exceeded 10 mg/kg. Post excavation analytical results indicated concentrations at all seven locations were below 10 mg/kg.

On February 15, 2021, a report summarizing the excavation, sampling, results, along with a request for No Further Action, was submitted to WDNR's Remediation and Redevelopment (RR) Program (See BRRTS Activity # 02-52-586-974).

On July 14, 2021, in response to the NFA request, WDNR issued a No Further Action Not Recommended letter and requested additional investigation. A work plan for the additional site investigation activities was submitted on October 15, 2021. The work plan was approved by WDNR on March 9, 2022. On October 25, 2022, a site investigation report and remedial action plan was submitted to WDNR. A copy of that report is included as Appendix 17. Updated information on this investigation is contained on the BRTT site at WDNR EM/RR BOTW (wi.gov).

It should be noted that the area of the facility being investigated and otherwise addressed pursuant to BRRTS #02-52-586974 is not a Solid Waste Management Unit under Wisconsin law and, as such, NR 670.014(4) is inapplicable.

Pursuant to § 291.37(1)(c), Wis. Stats., a "Solid waste management unit" means any unit designed or used for the storage, treatment or disposal of solid waste or hazardous waste or both, which is located in a hazardous waste facility required to have a license under s. 291.25 or a permit under 42 USC 6925 or required to comply with s. 291.29. "Solid

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waste management unit" includes but is not limited to a container, tank, surface impoundment, disposal facility, incinerator, wastepile, landfill, underground injection well, land treatment unit or wastewater treatment facility.

The residually impacted carbon material spilled during the routine carbon change out process that WM Waste is responding to and has been assigned BRRTS #02-52-586974 is being managed by WDNR's Remediation & Redevelopment (R&R) Bureau as a hazardous substance spill site under the authority of § 292.11(3), Wis. Stats. and Chp. NR 700, Wis. Admin. Code. For a full description of the background of this release, see *Site Investigation Work Plan* (Tetratech 2021) and documents cited therein.

This area of the facility was not "designed or used" for the storage, treatment or disposal of solid or hazardous waste nor does it carry any of the characteristics of the exemplars provided in the statutory definition. As such, it is not a "solid waste management unit" under Wisconsin law. Rather, it was an area that became impacted due to an inadvertent spill, not intended storage, treatment or disposal activities. The cited code provision (NR 670.014(4)) is inapplicable by its own terms. The code section anticipates submittal of information on SWMUs, including "when the unit was *operated*…and specifications of all waste *managed"* (emphasis added). § NR 670.014(4)(a)(4)&(5), Wis. Admin. Code. The subject area (residually impacted soils from a spill) was never "operated" nor were wastes specifically "managed" in this area. Both the statutory definition cited above and the code provision taken together reveal that the definition of SWMU (and therefore the information that must be included in the FPOR) is of a specifically constructed area intended for use as a storage, treatment or disposal area within the licensed facility. The area being addressed by the WDNR R&R Bureau meets none of those requirements.

At most, NR 670.002(3) concerning CAMUs may apply. That definition provides: "Corrective Action Management Unit" or "CAMU" means an area within a facility that is designated by the department under subch. S of ch. NR 664, for the purpose of implementing corrective action requirements s. NR 664.0101 and s. 291.37, Stats, or 42 USC 6928 (h). A CAMU shall only be used for the management of remediation wastes pursuant to implementing corrective action requirements at the facility." Even this designation, however, does not appear applicable to this area because WDNR has made no such designation and indeed has cited its authorities under the spill cleanup law as the basis of its case management jurisdiction.

The DNR wrote: "As you are aware, the DNR reviews environmental remediation cases for compliance with applicable laws, including Wis. Stat. ch. 292 and Wis. Admin. Code chs. NR 700 – 754 and whether any further threat to public health, safety or welfare or the environment exists at the site or facility, per Wis. Admin. Code § NR 726.13 (2) (b)." See, July 14, 2021 Site Closure Not Recommended Letter.

All other monitoring records indicated no issues which would warrant additional evaluation and/or corrective actions. Results from stormwater monitoring as required by License

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Conditions 60 and 61 are provided in Appendix 21. All historical monitoring records will continue to be maintained in the facility's operating record.

The continuous monitoring system which was used to measure mercury vapor monitoring conducted in accordance with License Condition 63 is no longer in use since mercury retort operations are no longer conducted.

5.0 NR 670.015 Feasibility and Plan of Operation Report Information for Containers

WM Waste has nine (9) licensed container storage areas as identified in the following table.

Storage Area Name	**ID**	**Description**	**Waste Type (See also Section 5.4 for Incompatible Waste Segregation Procedures**	**Indoors (I) or Outdoors (O)**	**Capacity (Basis)**
Containerized Wastes					
Licensed Container Storage Area #1	S-1	Container storage area on west wall of West Building	Non-flammable	I	33,000 gals (600 55-gal equiv.) *
Licensed Container Storage Area #2	S-2	Container storage area in West Building	Non-flammable	I	7,480 gal (136 55-gal equiv.)*
Licensed Container Storage Area #3	S-3	Container Storage on east wall of West Building	Non-flammable	I	14,080 gal (256 55-gal equiv.)*
Licensed Container Storage Area #4	S-4	Container Storage on west wall of East Building	Non-flammable	I	14,080 gal (256 55-gal equiv.)*
Licensed Container Storage Area #5	S-5	Container Storage on north wall of East Building	Non-flammable	I	8,800 gal (160 55-gal equiv.)*
Licensed Container Storage Area #6	S-6	Flammable liquid containers storage shed adjacent to West	Flammables	I	2,035 gal (37 55-gal equiv.)*

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		Building in Receiver Yard			
Licensed Container Storage Area #7	S-7	Container storage area in West Building	Non-flammable	I	4,400 gal (80 55-gal equiv.)*
Licensed Container Storage Area #8	S-8	Container storage area in West Building	Non-flammable	I	8,800 gal
Containerized Waste Total					92,675 (1,685 55-gal equiv.)
Storage Area Name	**ID**	**Description**		**Indoors (I) or Outdoors (O)**	**Capacity (Basis)**
Roll-off Box Containers and/or Other Containers					
Licensed Container Storage Area #8	S-8	Container storage (typically roll-off in south end of West Building	Non-flammable	I	120 cubic yards (3 40 yd^3 roll-offs)** & 8,800 gallons (160 55-gal drums or DE)*
Licensed Container Storage Area #12	S-12	Container (roll-off) storage	Non-flammble	O	320 cubic yards (8 40 yd^3 roll-off)**
Roll-off Box Container Storage Total					440 cubic yards

* The majority of hazardous waste containers managed in S-1 through S-7 will primarily contain liquids. Therefore, the capacity of these units is listed in gallons. S-8 will manage roll-off box containers as well as non-roll-off box containers. Containers containing solids that may be typically measured in in cubic yards will be converted to gallons using a conversion factor of 1 cubic yard = 202 gallons. This conversion is implemented as part of the inventory management procedure.

** Note: alternative capacity roll-off containers (i.e., 20 yd^3, 25 yd^3) may also be used.

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The following sections describe the applicability of the container storage regulations to each licensed container storage area.

5.1 NR 670.015(1) Description of Containment Systems

Secondary containment calculations for each container storage area have been developed and certified by a Professional Engineer in accordance with NR 670.014(1) and are included in Appendix 16, Attachment 16-1. Drawings depicting the updated configuration of each container storage area are provided in Appendix 16, Attachment 16-2**.** A table that shows the total maximum container volume, the largest container, and the secondary containment capacity is provided on each of the figures in Attachment 16-2. The description, design, and secondary containment capacity of each container storage area is summarized below.

S-1

a. Basic design parameters, dimensions, and materials of construction - The hazardous waste storage containment system for S-1 has been designed to comply with NR 664.0175. The storage area has been constructed in one continuous concrete slab base free of cracks or gaps that could allow liquids to penetrate the surface. All concrete surfaces have been treated with an impervious epoxy coating or equivalent that is inert and non-reactive with the chemicals that may be stored in this area. A description of the containment coating that will be applied prior to the license being reissued is included in Appendix 18. However, alternative impervious epoxy coatings or equivalent may be used in the future. WM Waste will maintain documentation regarding the coating and will provide it to the Department upon request. The floor has been reinforced to handle the weight of a forklift and a 5,000-pound load. The location of this unit within the facility is identified in Appendix 1, Figure A-3. Details and dimensions of the area are depicted in Appendix 16.

b. Drainage from standing liquids - All containers in this storage area are stored on either double-stacked pallets or in a three-tiered racking system, which ensures that the containers are not allowed to stand in liquids that may accumulate in this area. Each row of pallets has a minimum 2-foot aisle space on two opposite sides to allow for inspection. The three-tiered racking system at the facility consists of three levels of metal shelving designed to store pallets of containers. The container configuration is depicted in Appendix 16, Figure 16-1.

c. Containment capacity -

Licensed capacity -	33,000 gal.
Dimensions - 59.75’ x 41.67’ x 3.5” deep =	5,432 gal.
Ramp #1 displacement- 0.5 x 5.17' L x 10' W x 3.5" H	56 gal.
Less ramp #2 displacement- 0.5 x 4.58' L x 4.67' W x 3.5" H	23 gal.
Less drum displacement- 199 drums x (2’ D)2 x 3.1416/4 x 3.5” H =	1,364 gal.

Available secondary containment - 3,988 gal.

Since the available secondary containment (3,988 gallons) is greater than 10% of the licensed capacity (3,300 gallons) and is larger than the largest expected container (55-gallons), this location has adequate secondary containment.

d. Run-on management - This container storage area is located inside the West Building, under roof and with full walls, preventing run-on of precipitation into the containment area.

e. Accumulated liquid removal - Any liquids that may accumulate in this area are managed per the discussion in Section 4.8 NR 670.014(2)(h) of this FPOR.

S-2

a. Basic design parameters. dimensions and materials of construction - The hazardous waste storage containment system for S-2 has been designed to comply with NR 664.0175. The storage area has been constructed in one continuous concrete slab base free of cracks or gaps that could allow liquids to penetrate the surface. All concrete surfaces have been treated with an impervious epoxy coating or equivalent that is inert and non-reactive with the chemicals that may be stored in this area. A description of the containment coating that will be applied prior to the license being reissued is included in Appendix 18. However, alternative impervious epoxy coatings or equivalent may be used in the future. WM Waste will maintain documentation regarding the coating and will provide it to the WDNR upon request. The floor has been reinforced to handle the weight of a forklift and a 5,000-pound load. The location of this unit within the facility is identified in Appendix 1, Figure A-3. Details of the area are depicted in Appendix 16**.**

b. Drainage from standing liquids - All containers in this storage area are stored on double-stacked pallets, which ensures that the containers are not allowed to stand in liquids that may accumulate in this area. Each row of pallets has a minimum 2-foot aisle space on two opposite sides to allow for inspection. The container configuration is depicted in Appendix 16, Figure 16-2.

c. Containment capacity –

Licensed capacity -	7,480 gal.
Dimensions: 24’ x 24.92 x 5”=	1,864 gal.
Ramp #1 displacement- 0.5 x 5' L x 10’ W x 5" H =	78 gal.
Ramp #2 displacement- 0.5 x 3.92' L x 4.58’ W x 5" H =	28 gal
Less drum displacement-67 drums x (2’ D)2 x 3.1416/4 x 5” H =	656 gal
Available secondary containment -	1,102 gal.

Since the available secondary containment (1,102 gallons) is greater than 10% of the licensed capacity (748 gallons), and is also larger than the largest expected container (55-gallons), this location has adequate secondary containment.

d. Run-on management - This container storage area is located inside the West Building, under roof, and with full walls, preventing run-on of precipitation into the containment area.

e. Accumulated liquid removal - Any liquids that may accumulate in this area are managed per the discussion in Section 4.8 NR 670.014(2)(h) of this FPOR.

S-3

a. Basic design parameters, dimensions and materials of construction - S-3 may manage hazardous waste received from off-site, 90-day site generated waste, and non-hazardous waste. The hazardous waste storage area has been constructed in one continuous concrete slab base free of cracks or gaps that could allow material to penetrate the surface. The floor has been reinforced to handle the weight of a forklift and a 5,000-pound load. All concrete surfaces have been treated with an impervious epoxy coating or equivalent that is inert and non-reactive with the chemicals that may be stored in this area. A description of the containment coating that will be applied prior to the license being reissued is included in Appendix 18. However, alternative impervious epoxy coatings or equivalent may be used in the future. WM Waste will maintain documentation regarding the coating and will provide it to the department upon request. The location of this area within the West Building is depicted in Appendix 1, Figure A-3. Details of the area are depicted in Appendix 16.

b. Drainage from standing liquids - All containers are stored on double stacked pallets. As such, the containers are kept from contact with potential liquids on the floor. Secondary containment is provided by walls and curbs on three sides with a trench extending across the front of the container storage area. The trench allows for all potential liquids released in this area to be drained from the container storage area and collected in the trench. Each row of pallets has a minimum 2-foot aisle space on two opposite sides to allow for inspection. Pallets may be stacked 2 pallets high. The container configuration is depicted in Appendix 16, Figure 16-3.

c. Containment capacity –

Licensed capacity -	14,080 gal.
Curbed containment dimensions – 17.25’ W x 51.92’ L x 4” H =	2,233 gal.
Trench dimensions – 10” W x 11” H x 51.92’ L =	297 gal.
Less drum displacement-127 drums x (2’ D)2 x 3.1416/4 x 4” H=	995 gal.
Available secondary containment -	1,535 gal.

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Since the available secondary containment (1,535 gallons) is greater than 10% of the licensed liquid capacity (1,408 gallons) and is also larger than the largest expected container (55-gallons), this location has adequate secondary containment.

d. Run-on management - This container storage area is located inside the West Building, under roof, and with full walls, preventing run-on of precipitation into the containment area.

e. Accumulated liquid removal - Any liquids that may accumulate in this area's secondary containment are managed per the discussion in Section 4.8 NR 670.014(2)(h) of this FPOR

S-4

a. Basic design parameters. dimensions, and materials of construction - S-4 manages hazardous waste containers.. The hazardous waste storage area has been constructed in one continuous concrete slab base free of cracks or gaps that could allow material to penetrate the surface. All concrete surfaces have been treated with an impervious epoxy coating or equivalent that is inert and non-reactive with the chemicals that may be stored in this area. A description of the containment coating that was applied in August of 2020 is included in Appendix 18. However, alternative impervious epoxy coatings or equivalent may be used in the future. WM Waste will maintain documentation regarding the coating and will provide to the WDNR upon request. The floor has been reinforced to handle the weight of a forklift and a 5,000- pound load. The area is depicted in Appendix 1, Figure A-3. Details of the area are depicted in Appendix 16.

b. Drainage from standing liquids - All containers are stored on double stacked pallets. As such, the containers are kept from contact with standing liquids by being elevated on the pallets. Secondary containment is provided by walls and curbs on three sides with a trench extending across the front of the container storage area. The trench allows for all potential liquids released in this area to be drained from the container storage area and collected in the trench. Each row of pallets has a minimum 2-foot aisle space on two opposite sides to allow for inspection. Pallets may be stacked 2 pallets high. The container configuration is depicted in Appendix 16, Figure 16-4.

c. Containment capacity - Licensed capacity – 14,080 gal.
Curbed containment dimensions – 52' L x 17.75’ W x 4” H = 2,301 gal.
Trench dimensions - 10" W x 11" H x 52’ L = 297 gal.
Less drum displacement-143 drums x (2’ D)2 x 3.1416/4 x 4” H = 1,120 gal.
Available secondary containment - 1,478 gal.

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Since the available secondary containment (1,478 gallons) is greater than 10% of the licensed liquid capacity (1,408 gallons) and is also larger than the largest expected container (55-gallons), this location has adequate secondary containment.

d. Run-on management - This container storage area is located inside the East Building, under roof, and with full walls, preventing run-on of precipitation into the containment area.

e. Accumulated liquid removal - Any liquids that may accumulate in this area's secondary containment are managed per the discussion in Section 4.8 NR 670.014(2)(h) of this FPOR

S-5

a. Basic design parameters. dimensions and materials of construction - S-5 manages hazardous waste in containers. The storage capacity will contain no free liquids. The hazardous waste storage area has been constructed in one continuous concrete slab base free of cracks or gaps that could allow material to penetrate the surface. All concrete surfaces have been treated with an impervious epoxy coating or equivalent that is inert and non-reactive with the chemicals that may be stored in this area. A description of the containment coating that was applied in August of 2020 is included in Appendix 18. However, alternative impervious epoxy coatings or equivalent may be used in the future. WM Waste will maintain documentation regarding the coating and will provide it to the WDNR upon request. The floor has been reinforced to handle the weight of a forklift and a 5,000-pound load. The location of this area within the East Building is depicted in Appendix 1, Figure A-3. Details of the area are depicted in Appendix 16.

b. Drainage from standing liquids - All containers are stored on double stacked pallets. As such, the containers are kept from contact with standing liquids by being elevated by the pallets. Secondary containment is provided by walls and curbs on three sides with a trench extending across the front of the container storage area. The trench allows for all potential liquids released in this area to be drained from the container storage area and collected in the trench. Each row of pallets has a minimum 2-foot aisle space on two opposite sides to allow for inspection. Pallets may be stacked 2 pallets high. The container configuration is depicted in Appendix 16, Figure 16-5.

c. Containment capacity –

Licensed capacity -	8,800 gal.
Curbed containment dimensions-28.33’ L x 16.17’ W x 5” H =	1,428gal.
Trench Leg #1 dimensions - 10" W x 11" H x 28.3’ L =	162 gal.
Trench Leg #2 dimensions - 10" W x 11" H x 6.3’ L =	36 gal.
Volume within curb above Leg #1 and Leg #2 -10” W x 5” H x 34.6 ‘ L =	90 gal

Displacement
79 drums – 79 drums x (2')2 x 3.1416/4 x 5" H = 774 gal.
Available secondary containment - 941 gal.

Since the available secondary containment (941 gallons) is greater than 10% of the licensed liquid capacity (880 gallons) and is also larger than the largest expected container (55-gallons), this location has adequate secondary containment.

d. Run-on management - This container storage area is located inside the East Building, under roof, and with full walls, preventing run-on of precipitation into the containment area.

e. Accumulated liquid removal - Any liquids that may accumulate in this area's secondary containment are managed per the discussion in Section 4.8 NR 670.014(2)(h) of this FPOR.

S-6

a. Basic design parameters, dimensions and materials of construction - S-6 may manage hazardous, 90-day site-generated, and non-hazardous liquid waste. This container storage area is a pre-manufactured flammable shed capable of storing flammable liquids with secondary containment, a 4-hour fire rating and a fire suppression system. The unit is constructed of painted steel and is compatible with the materials that may be stored in this area. The secondary containment pan is free of cracks or gaps that could allow material to penetrate the surface and enter the concrete beneath it. The unit is located outside of the east wall of the West Building next to the main dock. This area is more than 50 feet from the property line, allowing the storage of ignitable (D001) wastes within the unit. The location of this unit is depicted in Appendix 1, Figure A-3. Details of the area are depicted in Appendix 16. Additional specifications and the local Fire Department installation approval are also included in Appendix 16.

b. Drainage from standing liquids - This storage area may be used for palletized or non-palletized containers on the elevated grating. As such, the containers are kept from contact with standing liquids by being elevated above the spill pan. Each row of containers has a minimum 2-foot aisle space on two opposite sides to allow for inspection. Secondary containment is provided by a steel pan beneath the shed. Since the drums sit on a steel grate above the pan, there are no displacements to be allowed for. Drums are not stacked. The container configuration is depicted in Appendix 16, Figure 16-6.

c. Containment capacity –
Licensed capacity - 2,035 gal.
Sump Dimensions - 6.92' W x 40.92' L x 11" H 1,942 gal.

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Available secondary containment - 1,942 gal.

Since the available secondary containment (1,942 gallons) is greater than 10% of the licensed capacity (204 gallons) and is also larger than the largest container (55 gallons), this location has adequate secondary containment.

d. Run-on management - This container storage area is located outside, but the unit is supplied with a roof and walls and the pan is slightly smaller than the outside dimensions of the unit, thus preventing stormwater from running into the containment area.

e. Accumulated liquid removal - Any liquids that may accumulate in this area's secondary containment are managed per the discussion in Section 4.8 NR 670.014(2)(h) of this FPOR.

S-7

a. Basic design parameters. dimensions, and materials of construction - This container storage area manages hazardous waste in containers. Containers may include 55 gallon drums and 260 gallon totes. The hazardous waste storage area has been constructed in one continuous concrete slab base free of cracks or gaps that could allow material to penetrate the surface. All concrete surfaces have been treated with an impervious epoxy coating or equivalent that is inert and non-reactive with the chemicals that may be stored in this area. A description of the containment coating that will be applied prior to the license being reissued is included in Appendix 18. However, alternative impervious epoxy coatings or equivalent may be used in the future. WM Waste will maintain documentation regarding the coating and will provide it to the WDNR upon request. The location of this area within the West Building is depicted in Appendix 1, Figure A-3. Details of the area are depicted in Appendix 16.

b. Drainage from standing liquids -. All containers are stored on double stacked pallets. As such, the containers are kept from contact with standing liquids by being elevated by the pallets. Secondary containment is provided by walls and curbs on three sides with a trench extending across the front of the container storage area. The trench allows for all potential liquids released in this area to be drained from the container storage area and collected in the trench. Each row of pallets has a minimum 2-foot aisle space on two opposite sides to allow for inspection. Pallets may be stacked 2 pallets high. The container configuration is depicted in Appendix 16, Figure 16-7.

c. As such, the container is kept from contact with potential liquids on the floor. Other container types will be stored on an elevated surface, such as a pallet.

d. Containment capacity -

Licensed capacity -	4,400 gal
Storage area dimensions – 30’ L x 10’ W x 5”H	935 gal
Displacement volume of 39 drums below curb	
3.1416/4 x (2’)2 x 5” H x 39 drums =	(382) gal
Available secondary containment	553 gal

e. Since the available secondary containment (553 gal) is greater than 10% of the licensed capacity (440 gal), and is also greater than the largest container volume (55 gallons for drum, and 275 gallons for tote), S-7 has adequate secondary containment.

f. Run-on management - This container storage area is located inside the West Building, under roof, and with full walls, preventing run-on into the area.

g. Accumulated liquid removal - Any liquids that may accumulate in this area's secondary containment are managed per the discussion in Section 4.8 NR 670.014(2)(h) of this FPOR.

S-8

a. Basic design parameters. dimensions and materials of construction - This container storage area manages up to 3 roll-off containers of 40-cubic yard capacity or less. This area may also manage other types of containers, such as, but not limited to, super sacks and drums. Up to 160 55-gallon drums (DE) may be managed in S-8.In relation to this document, super sacks are heavy-duty bags designed to contain flowable, solid materials such as spent catalysts. Most are made of durable, woven polypropylene fabric and have lift straps affixed to the top so that they can be easily maneuvered by a forklift. The floor of this waste storage area is constructed of concrete free of cracks or gaps that could allow material to penetrate the surface. All concrete surfaces have been treated with an impervious epoxy coating or equivalent that is inert and non-reactive with the chemicals that may be stored in this area. A description of the containment coating that will be applied prior to the license being reissued is included in Appendix 18. However, alternative impervious epoxy coatings or equivalent may be used in the future. WM Waste will maintain documentation regarding the coating and will provide it to the WDNR department upon request. The location of this area is within an addition to the south end of the West Building and is depicted in Appendix 1, Figure A-3. Details of the area are depicted in Appendix 16.

b. Drainage from standing liquids - The western half of the S-8 storage area is normally expected to be used for roll-off containers that are raised off the floor by runners, which keeps the bottom of the roll-off door above the liquid containment height. The floors are also sloped to cause the liquids to drain to a low point trench to keep the containers from contact with liquids that may be present in the area. The

eastern portion of the area is sloped to a center point allowing potential liquids that may be present to run to the center of the room. Containers in this area will be on stored on pallets or other means to prevent contact with the ground. The pallets will be placed within the painted lines. The container configuration is depicted in Appendix 16, Figure 16-8.

c. Containment capacity –

Licensed capacity -	120 cubic yards & 8,800 gal
Ramp area dimensions – 3.22 sf x 49.5 sf	1,193 gal
Curbed dimensions – 78.9’ L x 39.0’W x 4” H	7,673 gal
Trench dimensions – 38.5’ L x 10’ W x 11”H	220 gal
12-inch area above trench – 45.3’ L x 12” W x 2.8” H	79 gal
Area behind trench – 0.58 sf x 45.3 ft	196 gal

Displacement

Pyramid at east of ramp – 1/3 x 27.5’L x 5’W x 2.8” H	(80) gal
Speed Bump dimensions – 0.5 x 3.1416/4 x (1”)2 x 25’ L =	(2) gal
Wedge at west door – 0.5 x 6.75’ L x 8.58’ W x 2.8” H	(51) gal
Roll off wheel displacement – 3 rolloffs x 2 wheels x 2 gal	(12) gal

(3 roll offs, displacement from 2 wheels per roll-off, assume 2 gallons each)

Available secondary containment	9,217 gal

Since the available secondary containment (8278 gal) is greater than 10% of the aggregate licensed capacity (3,304 gal), and is also greater than the largest single container (8,078 gal), S-8 has adequate secondary containment.

d. Run-on management - This container storage area is located indoors on the south end of the West Building, under roof, with full walls to reduce the contact with precipitation. The entrance to the area from the south is also sloped away from the building to prevent run-on from outdoors.

e. Accumulated liquid removal - Any liquids that may accumulate in this area's secondary containment are managed per the discussion in Section 4.8 NR 670.014(2)(h) of this FPOR.

S-12

a. Basic design parameters, dimensions and materials of construction – This container storage area is constructed to manage up to 8 roll-off containers of 40-cubic yard capacity or less. The floor of each waste storage area is constructed of concrete free of cracks or gaps that could allow material to penetrate the surface. All concrete surfaces have been treated with an impervious epoxy coating or equivalent that is

inert and non-reactive with the chemicals that may be stored in this area. A description of the containment coating that will be applied prior to the license being reissued is included in Appendix 18. However, alternative impervious epoxy coatings or equivalent may be used in the future. WM Waste will maintain documentation regarding the coating and will provide it to the WDNR upon request. The location of this area is in the receiving yard south of the West Building and is depicted in Appendix 1, Figure A-3. Details of the area are depicted in Appendix 16.

b. Drainage from standing liquids - The storage area is sloped to a trench to keep the containers from contacting liquids that may be present in the area. The storage area is covered by a shed roof with walls on three sides. In addition, the rails of the roll-off boxes keep the bottoms of the containers above the maximum liquid height of the storage area. The container configuration is depicted in Appendix 16, Figure 16-9.

c. Containment capacity -
Each storage area has the following capacity and dimensions:

Licensed capacity -	320 cubic yards
Storage Area	
Ramp area dimensions – 0.5 x 23.08’ L x 91.67’ W x 15.8” H	10,421gal
Trench dimensions (adding in 2 ft for interior walls) – 87.67’ L x 9” W x 8” H	328 gal
11-inch area above trench – 91.67’ L x 11” W x 15.8” H	828 gal
Area behind trench – 1.29 sf x 91.67’	885 gal
Displacement	
Roll-off runner displacement – 5.52 sf wedge area x 1.375” (8 roll-offs, 2 per roll-off)	(76) gal
Roll-off box displacement – 2.55 sf wedge area x 7.33’ (8 roll-offs)	(1,119) gal
Roll-off wheel displacement – 3 roll-offs x 2 wheels x 2 gal (8 roll-offs, displacement from 2 wheels per roll-off, assume 2 gal each)	(32) gal
Available secondary containment -	11,234 gal.

Since the secondary containment (11,234 gal) is greater than 10% of the licensed capacity (6,463 gal), and is also greater than the largest container volume of 8,079 gallons, Area S-12 has adequate secondary containment.

d. Run-on management - Each container storage area is located under roof with three walls to reduce the potential for contact with precipitation. The entrance to each area is also sloped away from the containment area to prevent run- on from the receiving yard.

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e. Accumulated liquid removal - Any liquids that may accumulate in each area's secondary containment are managed per the discussion in Section 4.8 NR 670.014(2)(h) of this FPOR.

5.2 NR 670.015(2) No Free Liquids Storage Areas

Not applicable as the container storage areas are designed to store containers with free liquids.

5.3 NR 670.015(3) Buffer Zones

Hazardous waste containers that contain ignitable wastes are located more than 50 feet from the facility's boundaries. Ignitable liquid containers are stored in S-6 which is equipped with a fire suppression system. It is a manufactured unit designed for the storage of flammables. It is also considered freeze proof. This area is more than 50 feet from the property line. Reactive wastes are not accepted by the facility.

5.4 NR 670.015(4) Incompatible Waste Segregation

Hazardous wastes stored in any of the licensed storage areas with wastes or other materials that are incompatible will be segregated by a means of physical separation by use of distance (i.e., different container storage areas, within different areas of a container storage area (i.e., not on the same pallet or adjacent pallets) or by use of containment pallets.

For the purpose of segregating and storing containers of waste based on compatibility, the following procedure will be used:

1. The Facility Manager or Materials Handler will identify the compatibility group during the staging process.
2. Compatibility groups will be based on the physical/chemical characteristics of the waste stream as described in the Waste Material Profile and verified during the screening process described in the Waste Analysis Plan.
3. Materials in the same compatibility group are assigned a color and affixed with a corresponding color label on each container. These compatible materials may be stored in the same general location. In cases where materials of differing physical/chemical properties are in the same compatibility group (and may be stored together), the materials will be assigned a different pattern of the same color.

Group #1: Flammables (Solid RED)

Ignitable and combustible liquids, organicsolids, flammable alkaline materials, and halogenated organic materials

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Group #2: Flammable Acids (Spotted RED)

Flammable acids with a pH<= 4.0

Group #3: Inorganic Acids (YELLOW)

Non-flammable, low organic content materialswith a pH<= 4.0

Group #4: Organic Acids (WHITE)

Non-flammable, organic materials with a pH<=4.0

Group #5: Bases (BLUE)

Non-flammable, low organic content materialswith a pH>= 10.0

Group #6: Inert* (GREEN)

Material not fitting in the other compatibility groups.
*NOTE: Inert is here defined as materials that are neither chemically or biologically reactive and unlikely to adversely affect other matter with which it comes in contact.

Group #7: Oxidizer (SPOTTED YELLOW)

Materials that can start and support a fire through the chemical reaction of oxidation.

The compatibility group number(s) determined by the Facility Manager or Materials Handler will be written above the disposal code.

If a material can be classified into more than one compatibility group, then use the following hierarchy: oxidizer> flammable> corrosive (acid or base) > compatible. For example, if a material is both oxidizer and flammable, then characterize the material as oxidizer.

After acceptance and compatibility determination of a waste stream, operations personnel will affix the appropriate label on the container(s). The labels are numbered as well as color-coded.

The container will then be transferred to the designated storage/staging areas for process (see Section 4.1.1.4).

In order to maximize the use of storage space, certaincompatibility groups may be stored together. See the chart below in order to use storage space wisely AND segregate incompatibles. The chart must be read and followed carefully in order to avoidstoring incompatibles together.

Decision List for Combining Compatibility Groups in Storage Slots

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Group	may be placed with:	Group(s)
#1 (Flammables)		#2, #6
#2 (Flammable Acids)		#1, #6
#3 (Inorganic Acids)		#1, #2
#4 (Organic Acids): Must NOT be placed with ANY other Group		
#5 (Bases)		#6
#6 (Inert)		#1, #2 or #5
# 7 (Oxidizers): Must NOT be p1aced with ANY other group		

** To use this chart properly, only work from left to right. For example, if you have 15 #8, Non-hazardous drums -- you could put 10 in the slot designated for Group #8 and divide up the other five drums between those slots designated for Group numbers 1, 2 and 5. Do not try to work from the right side to the left. Just because you can put Group #8 Drums into Group numbers 1, 2 and 5 DOES NOT MEAN YOU CAN PUT GROUP NUMBERS 1,2 AND 5 TOGETHER. WORK ONLY LEFT TO RIGHT.

Occasionally there may be instances when differing compatibility groups must be stored together in the same containment area. When this occurs, follow the procedures below:

i. The Material Handler brings the original load paperwork to the Facility Manager for evaluation (to see if the differing compatibility groups can be stored in the same containment area);

ii. The Facility Manager either approves or disapproves of the placement of the materials into the same containment area;

iii. Both wastes will be stored on separate containment pallets or in separate areas of the container storage area.

Information regarding incompatible waste segregation is also discussed in the WAP, which is included in Appendix 2.

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A description of other precautions to prevent issues with incompatible wastes is provided in Section 4.10.

5.5 NR 670.015(5) Information Requirements for Air Emission Controls for Containers

Fugitive organic emissions from containers of hazardous waste are managed in the following manner. [NR 670.027]

a. Hazardous wastes may be received and re-shipped to other permitted/licensed hazardous waste facilities. Containers that are 0.1 cubic meters (26-gallons) or smaller are exempt from the fugitive emission regulations [NR 664.1080(2)(b)]. Containers that are greater than 0.1 cubic meters but less than or equal to 0.46 cubic meters (121-gallons) are subject to Level I controls [NR 664.1086(2)(a)(2)]. All hazardous waste containers within this capacity range that will be trans-shipped to another facility are assumed to contain greater than 500 ppm VO. As such, the Level 1 control requirements are implemented for these containers which include being managed in either:

    1. A container that meets the applicable DOT regulations on packaging hazardous materials for transportation; or
    2. A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position, there are no visible holes, gaps, or other open spaces into the interior of the container; or
    3. An open- top container in which an organic vapor suppressing barrier is placed on or over the hazardous waste in the container such that no hazardous waste is exposed to the atmosphere.

b. Containers that are greater than 0.1 cubic meters but less than or equal to 0.46 cubic meters (121-gallons) that contain greater than 500 ppm VO will not be opened or consolidated by WM Waste.
c. Containers of hazardous waste greater than 0.46 cubic meters (121 gallons) which contain a VOC content greater than 500 ppm will not be accepted at the facility. This decision is based on the certification supplied with the Waste Material Profile.

6.0 NR 670.016 Feasibility and Plan of Operation Report Information for Tanks

This section is not applicable since WM Waste does not operate tanks to store or treat hazardous waste.

7.0 NR670.017 Feasibility and Plan of Operation Report Information for Surface Impoundments

This section is not applicable since WM Waste does not operate a surface impoundment.

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8.0 NR670.018 Feasibility and Plan of Operation Report Information for Waste Piles

This section is not applicable since WM Waste does not operate a waste pile.

9.0 NR670.019 Feasibility and Plan of Operation Report Information for Incinerators

This section is not applicable since WM Waste does not operate an incinerator.

10.0 NR 670.021 Feasibility and Plan of Operation Report Information for Landfills

This section is not applicable since WM Waste does not operate a landfill.

11.0 NR 670.022 Feasibility and Plan of Operation Report Information for Boilers and Industrial Furnaces Burning Hazardous Waste

This section is not applicable since WM Waste does not operate a boiler or industrial furnace burning hazardous waste.

12.0 NR 670.023 Feasibility and Plan of Operation Report Information for Miscellaneous Units

This section is not applicable since WM Waste does not operate a miscellaneous unit licensed as a treatment unit.

13.0 NR 670.024 Feasibility and Plan of Operation Report Information for Process Vents (NR 664 Subchapter AA)

This section is not applicable to since WM Waste does not have process vents.

14.0 NR670.025 Feasibility and Plan of Operation Report Information for Equipment (NR 664 Subchapter BB)

This section is not applicable since WM Waste does not operate equipment subject to the applicability requirement of NR 664.1050

15.0 NR670.026 Feasibility and Plan of Operation Report Information for Drip Pads

This section is not applicable since WM Waste does not operate a drip pad.

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

16.0 NR670.027 Feasibility and Plan of Operation Report Information for Tanks, Surface Impoundments, and Containers (NR 664 Subchapter CC)

WM Waste does not operate licensed tanks, so the air emission controls applicable to this type of waste management unit are not applicable.

WM Waste does not operate a surface impoundment, so the air emission controls applicable to this type of waste management unit are not applicable.

WM Waste does not conduct stabilization activities in containers.

Roll-off box containers of hazardous waste may also be received at the facility if they are certified by the generator to contain volatile organics at a concentration of less 500 ppmw.

All containers which: 1) have a capacity of more than 26.4 gallons; and 2) manage hazardous waste with a VOC content of more than 500 ppmw (at the point of generation) are subject to at least Level 1 controls.. . See additional discussion at Section 5.5 NR 670.015(5) of this Feasibility and Plan of Operation Report.

16.1 NR 670.027(1)(a) Floating Roof Tank Certification

WM Waste does not operate any licensed tanks. Therefore, this section is not applicable.

16.2 NR 670.027(1)(b) Container Storage Area Certification

A container storage area certification is not required since WM Waste is not using the comparable Clean Air Act rules to demonstrate compliance with the Subpart CC standards for volatile organic controls from containers, per the regulations at NR 664.1080(2)(g) and NR 664.1089(10).

16.3 NR 670.027(1)(c) Air Emission Enclosure Certification

The WM Waste facility does not rely on the operation of an enclosure for containers to maintain compliance with the NR 664 subchapter CC requirements, so this section is not applicable.

16.4 NR 670.027(1)(d)Surface Impoundment Floating Membrane Certification

The WM Waste facility does not have a surface impoundment, and, hence, this section is not applicable.

WM Waste, Inc.
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800.741.3343 or 262.878.2599
262.878.2699 Fax

16.5 NR 670.027(1)(e) Closed -Vent System / Control Device Design and Performance Information

The WM Waste facility does not utilize a closed-vent system and control device to control the emissions of containers, so this section is not applicable.

16.6 NR 670.027(1)(g) Implementation Plan

The WM Waste facility is in compliance with the subchapter CC requirements and thus does not require the development of an implementation plan to come into compliance.

16.7 NR 670.027(l)(f) Monitoring Plan

The WM Waste facility does not require a periodic Method 21 test or a control device monitoring method to manage the emissions of those containerized wastes that may contain volatile organics at a concentration of 500 ppmw or more, so this section is not applicable. Compliance with the subchapter CC requirements for these containers is managed through the use of properly closed DOT-specification containers for those containers that may contain volatile organics at a concentration of 500 ppmw or greater.

16.8 NR 670.028 Long-Term Care License Information

WM Waste does not operate a waste management unit that requires a long-term care license, and the facility will be "clean-closed," not leaving any hazardous waste at the facility when the site is finally closed. Therefore, the requirements of this section are not applicable.

Appendices

Appendix 1
Hazardous Waste Permit Part A Form (8700-23)
RCRA Subtitle C Identification Form (8700-12)

United States Environmental Protection Agency

HAZARDOUS WASTE PERMIT PART A FORM

1. Facility Permit Contact

First Name	**Steven**	MI		Last Name	**Smolko**
Title	**Manager Operations**				
Email	**ssmolko@wm.com**				
Phone	**262-498-3072**	Ext		Fax	

2. Facility Permit Contact Mailing Address

Street Address	**21211 Durand Avenue**				
City, Town, or Village	**Union Grove**				
State	**Wisconsin**	Country	**United States**	Zip Code	**53182**

3. Facility Existence Date (mm/dd/yyyy)

9/27/2010

4. Other Environmental Permits

A. Permit Type	B. Permit Number	C. Description
E	**4381**	**WDNR Solid Waste Operator License**
N	**WIS067849-5**	**WDNR WPDES Stormwater**
E	**P330-08-00221**	**USDA Permit to Receive Soil**

5. Nature of Business

Hazardous waste storage facility that stores and consolidates containers of various hazardous and universal wastes prior to shipment to an appropriately permitted/licensed disposal facility.

A more detailed description of the general facility and processes is provided in Section 4.1.1 NR 670.014(2)(a) of the Feasibility & Plan of Operation (FPOR).

6. Process Codes and Design Capacities

Line Number		A. Process Code			B. Process Design Capacity		C. Process Total Number of Units	D. Unit Name
					(1) Amount	(2) Unit of Measure		
0	1	S	0	1	92,675	G	8	See continuation page
0	2	S	0	1	440	Y	2	See continuation page

7. Description of Hazardous Wastes (Enter codes for Items 7.A, 7.C and 7.D(1))

Line No.		A. EPA Hazardous Waste No.				B. Estimated Annual Qty of Waste	C. Unit of Measure	D. Processes								
								(1) Process Codes								(2) Process Description (if code is not entered in 7.D1))
																See continuation page

8. Map

Attach to this application a topographical map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.

9. Facility Drawing

All existing facilities must include a scale drawing of the facility. See instructions for more detail.

10. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, and disposal areas; and sites of future storage, treatment, or disposal areas. See instructions for more detail.

11. Comments

Section 6: See continuation page for Section 6
Section 7: See continuation pages for Section 7
Section 8: see Figure A-1
Section 9: see Figures A-2 and A-3
Section 10: See continuation pages for Section 10

Part A Attachments

Section 6 Continuation Page for container storage area (SO1) capacities

Section 7 Description of Hazardous Wastes

Section 8 Map
- Figure A-1 Topographic Map

Section 9 Facility Drawings
- Figure A-2 Property Lines
- Figure A-3 Site Map
- Figure A-4 Floor Plan

Section 10 Photographs

Section 6
Continuation Page for Container Storage Area (SO1) Capacities

6. Container Storage Area (SO1) Area Designation and Capacity

Area Designation	Gallons	Cubic Yards
S-1	33,000	
S-2	7,480	
S-3	14,080	
S-4	14,080	
S-5	8,800	
S-6	2,035	
S-7	4,400	
S-8	8,800	120
S-12		320
TOTAL	92,675	440

Section 7
Description of Hazardous Wastes

7. Description of Hazardous Waste

NOTE: Annual quantities may vary over time and are not intended to to represent maximum quanitites

Line No.	A. EPA Hazardous Waste No.	B. Estimated Annual Qty of Waste	C. Unit of Measure	Process Codes
1	D001	52,800	G	S01
2	D002	52,800	G	S01
3	D004	52,800	G	S01
4	D005	52,800	G	S01
5	D006	52,800	G	S01
6	D007	52,800	G	S01
7	D008	52,800	G	S01
8	D009	52,800	G	S01
9	D010	52,800	G	S01
10	D011	52,800	G	S01
11	D012	52,800	G	S01
12	D013	52,800	G	S01
13	D014	52,800	G	S01
14	D015	52,800	G	S01
15	D016	52,800	G	S01
16	D017	52,800	G	S01
17	D018	52,800	G	S01
18	D019	52,800	G	S01
19	D020	52,800	G	S01
20	D021	52,800	G	S01
21	D022	52,800	G	S01
22	D023	52,800	G	S01
23	D024	52,800	G	S01
24	D025	52,800	G	S01
25	D026	52,800	G	S01
26	D027	52,800	G	S01
27	D028	52,800	G	S01
28	D029	52,800	G	S01
29	D030	52,800	G	S01
30	D031	52,800	G	S01
31	D032	52,800	G	S01
32	D033	52,800	G	S01
33	D034	52,800	G	S01
34	D035	52,800	G	S01

35	D036	52,800	G	S01
36	D037	52,800	G	S01
37	D038	52,800	G	S01
38	D039	52,800	G	S01
39	D040	52,800	G	S01
40	D041	52,800	G	S01
41	D042	52,800	G	S01
42	D043	52,800	G	S01
43	F001	52,800	G	S01
44	F002	52,800	G	S01
45	F003	52,800	G	S01
46	F004	52,800	G	S01
47	F005	52,800	G	S01
48	F006	5,280	G	S01
49	F012	5,280	G	S01
50	F019	5,280	G	S01
51	F024	5,280	G	S01
52	F025	5,280	G	S01
53	F032	5,280	G	S01
54	F034	5,280	G	S01
55	F035	5,280	G	S01
56	F037	52,800	G	S01
57	F038	52,800	G	S01
58	F039	52,800	G	S01
59	K001	5,280	G	S01
60	K002	5,280	G	S01
61	K003	5,280	G	S01
62	K004	5,280	G	S01
63	K005	5,280	G	S01
64	K006	5,280	G	S01
65	K007	5,280	G	S01
66	K008	5,280	G	S01
67	K009	5,280	G	S01
68	K010	5,280	G	S01
69	K014	5,280	G	S01
70	K015	5,280	G	S01
71	K016	5,280	G	S01
72	K017	5,280	G	S01
73	K018	5,280	G	S01
74	K019	5,280	G	S01
75	K020	5,280	G	S01
76	K021	5,280	G	S01
77	K022	5,280	G	S01
78	K023	5,280	G	S01

79	K024	5,280	G	S01
80	K025	5,280	G	S01
81	K026	5,280	G	S01
82	K028	5,280	G	S01
83	K029	5,280	G	S01
84	K030	5,280	G	S01
85	K031	5,280	G	S01
86	K032	5,280	G	S01
87	K033	5,280	G	S01
88	K034	5,280	G	S01
89	K035	5,280	G	S01
90	K036	5,280	G	S01
91	K037	5,280	G	S01
92	K038	5,280	G	S01
93	K039	5,280	G	S01
94	K040	5,280	G	S01
95	K041	5,280	G	S01
96	K042	5,280	G	S01
97	K043	5,280	G	S01
98	K046	5,280	G	S01
99	K048	5,280	G	S01
100	K049	5,280	G	S01
101	K050	5,280	G	S01
102	K051	5,280	G	S01
103	K052	5,280	G	S01
104	K060	5,280	G	S01
105	K061	5,280	G	S01
106	K062	5,280	G	S01
107	K069	5,280	G	S01
108	K071	5,280	G	S01
109	K073	5,280	G	S01
110	K083	5,280	G	S01
111	K084	5,280	G	S01
112	K085	5,280	G	S01
113	K086	5,280	G	S01
114	K087	5,280	G	S01
115	K088	5,280	G	S01
116	K093	5,280	G	S01
117	K094	5,280	G	S01
118	K095	5,280	G	S01
119	K096	5,280	G	S01
120	K097	5,280	G	S01
121	K098	5,280	G	S01
122	K099	5,280	G	S01

123	K100	5,280	G	S01
124	K101	5,280	G	S01
125	K102	5,280	G	S01
126	K103	5,280	G	S01
127	K104	5,280	G	S01
128	K105	5,280	G	S01
129	K106	5,280	G	S01
130	K107	5,280	G	S01
131	K108	5,280	G	S01
132	K109	5,280	G	S01
133	K110	5,280	G	S01
134	K111	5,280	G	S01
135	K112	5,280	G	S01
136	K113	5,280	G	S01
137	K114	5,280	G	S01
138	K115	5,280	G	S01
139	K116	5,280	G	S01
140	K117	5,280	G	S01
141	K118	5,280	G	S01
142	K123	5,280	G	S01
143	K124	5,280	G	S01
144	K125	5,280	G	S01
145	K126	5,280	G	S01
146	K131	5,280	G	S01
147	K132	5,280	G	S01
148	K136	5,280	G	S01
149	K141	5,280	G	S01
150	K142	5,280	G	S01
151	K143	5,280	G	S01
152	K144	5,280	G	S01
153	K145	5,280	G	S01
154	K147	5,280	G	S01
155	K148	5,280	G	S01
156	K149	5,280	G	S01
157	K150	5,280	G	S01
158	K151	5,280	G	S01
159	K156	5,280	G	S01
160	K157	5,280	G	S01
161	K158	5,280	G	S01
162	K159	5,280	G	S01
163	K171	52,800	G	S01
164	K172	52,800	G	S01
165	K174	5,280	G	S01
166	K176	5,280	G	S01

167	K177	5,280	G	S01
168	K178	5,280	G	S01
169	P001	1,000	G	S01
170	P002	1,000	G	S01
171	P003	1,000	G	S01
172	P004	1,000	G	S01
173	P005	1,000	G	S01
174	P007	1,000	G	S01
175	P008	1,000	G	S01
176	P010	1,000	G	S01
177	P011	1,000	G	S01
178	P012	1,000	G	S01
179	P013	1,000	G	S01
180	P014	1,000	G	S01
181	P015	1,000	G	S01
182	P016	1,000	G	S01
183	P017	1,000	G	S01
184	P018	1,000	G	S01
185	P020	1,000	G	S01
186	P021	1,000	G	S01
187	P022	1,000	G	S01
188	P023	1,000	G	S01
189	P024	1,000	G	S01
190	P026	1,000	G	S01
191	P027	1,000	G	S01
192	P028	1,000	G	S01
193	P029	1,000	G	S01
194	P030	1,000	G	S01
195	P031	1,000	G	S01
196	P033	1,000	G	S01
197	P034	1,000	G	S01
198	P036	1,000	G	S01
199	P037	1,000	G	S01
200	P038	1,000	G	S01
201	P039	1,000	G	S01
202	P040	1,000	G	S01
203	P041	1,000	G	S01
204	P042	1,000	G	S01
205	P043	1,000	G	S01
206	P044	1,000	G	S01
207	P045	1,000	G	S01
208	P046	1,000	G	S01
209	P047	1,000	G	S01
210	P048	1,000	G	S01

211	P049	1,000	G	S01
212	P050	1,000	G	S01
213	P051	1,000	G	S01
214	P054	1,000	G	S01
215	P056	1,000	G	S01
216	P057	1,000	G	S01
217	P058	1,000	G	S01
218	P059	1,000	G	S01
219	P060	1,000	G	S01
220	P062	1,000	G	S01
221	P063	1,000	G	S01
222	P064	1,000	G	S01
223	P066	1,000	G	S01
224	P067	1,000	G	S01
225	P068	1,000	G	S01
226	P069	1,000	G	S01
227	P070	1,000	G	S01
228	P071	1,000	G	S01
229	P072	1,000	G	S01
230	P073	1,000	G	S01
231	P074	1,000	G	S01
232	P075	1,000	G	S01
233	P076	1,000	G	S01
234	P077	1,000	G	S01
235	P078	1,000	G	S01
236	P082	1,000	G	S01
237	P084	1,000	G	S01
238	P085	1,000	G	S01
239	P087	1,000	G	S01
240	P088	1,000	G	S01
241	P089	1,000	G	S01
242	P092	1,000	G	S01
243	P093	1,000	G	S01
244	P094	1,000	G	S01
245	P095	1,000	G	S01
246	P096	1,000	G	S01
247	P097	1,000	G	S01
248	P098	1,000	G	S01
249	P099	1,000	G	S01
250	P101	1,000	G	S01
251	P102	1,000	G	S01
252	P103	1,000	G	S01
253	P104	1,000	G	S01
254	P105	1,000	G	S01

255	P106	1,000	G	S01
256	P108	1,000	G	S01
257	P109	1,000	G	S01
258	P110	1,000	G	S01
259	P111	1,000	G	S01
260	P113	1,000	G	S01
261	P114	1,000	G	S01
262	P115	1,000	G	S01
263	P116	1,000	G	S01
264	P118	1,000	G	S01
265	P119	1,000	G	S01
266	P120	1,000	G	S01
267	P121	1,000	G	S01
268	P123	1,000	G	S01
269	P127	1,000	G	S01
270	P128	1,000	G	S01
271	P185	1,000	G	S01
272	P188	1,000	G	S01
273	P189	1,000	G	S01
274	P190	1,000	G	S01
275	P191	1,000	G	S01
276	P192	1,000	G	S01
277	P194	1,000	G	S01
278	P196	1,000	G	S01
279	P197	1,000	G	S01
280	P198	1,000	G	S01
281	P199	1,000	G	S01
282	P201	1,000	G	S01
283	P202	1,000	G	S01
284	P203	1,000	G	S01
285	P204	1,000	G	S01
286	P205	1,000	G	S01
287	U001	1,000	G	S01
288	U002	1,000	G	S01
289	U003	1,000	G	S01
290	U004	1,000	G	S01
291	U005	1,000	G	S01
292	U007	1,000	G	S01
293	U008	1,000	G	S01
294	U009	1,000	G	S01
295	U010	1,000	G	S01
296	U011	1,000	G	S01
297	U012	1,000	G	S01
298	U014	1,000	G	S01

299	U015	1,000	G	S01
300	U016	1,000	G	S01
301	U017	1,000	G	S01
302	U018	1,000	G	S01
303	U019	1,000	G	S01
304	U021	1,000	G	S01
305	U022	1,000	G	S01
306	U024	1,000	G	S01
307	U025	1,000	G	S01
308	U026	1,000	G	S01
309	U027	1,000	G	S01
310	U028	1,000	G	S01
311	U029	1,000	G	S01
312	U030	1,000	G	S01
313	U031	1,000	G	S01
314	U032	1,000	G	S01
315	U034	1,000	G	S01
316	U035	1,000	G	S01
317	U036	1,000	G	S01
318	U037	1,000	G	S01
319	U038	1,000	G	S01
320	U039	1,000	G	S01
321	U041	1,000	G	S01
322	U042	1,000	G	S01
323	U043	1,000	G	S01
324	U044	1,000	G	S01
325	U045	1,000	G	S01
326	U046	1,000	G	S01
327	U047	1,000	G	S01
328	U048	1,000	G	S01
329	U049	1,000	G	S01
330	U050	1,000	G	S01
331	U051	1,000	G	S01
332	U052	1,000	G	S01
333	U053	1,000	G	S01
334	U055	1,000	G	S01
335	U056	1,000	G	S01
336	U057	1,000	G	S01
337	U058	1,000	G	S01
338	U059	1,000	G	S01
339	U060	1,000	G	S01
340	U061	1,000	G	S01
341	U062	1,000	G	S01
342	U063	1,000	G	S01

343	U064	1,000	G	S01
344	U066	1,000	G	S01
345	U067	1,000	G	S01
346	U068	1,000	G	S01
347	U069	1,000	G	S01
348	U070	1,000	G	S01
349	U071	1,000	G	S01
350	U072	1,000	G	S01
351	U073	1,000	G	S01
352	U074	1,000	G	S01
353	U075	1,000	G	S01
354	U076	1,000	G	S01
355	U077	1,000	G	S01
356	U078	1,000	G	S01
357	U079	1,000	G	S01
358	U080	1,000	G	S01
359	U081	1,000	G	S01
360	U082	1,000	G	S01
361	U083	1,000	G	S01
362	U084	1,000	G	S01
363	U085	1,000	G	S01
364	U086	1,000	G	S01
365	U088	1,000	G	S01
366	U089	1,000	G	S01
367	U090	1,000	G	S01
368	U091	1,000	G	S01
369	U092	1,000	G	S01
370	U093	1,000	G	S01
371	U094	1,000	G	S01
372	U095	1,000	G	S01
373	U097	1,000	G	S01
374	U098	1,000	G	S01
375	U099	1,000	G	S01
376	U101	1,000	G	S01
377	U102	1,000	G	S01
378	U103	1,000	G	S01
379	U105	1,000	G	S01
380	U106	1,000	G	S01
381	U107	1,000	G	S01
382	U108	1,000	G	S01
383	U109	1,000	G	S01
384	U110	1,000	G	S01
385	U111	1,000	G	S01
386	U112	1,000	G	S01

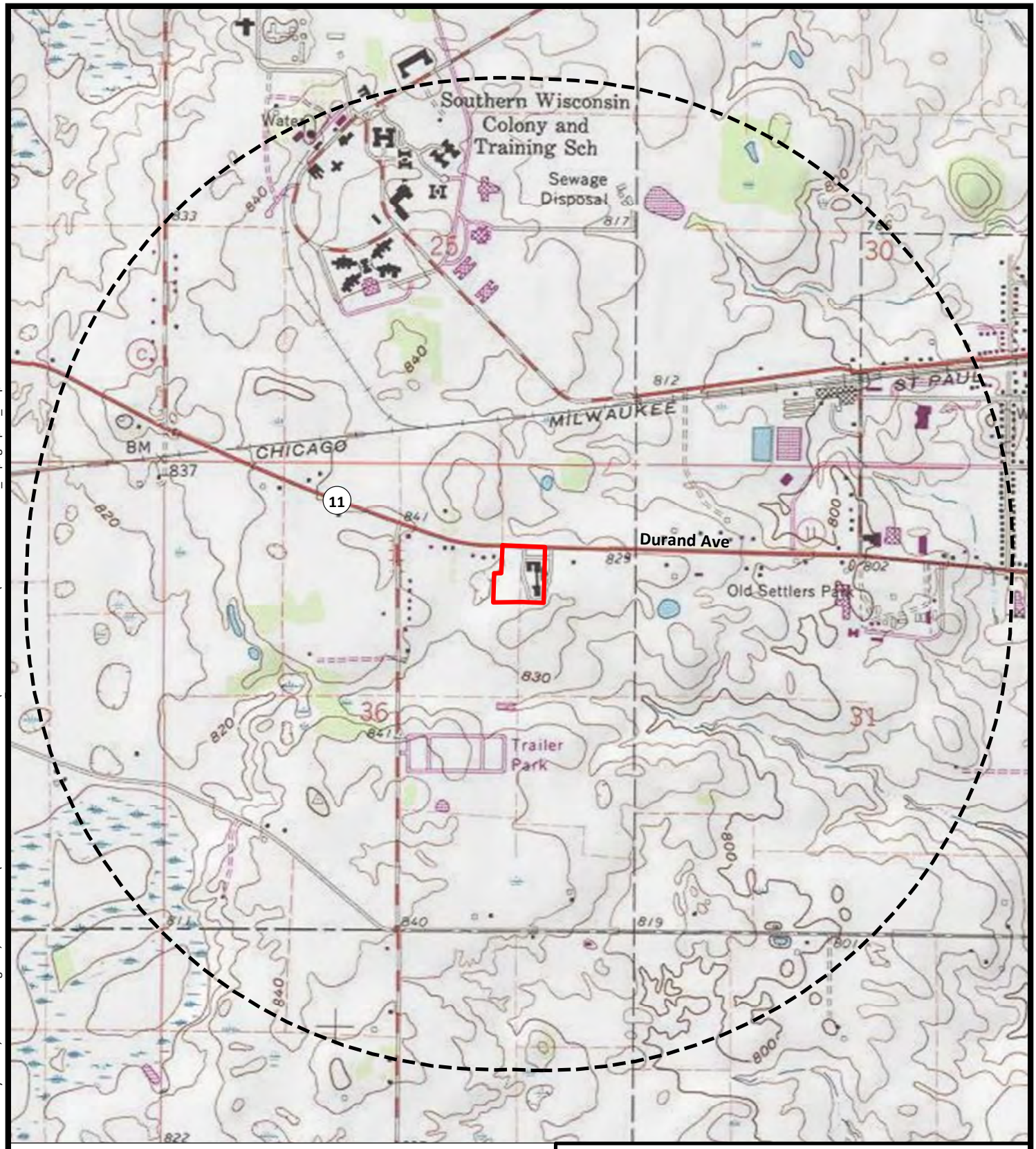
387	U113	1,000	G	S01
388	U114	1,000	G	S01
389	U115	1,000	G	S01
390	U116	1,000	G	S01
391	U117	1,000	G	S01
392	U118	1,000	G	S01
393	U119	1,000	G	S01
394	U120	1,000	G	S01
395	U121	1,000	G	S01
396	U122	1,000	G	S01
397	U123	1,000	G	S01
398	U124	1,000	G	S01
399	U125	1,000	G	S01
400	U126	1,000	G	S01
401	U127	1,000	G	S01
402	U128	1,000	G	S01
403	U129	1,000	G	S01
404	U130	1,000	G	S01
405	U131	1,000	G	S01
406	U132	1,000	G	S01
407	U134	1,000	G	S01
408	U135	1,000	G	S01
409	U136	1,000	G	S01
410	U137	1,000	G	S01
411	U138	1,000	G	S01
412	U140	1,000	G	S01
413	U141	1,000	G	S01
414	U142	1,000	G	S01
415	U143	1,000	G	S01
416	U144	1,000	G	S01
417	U145	1,000	G	S01
418	U146	1,000	G	S01
419	U147	1,000	G	S01
420	U148	1,000	G	S01
421	U149	1,000	G	S01
422	U150	1,000	G	S01
423	U151	1,000	G	S01
424	U152	1,000	G	S01
425	U153	1,000	G	S01
426	U154	1,000	G	S01
427	U155	1,000	G	S01
428	U156	1,000	G	S01
429	U157	1,000	G	S01
430	U158	1,000	G	S01

431	U159	1,000	G	S01
432	U161	1,000	G	S01
433	U162	1,000	G	S01
434	U163	1,000	G	S01
435	U164	1,000	G	S01
436	U165	1,000	G	S01
437	U166	1,000	G	S01
438	U167	1,000	G	S01
439	U168	1,000	G	S01
440	U169	1,000	G	S01
441	U170	1,000	G	S01
442	U171	1,000	G	S01
443	U172	1,000	G	S01
444	U173	1,000	G	S01
445	U174	1,000	G	S01
446	U176	1,000	G	S01
447	U177	1,000	G	S01
448	U178	1,000	G	S01
449	U179	1,000	G	S01
450	U180	1,000	G	S01
451	U181	1,000	G	S01
452	U182	1,000	G	S01
453	U183	1,000	G	S01
454	U184	1,000	G	S01
455	U185	1,000	G	S01
456	U186	1,000	G	S01
457	U187	1,000	G	S01
458	U188	1,000	G	S01
459	U190	1,000	G	S01
460	U191	1,000	G	S01
461	U192	1,000	G	S01
462	U193	1,000	G	S01
463	U194	1,000	G	S01
464	U196	1,000	G	S01
465	U197	1,000	G	S01
466	U200	1,000	G	S01
467	U201	1,000	G	S01
468	U202	1,000	G	S01
469	U203	1,000	G	S01
470	U204	1,000	G	S01
471	U206	1,000	G	S01
472	U207	1,000	G	S01
473	U208	1,000	G	S01
474	U209	1,000	G	S01

475	U210	1,000	G	S01
476	U211	1,000	G	S01
477	U213	1,000	G	S01
478	U214	1,000	G	S01
479	U215	1,000	G	S01
480	U217	1,000	G	S01
481	U218	1,000	G	S01
482	U219	1,000	G	S01
483	U220	1,000	G	S01
484	U221	1,000	G	S01
485	U222	1,000	G	S01
486	U225	1,000	G	S01
487	U226	1,000	G	S01
488	U227	1,000	G	S01
489	U228	1,000	G	S01
490	U235	1,000	G	S01
491	U236	1,000	G	S01
492	U237	1,000	G	S01
493	U238	1,000	G	S01
494	U239	1,000	G	S01
495	U240	1,000	G	S01
496	U243	1,000	G	S01
497	U244	1,000	G	S01
498	U246	1,000	G	S01
499	U247	1,000	G	S02
500	U248	1,000	G	S01
501	U249	1,000	G	S01
502	U271	1,000	G	S01
503	U278	1,000	G	S01
504	U279	1,000	G	S01
505	U280	1,000	G	S01
506	U328	1,000	G	S01
507	U353	1,000	G	S01
508	U359	1,000	G	S01
509	U364	1,000	G	S01
510	U367	1,000	G	S01
511	U372	1,000	G	S01
512	U373	1,000	G	S01
513	U387	1,000	G	S01
514	U389	1,000	G	S01
515	U394	1,000	G	S01
516	U395	1,000	G	S01
517	U404	1,000	G	S01
518	U409	1,000	G	S01

519	U410	1,000	G	S01
520	U411	1,000	G	S01

Section 8
Map



Facility Boundary

1-Mile Buffer

N

S

Racine County

0 1,500

Feet

USGS 24K Series Topo Map, Union Grove, WI

esri Partner Network Silver

WM Waste, Inc.

Union Grove, Wisconsin

Topographic Map

Racine County, WI

CK Associates Environmental Consultants

Drawn:	CAL	Checked:	BR
Date:	11/19/2020	Approved:	RK
Dwg. No.:	WA5011-18114-01		**Figure A-1**

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Section 9
Facility Drawings

WM Waste, Inc.
Panel fence
Cyclone fence

0 100 Feet

N

S

Racine County

Imagery: Racine County 2020, ESRI

WM Waste, Inc.
Union Grove, Wisconsin

Property Map

Racine County, WI

CK Associates Environmental Consultants

Drawn:	CAL	Checked:	BHR
Date:	1/22/2023	Approved:	LEC
Dwg. No.:	WA5011-18114-51		**Figure A-2**

P:\T-Z\Waste Management Mercury Waste, Inc - Union grove, WI - WA5011\P18114 - RCRA License Renewal\IMAGES AND MAPS\WA5011-18114-51_Property_Map.mxd

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N

0' 40' 80'

SCALE

LEGEND

- LICENSED CONTAINER STORAGE AREA
- DRUMS
- PANEL FENCING
- CYCLONE FENCING

Unit	Capacity	
S-1	33,000 gal.	600 55-gal. Drum Equivalent (DE)
S-2	7,480 gal.	136 55-gal. DE
S-3	14,080 gal.	256 55-gal. DE
S-4	14,080 gal.	256 55-gal. DE
S-5	8,800 gal.	160 55-gal. DE
S-6	2,035 gal.	37 55-gal. DE
S-7	4,400 gal.	80 55-gal. DE
S-8	120 Cu. Yds. and 8,800 gal.	(3) 40-yd rolloff equivalents and 160 55-gal. DE
S-12	320 Cu. Yds.	(8) 40-yd rolloff equivalents

Basemap from Waste Management.

WM Waste, Inc.
Union Grove, Wisconsin

Site Layout

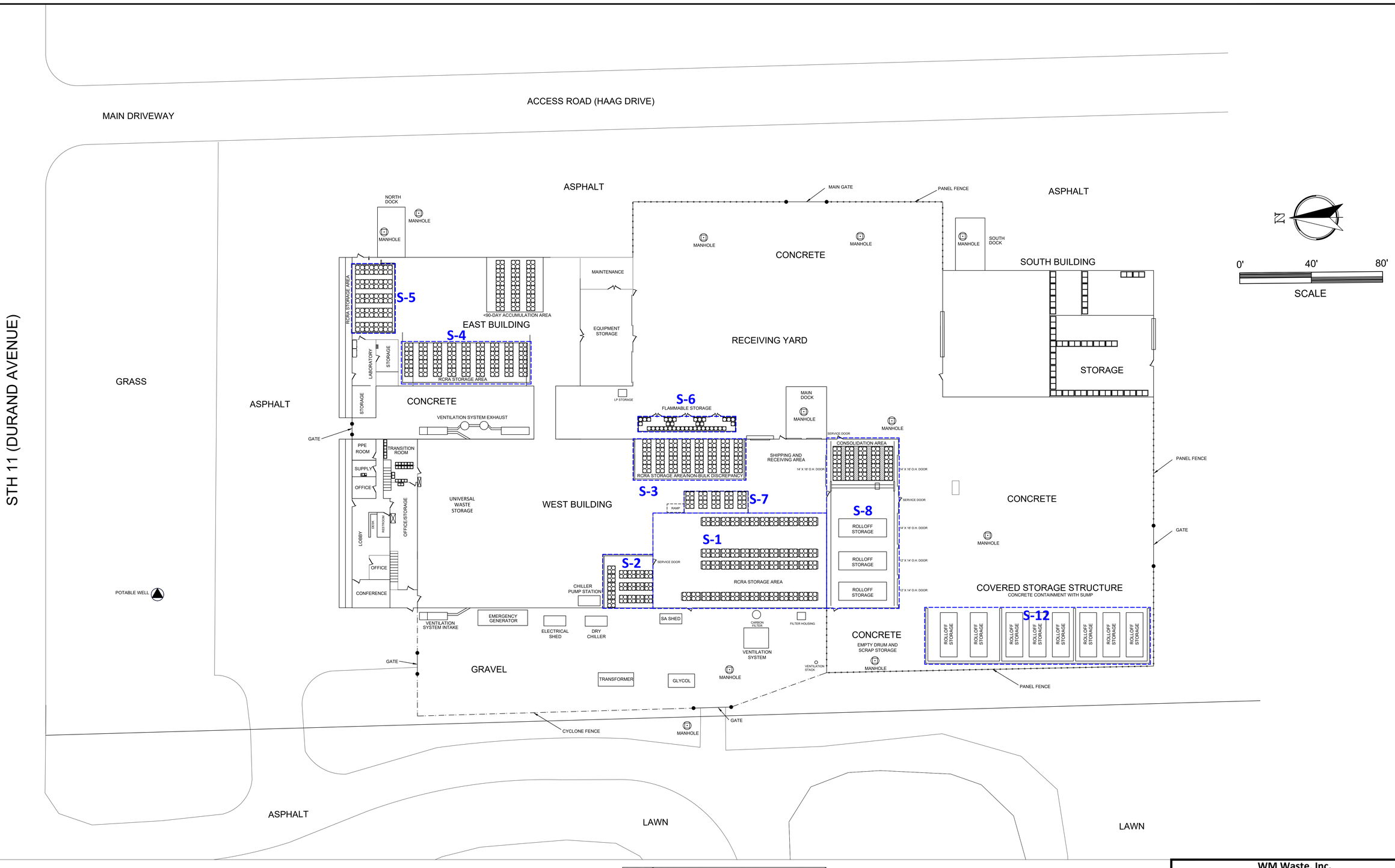
Racine County, WI

CK Associates Environmental Consultants

Drawn: CAL Checked: BHR
Date: 1/30/2022 Approved: LEC
Dwg. No.: WA5011-18114-05

Figure A-3

P:\T-Z\Waste Management Mercury Waste, Inc - Union grove, WI - WA5011\1\P1814 - ROFA License Renewal\IMAGES AND MAPS\WA5011-18114-05_Site_Layout.dwg 1/30/2023 - 1:47pm



LEGEND

- LICENSED CONTAINER STORAGE AREA
- DRUMS
- PANEL FENCING
- CYCLONE FENCING

Unit	Capacity	
S-1	33,000 gal.	600 55-gal. Drum Equivalent (DE)
S-2	7,480 gal.	136 55-gal. DE
S-3	14,080 gal.	256 55-gal. DE
S-4	14,080 gal.	256 55-gal. DE
S-5	8,800 gal.	160 55-gal. DE
S-6	2,035 gal.	37 55-gal. DE
S-7	4,400 gal.	80 55-gal. DE
S-8	120 Cu. Yds. and 8,800 gal.	(3) 40-yd rolloff equivalents and 160 55-gal. DE
S-12	320 Cu. Yds.	(8) 40-yd rolloff equivalents

Basemap from Waste Management.

WM Waste, Inc.
Union Grove, Wisconsin

Licensed Storage Areas

Racine County, WI

CK Associates Environmental Consultants

Drawn:	CAL	Checked:	BHR
Date:	1/30/2022	Approved:	LEC
Dwg. No.:	WA5011-18114-06		Figure A-4

Section 10
Photographs

Facility Photographs

1. Container Storage Area S-1

2. Container Storage Area S-2

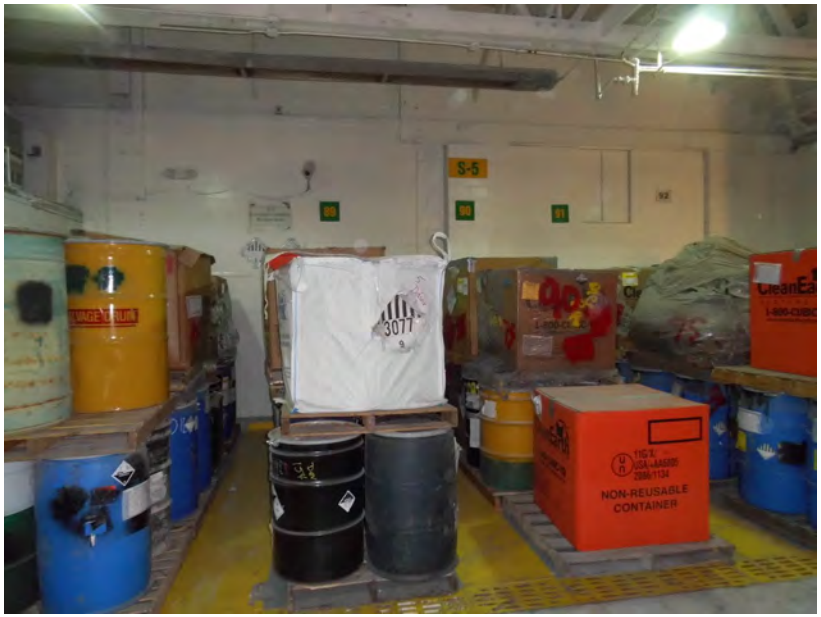
Facility Photographs

3. Container Storage Area S-3

4. Container Storage Area S-4

Facility Photographs

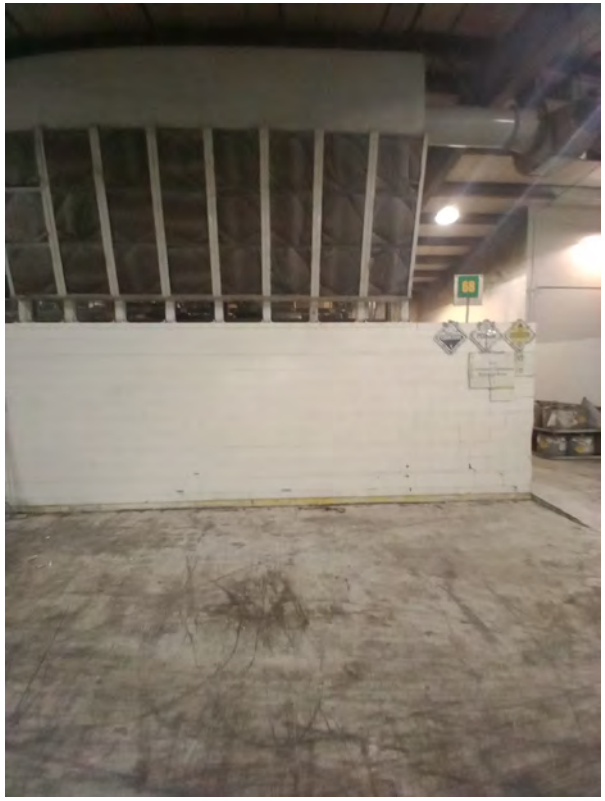
5. Container Storage Area S-5



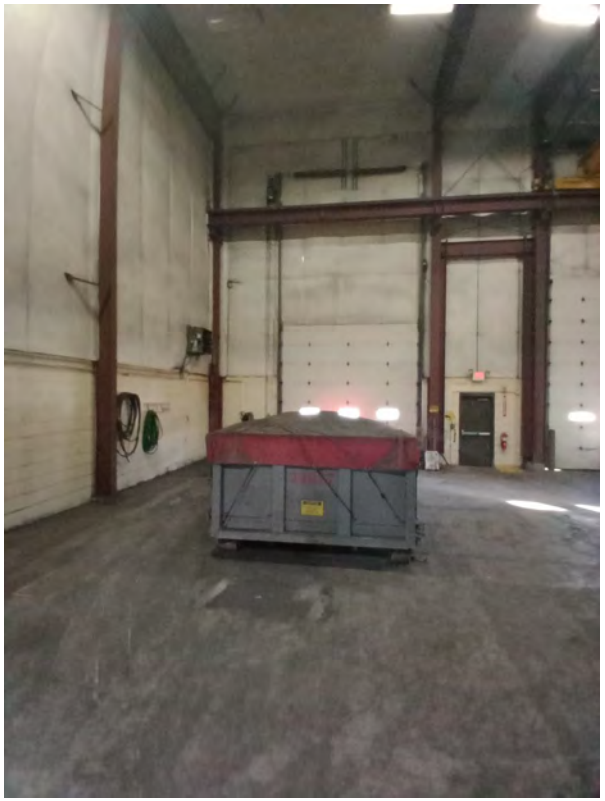
6. Container Storage Area S-6

Facility Photographs

7. Container Storage Area S-7



8. Container Storage Area S-8



Facility Photographs

9. Container Storage Area S-12

Facility Photographs

10. East Side

11. North Side

Facility Photographs

12. South Side

13. West Side

Facility Photographs

15. Aerial Photograph

United States Environmental Protec. on Agency

RCRA SUBTITLE C SITE IDENTIFICATION FORM

1. Reason for Submittal (Select only one.)

☐	Obtaining or updating an EPA ID number for on-going regulated activities (Items 10-17 below) that will continue for a period of time.
☐	Submitting as a component of the Hazardous Waste Report for _____ (Reporting Year)
	☐ Site was a TSD facility, a reverse distributor, and/or generator of ≥ 1,000 kg of non-acute hazardous waste, > 1 kg of acute hazardous waste, or > 100 kg of acute hazardous waste spill cleanup in **one or more months of the repor. ng year** (or State equivalent LQG regulations)
☐	Notifying that regulated activity is no longer occurring at this Site
☐	Obtaining or updating an EPA ID number for conducting Electronic Manifest Broker activities
☐	Submitting a new or revised Part A (permit) Form

2. Site EPA ID Number

3. Site Name

WM Waste, Inc.

4. Site Location Address

Street Address	**21211 Durand Avenue**				
City, Town, or Village	**Union Grove**			County	**Racine**
State	**Wisconsin**	Country	**USA**	Zip Code	**53182**
Latitude	**42° 40' 52" N**	Longitude	**88° 04' 3l" W**	☐ Use Lat/Long as Primary Address	

5. Site Mailing Address ☑ Same as Location Street Address

Street Address		
City, Town, or Village		
State	Country	Zip Code

6. Site Land Type

☐ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other

7. North American Industry Classification System (NAICS) Code(s) for the Site (at least 5-digit codes)

A. (Primary) **562211**	C.
B.	D.

EPA ID Number | | | | | | | | | | | | |

8. Site Contact Informa. on

☑ Same as Loca. on Address

First Name **Steven**	MI	Last Name **Smolko**
Title **Manager Operations**		
Street Address		
City, Town, or Village		
State	Country	Zip Code
Email **ssmolko@wm.com**		
Phone **262-498-3072**	Ext	Fax

9. Legal Owner and Operator of the Site

A. Name of Site's Legal Owner

☐ Same as Location Address

Full Name **See Section 18**	Date Became Owner (mm/dd/yyyy)
Owner Type ☐ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other	
Street Address	
City, Town, or Village	
State / Country / Zip Code	
Email	
Phone / Ext / Fax	
Comments	

B. Name of Site's Legal Operator

☑ Same as Location Address

Full Name **WM Waste, Inc.**	Date Became Operator (mm/dd/yyyy) **9/27/2010**
Operator Type ☐ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other	
Street Address	
City, Town, or Village	
State / Country / Zip Code	
Email **ssmolko@wm.com**	
Phone **262-498-3072** / Ext / Fax	
Comments **A name change from from "WM Mercury Waste, Inc." to the current name "WM Waste, Inc." was certified on 11/12/2020.**	

10. Type of Regulated Waste Activity (at your site)

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

A. Hazardous Waste Activities

☐ Y ☐ N	1. Generator of Hazardous Waste—If "Yes", mark only one of the following—a, b, c		
	☑	a. LQG	-Generates, in any calendar month, 1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste (includes quantities imported by importer site); or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/mo (220 lb/mo) of acute hazardous spill cleanup material.
	☐	b. SQG	100 to 1,000 kg/mo (220-2,200 lb/mo) of non-acute hazardous waste and no more than 1 kg (2.2 lb) of acute hazardous waste and no more than 100 kg (220 lb) of any acute hazardous spill cleanup material.
	☐	c. VSQG	Less than or equal to 100 kg/mo (220 lb/mo) of non-acute hazardous waste.
☐ Y ☐ N	2. Short-Term Generator (generates from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section. *Note: If "Yes", you MUST indicate that you are a Generator of Hazardous Waste in Item 10.A.1 above.*		
☐ Y ☐ N	3. Treater, Storer or Disposer of Hazardous Waste—Note: Part B of a hazardous waste permit is required for these activities.		
☐ Y ☐ N	4. Receives Hazardous Waste from Off-site		
☐ Y ☐ N	5 Recycler of Hazardous Waste		
	☐	a. Recycler who stores prior to recycling	
	☐	b. Recycler who does not store prior to recycling	
☐ Y ☐ N	6. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply.		
	☐	a. Small Quantity On-site Burner Exemption	
	☐	b. Smelting, Melting, and Refining Furnace Exemption	

B. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g. D001, D003, F007, U112). Use an additional page if more spaces are needed.

See Attached						

C. Waste Codes for State Regulated (non-Federal) Hazardous Wastes. Please list the waste codes of the State hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

None						

Section 10.B - Waste Codes for Federally Regulated Hazardous Wastes

D001	F003	K035	K110	P011	P063	P119	U027	U075	U123	U170	U222
D002	F004	K036	K111	P012	P064	P120	U028	U076	U124	U171	U225
D004	F005	K037	K112	P013	P066	P121	U029	U077	U125	U172	U226
D005	F006	K038	K113	P014	P067	P123	U030	U078	U126	U173	U227
D006	F012	K039	K114	P015	P068	P127	U031	U079	U127	U174	U228
D007	F019	K040	K115	P016	P069	P128	U032	U080	U128	U176	U235
D008	F024	K041	K116	P017	P070	P185	U034	U081	U129	U177	U236
D009	F025	K042	K117	P018	P071	P188	U035	U082	U130	U178	U237
D010	F032	K043	K118	P020	P072	P189	U036	U083	U131	U179	U238
D011	F034	K046	K123	P021	P073	P190	U037	U084	U132	U180	U239
D012	F035	K048	K124	P022	P074	P191	U038	U085	U134	U181	U240
D013	F037	K049	K125	P023	P075	P192	U039	U086	U135	U182	U243
D014	F038	K050	K126	P024	P076	P194	U041	U088	U136	U183	U244
D015	F039	K051	K131	P026	P077	P196	U042	U089	U137	U184	U246
D016	K001	K052	K132	P027	P078	P197	U043	U090	U138	U185	U247
D017	K002	K060	K136	P028	P082	P198	U044	U091	U140	U186	U248
D018	K003	K061	K141	P029	P084	P199	U045	U092	U141	U187	U249
D019	K004	K062	K142	P030	P085	P201	U046	U093	U142	U188	U271
D020	K005	K069	K143	P031	P087	P202	U047	U094	U143	U190	U278
D021	K006	K071	K144	P033	P088	P203	U048	U095	U144	U191	U279
D022	K007	K073	K145	P034	P089	P204	U049	U097	U145	U192	U280
D023	K008	K083	K147	P036	P092	P205	U050	U098	U146	U193	U328
D024	K009	K084	K148	P037	P093	U001	U051	U099	U147	U194	U353
D025	K010	K085	K149	P038	P094	U002	U052	U101	U148	U196	U359
D026	K014	K086	K150	P039	P095	U003	U053	U102	U149	U197	U364
D027	K015	K087	K151	P040	P096	U004	U055	U103	U150	U200	U367
D028	K016	K088	K156	P041	P097	U005	U056	U105	U151	U201	U372
D029	K017	K093	K157	P042	P098	U007	U057	U106	U152	U202	U373
D030	K018	K094	K158	P043	P099	U008	U058	U107	U153	U203	U387
D031	K019	K095	K159	P044	P101	U009	U059	U108	U154	U204	U389
D032	K020	K096	K171	P045	P102	U010	U060	U109	U155	U206	U394
D033	K021	K097	K172	P046	P103	U011	U061	U110	U156	U207	U395
D034	K022	K098	K174	P047	P104	U012	U062	U111	U157	U208	U404
D035	K023	K099	K176	P048	P105	U014	U063	U112	U158	U209	U409
D036	K024	K100	K177	P049	P106	U015	U064	U113	U159	U210	U410
D037	K025	K101	K178	P050	P108	U016	U066	U114	U161	U211	U411
D038	K026	K102	P001	P051	P109	U017	U067	U115	U162	U213	
D039	K028	K103	P002	P054	P110	U018	U068	U116	U163	U214	
D040	K029	K104	P003	P056	P111	U019	U069	U117	U164	U215	
D041	K030	K105	P004	P057	P113	U021	U070	U118	U165	U217	
D042	K031	K106	P005	P058	P114	U022	U071	U119	U166	U218	
D043	K032	K107	P007	P059	P115	U024	U072	U120	U167	U219	
F001	K033	K108	P008	P060	P116	U025	U073	U121	U168	U220	
F003	K034	K109	P010	P062	P118	U026	U074	U122	U169	U221	

11. Additional Regulated Waste Activities (NOTE: Refer to your State regulations to determine if a separate permit is required.)

A. Other Waste Activities

☐ Y ☐ N	1. Transporter of Hazardous Waste—If "Yes", mark all that apply.
☐	a. Transporter
☐	b. Transfer Facility (at your site)
☐ Y ☐ N	2. Underground Injection Control
☐ Y ☐ N	3. United States Importer of Hazardous Waste
☐ Y ☐ N	4. Recognized Trader—If "Yes", mark all that apply.
☐	a. Importer
☐	b. Exporter
☐ Y ☐ N	5. Importer/Exporter of Spent Lead-Acid Batteries (SLABs) under 40 CFR 266 Subpart G—If "Yes", mark all that apply.
☐	a. Importer
☐	b. Exporter

B. Universal Waste Activities

☐ Y ☐ N	1. Large Quantity Handler of Universal Waste (you accumulate 5,000 kg or more) - If "Yes" mark all that apply. Note: Refer to your State regulations to determine what is regulated.
☑	a. Batteries
☑	b. Pesticides
☑	c. Mercury containing equipment
☑	d. Lamps
☐	e. Aerosol Cans
☐	f. Other (specify) _____
☐	g. Other (specify) _____
☐ Y ☐ N	2. Destination Facility for Universal Waste Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities

☐ Y ☐ N	1. Used Oil Transporter—If "Yes", mark all that apply.
☐	a. Transporter
☐	b. Transfer Facility (at your site)
☐ Y ☐ N	2. Used Oil Processor and/or Re-refiner—If "Yes", mark all that apply.
☐	a. Processor
☐	b. Re-refiner
☐ Y ☐ N	3. Off-Specification Used Oil Burner
☐ Y ☐ N	4. Used Oil Fuel Marketer—If "Yes", mark all that apply.
☐	a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
☐	b. Marketer Who First Claims the Used Oil Meets the Specifications

D. Pharmaceutical Activities

☐ Y ☐ N	1. Operating under 40 CFR Part 266, Subpart P for the management of hazardous waste pharmaceuticals—if "Yes", mark only one. Note: See the item-by-item instructions for definitions of healthcare facility and reverse distributor.
☐	a. Healthcare Facility
☐	b. Reverse Distributor
☐ Y ☐ N	2. Withdrawing from operating under 40 CFR Part 266, Subpart P for the management of hazardous waste pharmaceuticals. Note: You may only withdraw if you are a healthcare facility that is a VSQG for all of your hazardous waste, including hazardous waste pharmaceuticals.

12. Eligible Academic En.. es with Laboratories—No. fication for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262, Subpart K.

☐ Y ☐ N	A. Opting into or currently operating under 40 CFR Part 262, Subpart K for the management of hazardous wastes in laboratories— If "Yes", mark all that apply. Note: See the item-by-item instructions for definitions of types of eligible academic entities.
☐	1. College or University
☐	2. Teaching Hospital that is owned by or has a formal written affiliation with a college or university
☐	3. Non-profit Institute that is owned by or has a formal written affiliation with a college or university
☐ Y ☐ N	B. Withdrawing from 40 CFR Part 262, Subpart K for the management of hazardous wastes in laboratories.

13. Episodic Generation

☐ Y ☐ N	Are you an SQG or VSQG generating hazardous waste from a planned or unplanned episodic event, lasting no more than 60 days, that moves you to a higher generator category. If "Yes", you must fill out the Addendum for Episodic Generator.

14. LQG Consolidation of VSQG Hazardous Waste

☐ Y ☐ N	Are you an LQG notifying of consolidating VSQG Hazardous Waste Under the Control of the Same Person pursuant to 40 CFR 262.17(f)? If "Yes", you must fill out the Addendum for LQG Consolidation of VSQG hazardous waste.

15. Notification of LQG Site Closure for a Central Accumulation Area (CAA) (optional) OR Entire Facility (required)

☐ Y ☐ N	LQG Site Closure of a Central Accumulation Area (CAA) or Entire Facility.
	A. ☐ Central Accumulation Area (CAA) or ☐ Entire Facility
	B. Expected closure date: _____ mm/dd/yyyy
	C. Requesting new closure date: _____ mm/dd/yyyy
	D. Date closed : _____ mm/dd/yyyy ☐ 1. In compliance with the closure performance standards 40 CFR 262.17(a)(8) ☐ 2. Not in compliance with the closure performance standards 40 CFR 262.17(a)(8)

16. Notification of Hazardous Secondary Material (HSM) Activity

☐ Y ☑ N	Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), (25), or (27)? If "Yes", you must fill out the Addendum to the Site Identification Form for Managing Hazardous Secondary Material.

17. Electronic Manifest Broker

☐ Y ☑ N	Are you notifying as a person, as defined in 40 CFR 260.10, electing to use the EPA electronic manifest system to obtain, complete, and transmit an electronic manifest under a contractual relationship with a hazardous waste generator?

18. Comments (include item number for each comment)

9A. the land on which WM Waste, Inc. consists of three parcels, each of which is owned by WM Waste.

WM Waste, Inc. became the owner of parcel with the main operating buildings on December 12, 2022.

The parcels to the west (stormwater pond and Admin building) and to the south (1 acre vacant land) of the operating buildings are owned by:
WM Waste, Inc.
Brandon Shaw, Area Vice-President, WM
21211 Durand Avenue
Union Grove, WI 53182-9711 USA
Date became owner: September 27, 2010

19. Certification I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. **Note: For the RCRA Hazardous Waste Part A permit Application, all owners and operators must sign (see 40 CFR 270.10(b) and 270.11).**

Signature of legal owner, operator or authorized representative	Date (mm/dd/yyyy)
	3/10/23
Printed Name (First, Middle Initial Last) Brandon Shaw	Title President, WM Waste, Inc.
Email BShaw2@wm.com	

Signature of legal owner, operator or authorized representative	Date (mm/dd/yyyy)
Printed Name (First, Middle Initial Last)	Title
Email	

Appendix 2 Waste Analysis Plan

`APPENDIX 2

WASTE ANALYSIS PLAN

WM WASTE, INC.
21211 DURAND AVE.
UNION GROVE, WISCONSIN
EPA ID No. WIR000000356

FEBRUARY 2023

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List of Tables

List of Attachments

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1.0 General Overview

Pursuant to s. NR 670.014(2)(c) Wis. Adm. Code, WM Waste must develop and follow a Waste Analysis Plan (WAP) that meets the requirements of s. NR 664.0013, Wis. Adm. Code. The formatting is based on the WDNR's "WAP Example - PRELIMINARY VERSION; LAST REVISED: FEBRUARY 10, 2022.

This WAP establishes procedures for the following:

1. Store, treat, and dispose of each waste container properly and safely.
2. Identify the procedures used for obtaining a waste characterization of each waste container prior to its acceptance at the facility.
3. The frequency at which analysis of waste occurs to ensure that waste is characterized accurately.
4. Upon waste container receipt, procedures to confirm that:
   a. The contents conform to the approved waste characterization.
   b. The wastes and containers match the shipping documents (e.g., manifest) and Land Disposal Restriction (LDR) paperwork.
   c. Containers are in acceptable condition and properly labelled.
5. Procedures for handling discrepancies and rejected shipments.
6. When the facility needs to conduct an analysis of the waste.
7. The methods used to obtain a representative sampled
8. The parameters for which each waste is analyzed and the rationale for selecting these parameters.
9. The test methods used to test for each parameter.
10. A quality assurance/quality control (QA/QC) program for waste sampling and analysis, along with a corrective action program.
11. Procedures to perform the waste determination and characterization for wastes shipped to other facilities.
12. Procedures to comply with the manifesting requirements for inbound and outbound shipments.
13. Procedures to comply with LDR requirements for inbound and outbound shipments.
14. Recordkeeping and reporting procedures associated with these activities.

The facility uses competent individuals as defined in section 1.1 Definitions of this WAP in all aspects in the implementation of this WAP. Required qualifications and training for these individuals are established in the training program required by s. NR 664.0016, Wis. Adm. Code.

Section NR 662.011, Wis. Adm. Code, requires Wisconsin generators to make an accurate waste determination. This WAP helps the facility use this information to safely handle the wastes it receives and assists the facility's customers in achieving compliance.

Emphasis is placed upon obtaining accurate information about the chemical and physical makeup of each waste received by the facility. This information, which is to be detailed in a Waste Information Profile (WIP) is maintained as part of the facility record and is based on analytical testing of a representative sample of the waste using a laboratory certified or registered under ch. NR 149, and/or is a knowledge-based determination that meets the "acceptable knowledge" criteria as defined in section 1.1 Definitions of this WAP.

The facility accepts waste in a variety of container configurations including "containerized waste", "bulk container waste", "bulk or consolidation packs", and "lab packs". These terms are defined in section 1.1 Definitions. The facility also accepts wastes in a variety of physical forms, including for example liquids, sludges, solids, and layered (or multi-phased). In addition to hazardous wastes regulated under the Resource Conservation and Recovery Act (RCRA) and similarly under chs. NR 660-673, Wis, Adm. Code, the facility also accepts nonhazardous waste. These wastes may also be subject to additional regulatory requirements such as the Toxic Substances Control Act (TSCA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) also known as Superfund, as well as Chs. NR 500-544, Wis. Adm. Code.

1.1 Definitions

For the purposes of this WAP the facility uses the following definitions.

"**Accept"** or "**Acceptance**" means the time when waste screening is complete and the facility signs line 20 of the manifest.

"**Acceptable Knowledge**" means knowledge-based determinations that are based on relevant and reliable (i.e., verifiable) information from any source that indicates that the waste is either a hazardous waste or non-hazardous waste under subchapter C and D of chapter NR 661 Wis. Adm. Code; which hazardous waste codes(s) apply; and which exclusions or restrictions pertain to management of the waste. Acceptable knowledge may include, but is not limited to, any of the following: process knowledge, which describes information about chemical feedstocks and other inputs to the production process; knowledge of products, by-products, and intermediates produced by the manufacturing process; chemical or physical characterization of wastes; information on the chemical and physical properties of the chemicals used or produced by the process or otherwise contained in the waste; testing that illustrates the properties of the waste; or other reliable and relevant information about the properties of the waste or its constituents.

"**Bulk Container Waste"** or **"Bulk Waste**" or "**Bulk Load**" means waste that is received and shipped in large containers, such as Intermediate Bulk Container (IBC (also known as totes)) as defined at 49 CFR 171.8, tanker trucks, roll-off containers, and lugger boxes.

"Bulk Container" means a container that holds Bulk Container Waste.

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"**Bulk or Consolidation Packs**" means containers that hold smaller containers of one type of material (e.g., paints, lamps). Each bulk or consolidation pack container is prepackaged in accordance with applicable U.S. DOT regulations. Examples of wastes delivered in this way include spent batteries, palletized boxes of ODM/OEM chemicals that have been shipped in the original manufactures approved outer containers.

"**Consolidation"** or "**Commingling**" or "**Bulking**" means the act of combining the contents of one container or tank with the contents of another container or tank, such that they are in contact with each other. Lab-packing/repacking does not constitute consolidation.

"**Competent Individual**" means a person by way of training and/or experience, is knowledgeable of applicable standards, is of sound mind and body, and is capable of identifying workplace hazards and environmental risks relating to the specific operations and has the authority to correct them.

"**Container**" per s. NR 660.10(14) Wis. Adm. Code means any portable device in which a material is stored, transported, treated, disposed of or otherwise handled (e.g., sacks, flasks, pails, bags, boxes, gas cylinders, drums, IBCs, cubic-yard boxes and bags, and tanker trucks).

"**Discrepancy**" For Level I, II, and IIIanalyses, "discrepancy" means a difference between the waste received at the facility when compared to its WIP, the manifest or bill of lading, and the LDR document (if applicable). Examples of discrepancies include all of the following:

- The container differs from the information provided on the manifest or shipping paper.
- The waste is a different waste stream than the waste described in the WIP.
- The waste codes in the WIP, manifest, and LDR document do not align.

"**Facility**" means WM Waste, Inc., 21211 Durand Avenue, Union Grove, WI, EPA ID No. WIR000000356.

"**Fingerprint Analysis**" means the sampling and analysis of key chemical and physical parameters of a waste to substantiate or verify the composition of a waste as determined previously during a full-scale waste characterization/determination. Fingerprint analysis is typically used by the facility to expedite screening of received wastes. Parameters for analysis may be a subset of the parameters used during full-scale characterization, or they may be parameters that are not normally present in the waste to verify the absence of certain constituents.

"**Fuel Blending**" means combining compatible hazardous wastes that possess substantial heat value with other compatible materials that also possess substantial heat value (e.g., used oil, spent solvent) to create a waste that is amendable to burning for energy recovery. Fuel blending is hazardous waste treatment that requires a license.

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"Lab Pack" means an over-packed container, usually a steel, fiber, or polyethylene drum, containing a variety of small containers of chemicals of the same DOT hazard class packed in nonbiodegradable absorbent materials. Each lab pack container is prepackaged in accordance with applicable U.S. DOT regulations that are based on compatibility, content, and size of individual samples. An inventory-packing list accompanies each lab pack container and identifies, among other things, the content, quantity, and size of each container within the lab pack, and applicable hazardous waste code(s).

"**Lab-packing/Repacking**" means when small containers of hazardous waste are placed into a larger container while remaining in the original smaller container, with the intention to not allow the waste contents to mix.

"**Licensed RCRA Unit**" or "**Licensed Unit**" means a unit that has a hazardous waste license number assigned to it and meets the definition of "hazardous waste management unit" in s. NR 66110(54) Wis. Adm. Code. Examples include:

- Container storage areas. Note: A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed (see s. NR 660.10(54), Wis. Adm. Code).
- Tanks and associated piping and underlying containment systems.
- Landfills.
- Miscellaneous units.

"**Manufactured Article**" means a device this is designed for a purpose other than to access the chemicals that are present within the device. As examples, one uses these articles for electrical energy (batteries), light (lamps) or to measure temperature (thermometers). One does not use these articles to access the mercury, lead, or other chemicals contained in these articles.

"**Processing**" or "**Process**" means when the contents of a container or tank are added to a different container or tank or combined with other wastes or materials or are otherwise treated in a manner not requiring a hazardous waste license. The following are examples of license-exempt processing activities:

- Consolidation or commingling or bulking
- Lab-packing, Repacking, and re-packing
- Elementary neutralization
- Wastewater Treatment Unit treatment
- Qualifying treatability studies

Proper processing requires that wastes are only combined or comingled when compatible with the container and the other wastes or materials.

"**Receive"** or "**Receipt**" means the time when a waste delivery enters the facility property.

"**Repackaging"** or "**Recontainerization**" occurs when the contents one a container are moved to another container without mixing with another waste. This includes placement of a container into an overpack container.

"**Shipment**" means a container or containers of a single waste stream or waste streams that is delivered in the same transportation vehicle.

"**Trans-ship**" means a waste that has been accepted into the facility and is then shipped to an off-site facility; the waste remains in its original container and the waste does not undergo any type of treatment or processing.

"**Waste Information Profile (WIP)"** means written documentation for a specific waste stream that is intended to contain all the information which must be known by the facility to properly process, treat, store, and/or transship the waste according to this chs. NR 664 and NR 668, Wis. Adm. Code.

"**Waste Analysis**" means waste information gathered from analytical testing of representative samples and from knowledge-based determinations.

"**Waste Stream**" means a single type of solid waste or hazardous waste from a single generator.

1.2 Facility Activities

Storage:

The following is a list of licensed container storage areas:

- S-1
- S-2
- S-3
- S-4
- S-5
- S-6
- S-7
- S-8
- S-12

A more detailed description of these container storage areas is provided in Section 5.0 of the FPOR.

The following is a list of licensed tank storage areas:

- Not Applicable.

Processing:
The following is a list of processing activities and areas:

- (list and briefly describe each processing activity and location/area that occurs at the facility by the name/location used in the FPOR. Note that the FPOR must describe in more detail describe these processes, their locations, and controls). Examples of non-licensed treatment may include:
    - Consolidation of debris into containers in S-8
    - Labpacking/ Repacking in S-8

Treatment:
The following is a list of licensed hazardous waste treatment activities and areas:

- None.

2.0 Waste Prequalification

All waste approved to be shipped to or accepted by the facility must be approved through the waste prequalification process. As described in section 3.0 Waste Analysis of this WAP, the prequalification process requires completion of a Waste Information Profile (WIP) by the generator or their authorized agent, and review and approval of the WIP by the WM Waste Approval staff. WM Waste's WIP form is designated as the EZ ProfileTM (see Attachment 2-1). Wastes which do not meet the prequalification requirements of having a WIP approved by the facility and/or have hazardous waste codes that the facility is not authorized to accept (section 4.0 Acceptable Waste Codes of this WAP) are not accepted by the facility.

As a standard practice, all shipments of waste to the facility are scheduled. The facility will not approve the schedule of any shipment of wastes that have not been prequalified through the WIP process described herein. For waste shipments that are not scheduled, WM Waste then implements the waste approval process as described in this WAP

The facility does not accept "unknown" wastes. If an unknown waste is delivered to the facility without the facility's knowledge or consent (e.g., waste left at gate during the night, or an unidentified waste accompanies a waste delivery and is off-loaded by the facility), the facility makes a waste determination in accordance with s. NR 662.011 Wis. Adm. Code for the purpose of placing the waste into the facility's storage area and/or preparing the waste for proper shipment to an appropriate off-site facility.

For authorized agents that represent the generator (such as consultants or brokers), the facility will obtain written evidence that demonstrates that agents have authority to act on behalf of the generator for the purpose of arranging for the management of the generator's waste stream.

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3.0 Waste Analysis

Section 664.0013(1) Wis. Adm. Code requires that the facility obtain a detailed chemical and physical analysis of a representative sample of a waste. This analysis must contain all the information which must be known to treat, store, or dispose of the waste according to chapters NR 664, 668 Wis. Adm. Code and the conditions of the facility's license. The Facility uses the following methods to meet this requirement:

Representative Sample and Analysis
When available generator knowledge is inadequate to determine whether the waste exhibits one or more hazardous characteristics, the waste analysis must contain results from analytical testing of a representative sample in the manner consistent with the generator requirements of s. NR 662. 011(4)(b) Wis. Adm. Code.

The waste analysis requirements for analytical testing are met when a representative sample of the waste identifies the chemical and physical characteristics and composition of a waste. Section 664.0013(1)(a)1. Wis. Adm. Code requires that chemical and physical samples be analyzed (except for field analyses for pH, specific conductance and temperature) by a laboratory certified or registered under ch. NR 149; this includes waste received by the facility from in-state and out-of-state generators.

The waste analysis must include, as supporting information, a certification that a representative sample was collected in accordance with s. NR 662.011(4)(b)(1), and the laboratory's report(s) showing the analytical methods, detection limits, results, and quality control checks.

Knowledge-Based Information
In lieu of analytical testing on a representative sample, the waste analysis requirements for knowledge-based determination are met when the knowledge base determination meets "acceptable knowledge". In this case the waste analysis must contain information consistent with the generator requirements of s. NR 662. 011(4)(a) Wis. Adm. Code. Acceptable knowledge may include any of the following:

- Process knowledge, which describes information about chemical feedstocks and other inputs to the production process.
- Knowledge of products, by−products, and intermediates produced by the manufacturing process.
- Chemical or physical characterization of wastes.
- Information on the chemical and physical properties of the chemicals used or produced by the process or otherwise contained in the waste
- Testing that illustrates the properties of the waste. A test other than a test method set forth in subchapter C chapter NR 661 Wis. Adm. Code, or an equivalent test method approved by the department under s. NR 660.21 Wis. Adm. Code, may be used as part

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of a person's knowledge to determine whether a solid waste exhibits a characteristic of hazardous waste. However, such tests do not, by themselves, provide definitive results.
- Relevant information about the properties of the waste or its constituents.
- Analytical results (i.e., numbers) used in knowledge-based determination must be supported.

If non-NR 149 certified laboratory data is used by the generator to show if a waste is or is not a characteristic waste and/or to describe other waste properties, then the Facility requires the generator to submit suitable laboratory quality control information or laboratory certifications. The WM Waste Approval staff must review any such laboratory certifications and conclude that they are equivalent to that which a laboratory certified or registered under ch. NR 149 must achieve, prior to approving the waste stream.

As evidence to support a generator's knowledge-based determination, a generator may use a test method other than the test methods set forth in subch. C of ch. NR 661 Wis. Adm. Code or an equivalent test method approved by the department under s. NR 660.21 Wis. Adm. Code. However, these tests methods cannot be used, by themselves, to make a determination if a solid waste exhibits a characteristic of a hazardous waste (s. NR 661.011(40(a) Wis. Adm. Code).

3.1 Waste Information Profile (WIP)

Each waste stream accepted by the facility is described in an approved WIP. For the WIP and associated documentation to be complete, it must contain all the following:

3.1.1 WIP Content

Documentation from the generator or their authorized agent:

1. A detailed description of the process that generated the waste.
2. If sampling was used to determine if the waste is or is not a characteristic hazardous waste, then a certification that the samples collected are representative.
3. If generator knowledge was used by the generator, a complete set of the information described in NR 662.011(4)(a) Wis. Adm. Code such as process knowledge, which describes information about chemical feedstocks and other inputs to the production process; knowledge of products, by-products, and intermediates produced by the manufacturing process; chemical or physical characterization of wastes; information on the chemical and physical properties of the chemicals used or produced by the process or otherwise contained in the waste; testing that illustrates the properties of the waste; or other reliable and relevant information about the properties of the waste or its constituents.
4. The generator's hazardous waste determination that shows compliance with s. NR 662.011 Wis. Adm. Code.

5. Laboratory analytical reports as needed to support an accurate waste determination under NR 661.011 and an accurate waste analysis under NR 664.0013(1)(a), unless acceptable knowledge does not necessitate them.
6. The waste's waste analysis meets section 3.0 Waste Analysis of this WAP.
7. All of the information which must be known by the facility to treat, store, or dispose of the waste according to chapters NR 664, 668 Wis. Adm. Code and the conditions of the facility's license.
8. Determination if the hazardous waste has a Volatile Organic Compounds (VOCs) concentration of at least 500 Part per Million by Weight (ppmw). If so, then container is subject to subchapter CC of chapter NR 553, Wis. Adm. Code.
9. An LDR document in compliance with s. NR 668.07(1) Wis. Adm. Code.
10. If applicable, an SDS for waste that is a commercial chemical product (excluding household-generated wastes and lab packs).
11. Upon expiration of an existing approval, the generator certifies that the chemical and physical characteristics of the waste remain unchanged and that the WIP remains complete and accurate. Documentation is maintained with WM Waste Approvals system which is accessible at all times.

The WIP form used by the facility to capture this information, designated as the EZ Profile™, is included in Attachment 2-1. The WIP form must be accompanied by supportive documents as necessary to address all of the required information summarized above. To be approvable. all information identified in the WIP form must be included or addressed.Each approved WIP is identified by a unique number in the upper right corner of each page. The manifest or shipping paper accompanying each delivery of waste must clearly identify the WIP number for each different waste stream in the delivery.

3.1.2 WIP Review and Approval

A WIP must be completed, signed, and submitted by the generator or the generator's authorized agent for each waste stream (including nonhazardous waste) that is proposed to be placed into the facility's licensed unit. The WM Waste Approval staff then reviews each WIP to determine if the facility can properly store and/or treat the waste. Based on the information provided in the WIP, the facility must do one of the following:

1. Approve the WIP. An example approval form is provided in Attachment 2-1. The approval form is signed by the Waste Approvals staff and contains conditions as necessary.
2. Determine that the WIP requires additional information before making an approval determination.
3. Deny the WIP.

After one of these decisions is made, the Facility notifies the generator of the decision, and maintains documentation of this notification with the WIP in the operating record.

The following are examples of when the facility requires additional information before the facility makes a determination of accepting the waste into the facility:

- Required information is omitted from the WIP. For example, the generator did not provide sufficient information about the process generating the waste or how the samples were collected.
- The information in the WIP is inconsistent. For example, the generator classifies that waste as an acidic solution, but the waste has a pH value of 14.
- The generator does not provide sufficient information which must be known to safely store and treat the waste. For example, the generator classifies the waste as a D003, but fails to identify why the waste carries the D003 waste code. Is it due to the waste being an explosive, generating toxic gases, or reacting violently with water?

An incomplete or inconsistent WIP cannot be approved and therefore the waste cannot be accepted into the facility. In all cases, if the facility is not confident that a waste has been sampled or characterized accurately, or if knowledge-based information is not adequately supported, then the facility cannot approve the waste for acceptance into the facility.

The facility documents the approval of each WIP. This approval is retained with that WIP and supporting documentation along with any conditions of approval that must be followed by the generator or transporter. The WIP, all supporting documentation package, and the approval is retained as part of the facility's operating record and made available as may be needed to persons performing Level I, II, or III analyses. This documentation will also include any subsequent corrections or supplementary information to the WIP along with its approval. Each part of the documentation will be clearly identified as part of the WIP, such as by marking it with the unique WIP number. These operating record requirements can be achieved with electronic documents provided they are properly organized, secured from unauthorized editing, and readily available.

3.1.3 WIP Updates

In accordance with s. NR 664.0013(1)(c), Wis. Adm. Code, the WIP process must be repeated as necessary to ensure that it is accurate and up to date. At a minimum, this must occur when:

1. The facility is notified by the generator or authorized agent, or the facility has reason to believe, that the process or operation generating the waste has changed.
2. The results of the inspection of wastes indicate that the waste received at the facility:
    a. Does not match the waste described in the WIP.
    b. The waste differs from waste previously received from the generator that has the same WIP.
    c. The WIP was approved more than 3 years prior to receipt, or 5 years for sampling-exempt materials.

In accordance with s. NR 664.0013(1)(a)1, Wis. Adm. Code, chemical and physical samples used to support the WIP must be analyzed by a laboratory certified or registered under ch. NR 149, Wis.

Adm. Code, except for certain field analyses (i.e., field analyses for pH, specific conductance ,and temperature). In accordance with s. NR 664.0013(1)(a), only representative samples are used to obtain the detailed chemical and physical analysis.

If non-NR 149 lab data is provided as part of the WIP and the non-NR 149 lab data is used in the acceptance of the waste into the facility, then the facility obtains laboratory certifications that show the data from the non-NR 149 lab is equivalent to the standards listed in ch. NR 149, Wis. Adm. Code.

Each WIP's approval last for one year from the date that the WIP was last approved by the facility. For the waste to be accepted again, the generator or authorized agent must provide a signed statement to the facility that certifies the waste generating process and the chemical and physical characteristics of the waste remain unchanged. If changes have occurred, then a new WIP is required. If a signed certification statement is not returned to the facility, the WIP approval is voided. Records documenting these actions are kept with the WIP's documentation package. An example of the WIP Approval form is provided in Attachment 2-1.

3.2 Determination of Outbound Designated Facility

Either as part of the prequalification process during WIP approval or prior to shipping waste offsite, the facility also identifies the designated outbound facility(s) to which the facility intends to ship the waste after the waste has been received by the facility. Selection of the designated outbound facility is based on the WIP, assigned RCRA hazardous waste codes, any applicable land-disposal restriction regulations, generator request/requirement, and any requirements or restrictions of the designated facility's license or permit. Wastes cannot be shipped offsite unless the waste meets the acceptance criteria of the outbound designated facility(s) and the outbound facility(s) is reasonably anticipated to be available.

4.0 Acceptable Waste Codes

This facility is licensed to accept certain hazardous waste codes. See the current Part A application of the license for a full list of the hazardous waste codes that the facility is allowed to accept. As a matter of convenience, the waste codes listed in part A have been included in Attachment 2-8. Additional waste codes may be accepted only after a license modification is approved. In addition, the facility does not accept the wastes identified in section 8.0 Restricted Wastes of this WAP.

5.0 Shipment Screening, Analysis, and Acceptance

When the facility receives a shipment of waste, the facility must successfully complete and document the following procedures to accept the waste into a licensed hazardous waste unit:

1. Review the manifest or shipping paper for accuracy and completeness and resolve any inaccuracies and/or items of incompleteness (see 9.0 Manifest and Bill of Lading Discrepancies of this WAP).
2. Confirm receipt of and review the LDR document for accuracy and completeness; resolve any inaccuracies and/or items of incompleteness.
3. Review the WIP, manifest or shipping paper, and LDR document for discrepancies between them and resolve any discrepancies. Record these discrepancies and how they were resolved into the facility operating record.
4. Check container labels for accuracy and consistency with the WIP and resolve any inaccuracies and/or items of incompleteness.
5. Check the condition of each container and the type of container used for that waste and verify that the container is U.S. DOT approved. If not in a U.S. DOT approved container then the facility must repackage the waste into an approved U.S. DOT container, prior to shipping to the designatedl facility. The facility checks to confirm that the container is not leaking and properly closed.
6. Verify that each container type, and size is consistent with the information in the WIP and manifest or shipping paper., LDR document, and waste stored in the container.
7. Assign a unique container number to each container using the facility's tracking system and affix a durable label marked with that unique number to the container
8. The facility utilizes a tiered approach for analyzing incoming shipments at the facility.
   a. Perform a Level I analysis on each shipment received as described in section 5.1 Level I Analysis of this WAP.
   b. Perform a Level II analysis when the Level I analysis indicates unresolved discrepancies between the waste and its WIP as described in sections 5.2 Level II Analysis of this WAP.
   c. Perform a Level III analysis to containers received on a periodic basis (to evaluate the accuracy of the WIPs maintained by the facility) as described in sections 5.3 Level III Analysis of this WAP.
9. Complete the form(s) in Attachment 2-F and Attachment 2-G.
10. In addition to the prequalification requirements described in section 2.0 Waste Prequalification and the waste analysis requirements in section 3.0 Waste Analysis the facility reviews each lab pack' packing list using the Lab Pack Contents Form (see Attachment 2-B). If any incompatible or unacceptable material is listed on the Lab Pack Contents Form, the generator or generator's agent is given the option of either arranging for the facility to properly repack that material or having the lab pack container rejected by the facility.

Table 2 gives an overview of these analyses and **Table** summarizes the analytical parameters and rationales used to determine the general and specific characteristics of a waste stream.

Table 2: Required Analyses to be Performed by the Facility for Incoming Waste Shipments

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Incoming Shipments						
Analysis Level	**Level I**		**Level II***		**Level III**	
Frequency	**Each container and bulk load**		**Unresolved discrepancy from Level I**		**One out of every 500 containers/bulk load**	
Parameter	**Review Required**	**Analytical Method to use****	**Review Required**	**Analytical Method to use****	**Review Required**	**Analytical Method to use****
Physical Evaluation	Yes	M-1			Yes	M-1
pH (if applicable)	Yes	M-2			Yes	M-2
Ignitability (if applicable)	Yes	M-3			Yes	M-3
Water Reactivity			Yes	M-4	Yes	M-4
Reactive Sulfides Screen			Yes	M-5	Yes	M-5
Reactive Cyanides Screen (Spot Test)			Yes	M-6	Yes	M-6
Oxidizer Screen			Yes	M-7	Yes	M-7
Specific Gravity(if applicable)			Yes	M-8	Yes	M-8
% Suspended Solids			Yes	M-9	Yes	M-9
Chlorine Spot Test(if applicable)			Yes	M-10	Yes	M-10
Polychlorinated Biphenyl (PCB) Screen (if applicable)			Yes	M-11	Yes	M-11
TCLP (if applicable)			Yes	M-12	Yes	M-12
Any other parameter necessary to	When necessary		When necessary		When necessary	

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Incoming Shipments						
Analysis Level	**Level I**		**Level II***		**Level III**	
Frequency	**Each container and bulk load**		**Unresolved discrepancy from Level I**		**One out of every 500 containers/bulk load**	
Parameter	**Review Required**	**Analytical Method to use****	**Review Required**	**Analytical Method to use****	**Review Required**	**Analytical Method to use****
confirm that the waste matched the WIP and that the waste can be properly managed						

* A complete Level II suite of analyses is not necessary or appliable to all wastes which Level I analyses indicates a discrepancy. For example, a suspend solids test would not need to conducted on a solid material such as a brick.
** See Table 2: Analytical Parameters and Rationales

Sampling-exempt Materials:
The following wastes do not require sampling and/or analytical testing for level I and level III analysis unless the analytical testing is needed to maintain compliance with chs. NR 660 to 679 Wis Adm. Code. **Note that a physical evaluation (method M-1) is still required.**

1. Household hazardous waste as defined by s. NR 661.0004(2)(a) Wis. Adm. Code.
2. Empty hazardous waste containers as defined in s. NR 661.0007 Wis. Adm. Code.
3. The listed commercial chemical products as defined under s. NR 661.0033(1) to (4) Wis. Adm. Code that are in their original container. The WIP must include an SDS. Examples:
    a. Any unused commercial chemical products that appear on the U listing.
    b. Any unused commercial chemical products that appear on the P listing.
4. Non-listed commercial chemical products that are not defined under s. NR 661.0033(1) to (4) Wis. Adm. Code, are unused, and are in their original container. The WIP must include an SDS. Examples:
    a. Paints.
    b. Pharmaceuticals as defined by s. NR 666.500(9) Wis. Adm. Code.
5. Manufactured articles as defined in section 1.1 Definitions. Examples:
    a. Video Monitors.
    b. Universal waste lamps, batteries, and mercury containing equipment.
    c. Cathode ray tubes (CRTs).
    d. Hydraulic equipment.

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e. Computers.
f. Cell phones.

6. Lab packs as defined in section 1.1 Definitions.
7. Contaminated environmental media (e.g., soil, groundwater) when the contamination is due to a release of a known chemical substance, commercial product, or waste, as established in the approved WIP.
8. Contaminated personal protective equipment (PPE).
9. Debris as defined by s. NR 668.02(7) Wis. Adm. Code generated only from construction or demolition activities involving a known chemical substance, commercial product, or waste, as established in the approved WIP. Examples:
    a. Construction of a healthcare facility's x-ray room that resulted in the generation of scrap wallboard covered with lead sheeting.
    b. Removal of asbestos insulation from a pipe run that contains lead paint.
    c. Demolition of a wall covered in lead paint.

5.1 Level I Analysis

Prior to acceptance, the facility opens and inspects each container and bulk load in the waste receiving area, including:

- Containers that are trans-shipped or planned to be trans-shipped.
- Containers of sampling-exempt materials identified in section 5.0 Shipment Screening, Analysis, and Acceptance of this WAP - except that the following containers are not required to be opened:
    - manufactured articles
    - small containers within a lab pack container

Upon opening each container and bulk load, the facility performs an examination of the waste and compares the waste to the information on the label(s), manifest/shipping paper, and WIP.

Physical Evaluation:
The physical examination includes, at a minimum, appearance, color, layering, viscosity, and odor if detected.

- Waste Liquids: The facility uses a composite liquid waste sampler (COLIWASA) or sample thief to check for layering. Layering can include, for example, different phases of liquids, or a layer of solid or semi-solid material at the bottom of the container.
- Waste other than liquids: The facility uses an auger, sludge sediment probe, or similar devise to check for layering.
- Lab packs: The facility only needs to open the lab pack to confirm that it meets the definition of a lab pack.

If the evaluation of the waste or WIP indicates that the waste is potentially ignitable or corrosive, then the facility screens the waste for flash point and/or corrosivity. Waste streams that are potentially subject to flash point and/or corrosivity screening include:

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- Waste containing liquids;
- Waste having a petroleum- or solvent-like odor; and
- Wastes that are not already characterized as exhibiting the characteristic of ignitability (D001) or corrosivity (D002).

Representative Sampling:
The facility collects a representative sample for analytical testing from each container and bulk load in accordance with the facility's Sampling SOP (see Attachment 2-3 of the WAP). The following are exceptions to the collection of a representative sample for analytical testing from each container:

- Shipments of multiple containers from a single generator with the same WIP in which the physical evaluation showed the waste in the containers are consistent. In this case collect at least one representative sample from every ten containers received; the container to be sampled will be selected in a randomized manner.
    - If a discrepancy is found in a container that was selected as one to be sampled from a batch of 10 or fewer other containers of the same waste stream from the same shipment, then a Level I sample and analysis is performed on all containers.
- Sampling and analytical testing is not required for the sample-exempt wastes listed in section 5.0 Shipment Screening, Analysis, and Acceptance of this WAP.

The facility ensures that a representative sample is collected when a container contains waste with multiple layers or phases. When appropriate, individual (un-composited) samples of individual phases layers can be used for analysis to evaluate conformance with WIP information.

Analytical Testing:
The analytical testing required for a Level I analysis are identified in the column titled "Analytical Method to use" in **Table 2** of this WAP.

Evaluating the Physical and Analytical Results:
The facility compares the Level I physical examination and analytical results to the waste's WIP. If the Level I analysis identifies a discrepancy, the facility takes the following actions.

1. Follow section 10.0 WIP Discrepancies of this WAP.
2. Clearly mark or label the waste with the word "Quarantined".
3. Place the waste in a quarantine area within a licensed storage area until the discrepancy is resolved. The container must remain in quarantine until it is accepted or removed from the facility.
4. Promptly contact the generator or the generator's agent and attempt to resolve the discrepancy.
    a. If the discrepancy is resolved by contacting the generator and the WIP remains accurate, then the waste is moved to the appropriate licensed unit by the end of the day.

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b. If the discrepancy cannot be resolved by the generator, then the facility chooses one of the following options:
    i. Reject the waste back to the generator in accordance with NR 664.0072(6) Wis. Adm. Code and section 8.0 Restricted Wastes of this WAP.
    ii. Ship the waste, with the generator's consent. to another TSD facility in accordance with NR 664.0072(4) and (5) Wis. Adm. Code. In addition to these requirements, the facility provides the new receiving TSD facility with the original WIP and Level I (and as applicable II and III) analysis results.
    iii. Accept the waste and perform a level II analysis. Note that the container must remain labelled as "quarantined" until it is accepted or removed from the facility.

5. The facility requires a new WIP to be submitted by the generator or generator's agent when the discrepancy involves the waste's physical and/or analytical results not matching the waste's WIP.
6. Document the cause and resolution of the discrepancy in the operating record together with a copy of the manifest.

Records:
The Level I analysis is documented using the Level I QA/QC report (see Attachment 2-6 of this WAP). A record of all Level I analysis (and how discrepancies were resolved) is maintained by the facility in accordance with section 17.0 Recordkeeping and Reporting for each container delivery as part of the facility operating record.

5.2 Level II Analysis

The facility conducts a Level II analysis when there is an unresolved Level I discrepancy and the facility retains the waste. Waste subject to Level II analysis remains quarantined until the discrepancy is resolved. The container must remain labeled as "quarantined" until it is placed in storage or removed from the facility.

Representative Sampling:
The "Representative Sampling" for a Level II analysis is performed as described in section 5.1 Level I Analysis of this WAP.

Analytical Testing:
The analytical testing methods used for a Level II analysis are identified in the column titled "Analytical Method to use" in **Table 2** of this WAP. Methods M-11 and M-12 require testing by a laboratory certified under NR 149. The particular Level II parameters and methods to be used will be based on the results of the Level I analysis and an evaluation of the WIP and associated

documentation. At a minimum, Level II analysis parameters and methods must include the parameters and methods provided as part of the WIP waste characterization.

Evaluating the Physical and Analytical Results:
If the Level II analysis identifies a discrepancy with the WIP, the facility takes the following actions:

1. Follow section 10.0 WIP Discrepancies of this WAP.
2. Clearly mark or label the waste with the word "Quarantined".
3. Place the waste in a quarantine area within a licensed storage area until the discrepancy is resolved. The container must remain in quarantine until it is accepted or removed from the facility.
4. Promptly contact the generator or the generator's agent and attempt to resolve the discrepancy.
    a. If the discrepancy is resolved by contacting the generator and the WIP remains accurate, then the waste is moved to the appropriate licensed unit by the end of the day.
    b. If the discrepancy cannot be resolved by the generator, then the facility chooses one of the following options:
        i. Reject the waste back to the generator in accordance with NR 664.0072(6) Wis. Adm. Code and section 8.0 Restricted Wastes of this WAP.
        ii. Ship the waste, with the generator's consent to another TSD facility in accordance with NR 664.0072(4) and (5) Wis. Adm. Code. In addition to these requirements, the facility provides the new receiving TSD facility with the original WIP and Level I (and as applicable II and III) analysis results.
5. The facility requires a new WIP to be submitted by the generator or generator's agent when the discrepancy involve the waste's physical and/or analytical results not matching the waste's WIP.
6. Document the cause and resolution of the discrepancy in the operating record together with a copy of the manifest.

Records:
The Level II analysis is documented using the Level II QA/QC report (see Attachment 2-7 of this WAP). A record of all Level II analysis (and how discrepancies were resolved) is maintained by the facility in accordance with section 17.0 Recordkeeping and Reporting for each container or bulk load subject to a level II analysis.

5.3 Level III Analysis

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The facility conducts a Level III analysis for the contents of one out of every 500 containers and the contents of one out of every 50 bulk loads,including non-hazardous wastes, received by the facility.

- The facility uses an inventory tracking system, to identify every 500th container and every 50th bulk load received by the facility in sequential order. The above procedure is implemented with the following exceptions:
  - If the 500th container or 50th bulk load is a sample-exempt wastes or a P or U-listed waste, then the facility selects the next sequential container that is not one of these types of waste.
  - If the 500th container is one of several containers within a single delivery, the container to undergo Level III analysis will be selected randomly from the delivery.

The facility uses its container tracking system to track the number and sequence of containers received by the facility, in order to identify Level III container candidates. A description of the inventory tracking system is provided in Section 4.1.1.4 of the FPOR.

Physical Evaluation:
The "Physical Evaluation" is performed as described in section 5.1 Level I Analysis of this WAP.

Representative Sampling:
The "Representative Sampling" for a Level III analysis is performed as described in section 5.1 Level I Analysis of this WAP.

Analytical Testing:
The analytical testing methods that are used for a Level III analysis are identified in the column titled "Analytical Method to use" in **Table 2** of this WAP. Methods M-2, M-3, M-11, and M-12 require testing by a laboratory certified under NR 149. At a minimum, Level III analysis parameters and methods must include the parameters and methods required as part of the WIP waste characterization.

Evaluating the Physical and Analytical Results:
On an annual basis, the facility reviews the Level III analysis and the previous year's Level III analysis results to ensure that a variety of waste types and customers have been, and will continue to be, represented.

If the Level III analysis identifies a discrepancy with the WIP, the facility takes the following actions:

1. Follow section 10.0 WIP Discrepancies of this WAP.
2. Clearly mark or label the waste with the word "Quarantined".

3. Place the waste in a quarantine area within a licensed storage area until the discrepancy is resolved. The container must remain in quarantine until it is accepted or removed from the facility.
4. Promptly contact the generator or the generator's agent and attempt to resolve the discrepancy.
    a. If the discrepancy is resolved by contacting the generator and the WIP remains accurate, then the waste is moved to the appropriate licensed unit by the end of the day.
    b. If the discrepancy cannot be resolved by the generator, then the facility chooses one of the following options:
        i. Reject the waste back to the generator in accordance with NR 664.0072(6) Wis. Adm. Code and section 8.0 Restricted Wastes of this WAP.
        ii. Ship the waste, with the generator's consent to another TSD facility in accordance with NR 664.0072(4) and (5) Wis. Adm. Code. In addition to these requirements, the facility provides the new receiving TSD facility with the original WIP and Level I (and as applicable II and III) analysis results.
5. The facility requires a new WIP to be submitted by the generator or generator's agent when the discrepancy involves the waste's physical and/or analytical results not matching the waste's WIP.
6. Document the cause and resolution of the discrepancy in the operating record together with a copy of the manifest.

Records:
The Level III analysis is documented using the Level II/III QA/QC report (see Attachment 2-7 of this WAP). A record of all Level III analysis (and how discrepancies were resolved) is maintained by the facility in accordance with section 17.0 Recordkeeping and Reporting for each container or bulk load subject to a level III analysis.

5.4 Final Acceptance and Placement of Waste in Storage

Upon verification that the container and its waste contents are acceptable through the waste screening process, the container is then moved from the receiving area to an appropriate licensed storage unit or removed and placed into transportation. Such movement or removal occurs within 24 hours after the waste arrived at the facility unless the container is quarantined.

Any waste that does not conform to the corresponding WIP and other applicable records is quarantined until the discrepancy is resolved with the generator. Upon resolution of the discrepancy, quarantine labels are removed, and the waste is moved to an appropriate licensed storage unit by the end of the day or removed and placed into transportation by the end of the day.

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A waste may be accepted but still rejected, if the facility determines after signing the manifest that the waste does not conform to the corresponding WIP; in this case the container is labelled for (and placed into) quarantine.

6.0 Processing Wastes

Certain processing activities such as bulking, containerizing, consolidating, lab-packing/repacking, and elementary neutralization do not require a hazardous waste treatment license when hazardous waste treatment is not occurring. For example, repackaging waste from larger to smaller container or from a smaller to larger container is not treatment provided the intent is to make the waste more cost-effective for shipment to a TSD facility, and provided that any reduction in the hazards due to this activity is incidental (i.e., not the intent of the activity)[1].

Consolidation that involves hazardous waste treatment, such as blending of different types of hazardous waste to meet a fuel specification, does not occur at the Facility (see section 7.0 Treatment).

Processes that involve impermissible dilution do not occur at the facility. The facility will not perform impermissible dilution when performing consolidation or processing.

The June 1, 1990, federal register (55 FR 22666/22667[2]) states the following:
"*The Agency is able to provide limited additional guidance today on the issue of when treatment methods involving dilution are permissible. The issue frequently arises when prohibited wastes are aggregated for purposes of treatment. First if the wastes are all legitimately amenable to the same type of treatment, and this method of treatment is utilized for the aggregated wastes, the aggregation step is not impermissible dilution. Thus, it is permissible (and normally desirable) for prohibited organic-containing wastes that are suitable for combustion to be aggregated before combustion even though the concentration of organics in some of the wastes decreases*"
The mixing (i.e., aggregation) of hazardous wastes for treatment on an economic scale must only occur when the waste-constituents are legitimately amenable to the same type of treatment.

All required waste codes and LDR restrictions are followed when wastes are consolidated.

6.1 Compatibility Testing for Consolidated Waste

1 RO 11497: https://rcrapublic.epa.gov/files/11497.pdf
RO 12458: https://rcrapublic.epa.gov/files/12458.pdf
RO 13764: https://rcrapublic.epa.gov/files/13764.pdf

2 https://tile.loc.gov/storage-services/service/ll/fedreg/fr055/fr055106/fr055106.pdf

Before the wastes are consolidated with other wastes the waste mixture is tested for compatibility. Compatibility is evaluated to ensure that wastes do not adversely react with one another when they are comingled in containers. Only hazardous waste debris may be consolidated at the Facility.

To prevent undesirable chemical reactions from occurring when wastes are consolidated or bulked, the facility tests for compatibility using the M-13: Compatibility Testing as outlined in section 15.0 Test Methods using representative samples from all wastes and residues that will contact each other.

Prior to the compatibility test, the facility reviews the WIP and other relevant information to conclude that the described waste and constituents to be consolidated are compatible. When a container contains waste with multiple layers or phases, the facility ensures that each phase/layer is properly represented within the sample.

6.2 Lab Packs

Wastes to undergo lab packing/lab repacking are reviewed to ensure they are compatible with other wastes to be placed in the same container and with the container Additional compatibility testing is not required since the waste is not being mixed.

Lab packing only occurs using a clean container that is free of any potentially incompatible materials, structurally sound, made of materials compatible with the wastes, and leak proof when closed.

6.3 Containers

Wastes are only consolidated or re-packaged into containers that are free of any potentially incompatible materials, structurally sound, made of materials compatible with the wastes, and leak proof when closed. If container is not cleaned of all residues, then the compatibility testing will include the residues that remain in the container before use.

6.4 Documentation

The facility uses the Bulk Consolidation Tracking Sheet (see Attachment 2-4) for hazardous wastes that are consolidated on-site in advance of outbound shipments. Each Bulk Consolidation Tracking Sheet is maintained with the facility copy of the outbound manifest as part of the facility operating record. This form also includes documentation of compatibility testing.

The facility uses the Lab Pack Contents form (see Attachment 2-2) when lab packing smaller containers.

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7.0 Treatment

The facility does not conduct hazardous waste treatment that requires a hazardous waste license. Section 291.01(21) Wis. Stats defines treatment as: "*Any method, technique or process, including neutralization, which follows generation and which is designed to change the physical, chemical or biological character or composition of any hazardous waste so as to neutralize the hazardous waste or so as to render the waste nonhazardous, safer for transport, amenable for recovery, amenable for storage or reduced in volume.*"

The Facility does not conduct fuel blending as defined in section 1.1 Definitions.

8.0 Restricted Wastes

The facility may only accept hazardous waste listed in the Part A. It does not accept the following waste:

1. Radioactive wastes.
2. Conventional or chemical ordnance.
3. Gaseous wastes in high-pressure cylinders.
4. Aerosol cans
5. Propane cylinders
6. Reactive D003 wastes.
7. Dioxin-containing wastes.
8. Used oil as defined in NR 679.01

9.0 Manifest and Bill of Lading Discrepancies

The facility reviews each manifest and bill of lading to verify that all required information has been entered. If the required information is missing or incorrect, then the facility contacts the generator for the missing information or for the correct information. The facility documents these changes in the facility operating record. The manifest or bill of lading identifies the approved WIP number for each waste stream.

Manifest and bill of lading discrepancies are any of the following:

1. Significant discrepancies in quantity are any of the following:
    - **a.** For bulk waste with weight as the unit of measure on the manifest, variations greater than 10% in weight. Such waste shall either be weighed on a facility scale or a 3rd party certified scale and documented. Tare weight of the container shall be considered. If tare weight of the container is not provided by the generator, it should be determined by researching container vendor specifications. If tare weight cannot be determined by research, the volume of waste in the container shall be requested from the generator.

b. For bulk waste with volume as the unit of measure on the manifest, variations greater than 10% of volume based on visual observations of the container contents.
c. For bulk waste with both weight and volume as the unit of measure on the manifest, see 1.a and 1.b above.
d. For batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload.

2. Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as:
   a. Waste solvent substituted for waste acid.
   b. Solid material substituted for a liquid.
   c. Orange waste substituted for gray waste
3. Rejected wastes based on the Level I, II, and III evaluation and analyses, which may be a full or partial shipment of hazardous waste that the facility cannot accept.
4. Container residues, which are residues that exceed the limits for empty containers set forth in s. NR 661.0007(2) Wis. Adm. Code.

The facility follows the procedures in section s. NR 664.0072(3) Wis. Adm. Code to address manifest discrepancies – including those VSQGs who use a manifest. The facility also resolves discrepancies related to waste on bill of ladings. In addition to following s. NR 664.0072(3) Wis. Adm. Code the facility also does all the following:

1. Decide if the waste can be accepted by the facility despite the discrepancy. This may require obtaining addition information from the generator, and involves a determination whether the facility, and the destination facility, can manage the waste in a manner that is safe, effective, and in accordance with the conditions of the facility's license.
2. If the waste cannot be accepted, reject it in accordance with section 11.0 of this WAP.
3. Perform a WIP re-evaluation to determine if a new or revised WIP is necessary. This could involve acquiring a new or modified WIP from the generator for re-evaluation and re-certification. The new or revised WIP is then subject to the Pre-Qualification process described in section 2.0 Waste Prequalification of this WAP.
4. Maintains records that document proper completion of the above actions. Refer to section 17.0 Recordkeeping and Reporting of this WAP for recordkeeping.

Additional information and requirements regarding discrepancies is provided in sections 5.0 Shipment Screening, Analysis, and Acceptance to 5.5 Final Acceptance and Placement of Waste in Storage and section 10.0 WIP Discrepancies of this WAP.

10.0 WIP Discrepancies

Section NR 664.0013(1)(a) Wis. Adm. Code requires the facility to know how to treat, store, and dispose of the waste it receives from off-site in accordance with chs. NR 664 and 668 Wis. Adm.

Code and the conditions of the facility's RCRA license. Therefore, the facility must ensure that the information in the WIP including the LDR document is correct.

If there is a discrepancy (e.g., discrepancy in pH, flammability, etc.) between the waste received at the facility and the waste's WIP, then the facility performs all of the following:

1. Attempt to resolve the discrepancy by calling the generator and requesting additional information.
2. Decide if the waste can be accepted by the facility despite the discrepancy. This involves a determination concerning whether the facility can manage the waste on-site in a manner that is safe, effective, and in accordance with the conditions of the facility's RCRA license.
3. If a decision is made to reject the waste, the facility follows the procedures in the Rejection Policy in section 8.0 Restricted Wastes of this WAP.
4. If the waste is not rejected, the facility performs the necessary analysis to fully characterize the waste. Refer to section 5.2 Level II Analysis of this WAP for the procedures associated with a Level II analysis.
5. Perform a WIP re-evaluation to determine if a new or revised WIP is necessary. This could involve acquiring a new or modified WIP from the generator for re-evaluation and re-certification. The new or revised WIP is then subject to the Pre-Qualification process described in section 2.0 Waste Prequalification of this WAP.
6. Maintains records that document proper completion of the above actions. Refer to section 17.0 Recordkeeping and Reporting of this WAP for recordkeeping.

Additional information and requirements regarding discrepancies is provided in sections 5.0 Shipment Screening, Analysis, and Acceptance to 5.5 Final Acceptance and Placement of Waste in Storage and section 10.0 WIP Discrepancies of this WAP.

11.0 Rejection of Inbound Hazardous Waste

The facility follows the procedures set forth at s. NR 664.0072(4) to (7) Wis. Adm. Code when rejecting hazardous waste containers. In addition to following s. NR 664.0072(4) to (7) Wis. Adm. Code the facility also does all of the following:

1. Place the rejected hazardous waste in the facility's quarantine area.
2. Clearly label each rejected hazardous waste container with the words "Rejected".
3. Ensure that the rejected hazardous waste is safely and properly containerized.
4. Maintain records that document proper completion of the above actions. Refer to section 17.0 Recordkeeping and Reporting of this WAP for recordkeeping.

Additional information and requirements regarding discrepancies is provided in sections 5.0 Shipment Screening, Analysis, and Acceptance to 5.5 Final Acceptance and Placement of Waste in Storage and section 10.0 WIP Discrepancies of this WAP.

12.0 Outbound Hazardous Wastes Shipments

Whenever a shipment of hazardous waste is initiated from the facility, the facility complies with the waste determination and recordkeeping requirements in s. NR 662.011, Wis. Adm. Code, the generator's manifesting requirements under subchapter B of ch. NR 662 Wis. Adm. Code and s. NR 664.071(3) Wis. Adm. Code, the LDR requirements of s. NR 668.07 Wis. Adm. Code, and the exception reporting requirements in s. NR 662.042(1) Wis. Adm. Code when a signed copy of the manifest is not received within 35 days of the date the waste was accepted by the initial transporter.

For wastes generated from the operation of licensed units and to comply with generator waste determination requirements, the facility may rely on, as acceptable knowledge, information from the applicable WIP(s) provided by the original waste generator(s), but only if this information appears to demonstrate compliance by the original generator with waste determination requirements in s. NR 662.011, Wis. Adm. Code., after the facility's reasonable review. Examples of these sorts of wastes are:

- Trans-shipped wastes
- Consolidated or bulked debris wastes
- Lab-packed wastes
- Spill cleanup residues
- Contaminated PPE
- Used containers

13.0 Waste Sampling

Samples used for waste determinations and Level I, II and II analyses must be representative and the procedures for collecting these representative samples are identified below. Sampling equipment is typically constructed of non-reactive materials such as glass, PVC plastic, aluminum, or stainless steel. Care is taken in the selection of the sampling device to prevent contamination of the sample and to ensure compatibility of materials. For example, glass bottles are not used to collect hydrofluoric acid wastes.

Collected samples are either returned to their original container or combined with compatible materials prior to shipment off-site for proper disposal. Any "waste" material generated by sampling activities is either returned to the original waste container or the facility utilizes a new container to store the waste material.

13.1 Sampling Methods

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The methods and equipment used for sampling waste vary with the form and consistency of the waste to be sampled. The facility selects the most appropriate representative sampling methods, techniques, devices, and containers from those included/described in either the EPA document "Test Methods for Evaluating Solid Wastes" (SW-846) or the "American Society for Testing and Materials" (ASTM) standards. A representative sample is defined as a sample exhibiting average properties of the whole waste (NR 660.10(101) Wis. Adm. Code).

The facility's sampling procedures are included in Attachment 2-3 of this section.

13.2 Sampling Personnel

All sampling is performed by facility personnel who have been trained in proper sample collection. This training is documented in the operating record, including at a minimum the description of the training contents, the name of the trainer(s), the name of the individual trained, and the date.

13.3 Sample Documentation

Samples collected for on-site Level I analysis are documented utilizing the Level I QA/QC checklist (see Attachment 2-6).

All Level II and III sampling are documented utilizing the Level II/Level III QA/QC Checklist included in Attachment 2-7 of this section. Chain-of-custody forms (see Attachment 2-5 of this section) are used for tracking Level II and Level III samples sent for off-site laboratory analyses and testing.

13.4 Sample Labels

Labels are affixed to each sample container prior to, or at the time of, sampling. At a minimum, the labels include the following information:

1. Name of sample collector.
2. Date of collection.
3. Unique container number, which can be used to quickly identify the generator name, waste name, WIP number, and WIP information.
4. A unique sample container number sticker, that matches (or references) the unique container number.
5. Instructions (e.g., Level I, II or III analysis).

Samples sent to outside labs must be accompanied by instructions and chain of custody documentation (see Attachment 2-5 of this section for an example chain of custody form).

Labels are affixed after the sample has been inserted and the sample container is sealed such that the sample container cannot be opened without disfiguring the label, thereby flagging those instances that other wastes or materials may have been introduced into the sample.

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14.0 Parameters and Rationale

Table 2 summarizes the analytical methods and rationales used to determine the general and specific characteristics of a waste stream. ASTM and SW-846 are used as guidelines in developing the following analytical methods:

Table 2: Analytical Parameters and Rationales

Parameter	Method Number	Reference Method(s)	Rationale for Selection
Physical Description	M-1	Not applicable	Used to determine the general characteristics of the waste stream. This facilitates subjective comparison with WIP information regarding physical characteristics of the waste. Facility personnel check for appearance, color, layering, and viscosity. If an odor is detected, then note if the odor is applicable to the waste. Tolerance limits: Must match description in WIP
pH	M-2	SW-846 test methods 9040C or 9041 (or equivalent EPA approved method)	Required of all water-bearing liquid, solid, and semi-solid waste streams to determine the corrosivity of the waste. The apparent pH of non-aqueous waste is also performed. Tolerance limits: +/- 2 pH unit change are established.
Ignitability	M-3	ASTM D93−79, D 93−80, or D 3278−78, SW-846 Method 1030 or 1050 (or equivalent EPA approved method)	Indicates the fire-producing potential of the waste and determines whether the waste is a D001 ignitable waste. Tolerance limits: +/- 10 degrees Fahrenheit

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Water Reactivity	M-4		Used to determine whether the waste has a potential to react with water to generate heat, flammable gases, or other products. The test does not apply to wastes already in contact with excess water. Tolerance limits: Must match description in WIP
Reactive Sulfides Screen (Spot Test)	M-5	ASTM D4978 (or equivalent EPA approved method)	Used to indicate whether the waste produces hydrogen sulfide upon acidification below pH 2. It is not required if the pH of the waste is <6 or if the waste is not water-soluble. Tolerance limits: Must match description in WIP
Reactive Cyanides Screen (Spot Test)	M-6		Indicates whether the waste produces hydrogen cyanide upon acidification below a pH of 2. It is not required for wastes with pH <6 or if the waste is not water-soluble. Tolerance limits: Must match description in WIP
Oxidizer Screen	M-7		A general qualitative test used to determine if a waste is an oxidizer. Oxidizers have the potential to react with a wide range of wastes and therefore often need to be segregated. Tolerance limits: Must match description in WIP
Specific Gravity	M-8		Used in conjunction with other test data to determine probable characteristics of materials and their conformance to the WIP. Tolerance limits: +/- 10% of value reported in WIP
Percent Suspended Solids	M-9	EPA method 160.2 (or equivalent EPA approved method)	Used in conjunction with other test data to determine probable characteristics of materials and their conformance to the WIP. Tolerance limits: +/- 10% of value reported in WIP

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Chlorine (Spot Test)	M-10		Indicates if the material is chlorinated. Information is used to check conformance to the WIP. Tolerance limits: Must match description in WIP
Polychlorinated Biphenyls Screen	M-11	SW-846 8082 (or equivalent EPA approved method)	Determines PCB content in order to verify WIP information and assess applicability under TSCA. Tolerance limits: Must match description in WIP
TCLP	M-12	SW 846 test method 1311 for digestion (or equivalent EPA approved method)	Used to determine the leachable concentration of the 40 constituents listed in s. NR 661.0024 Wis. Adm. Code. Tolerance limits: +/- 20% of value reported in WIP
Compatibility Testing	M-13	ASTM D5058 ASTM D4981 (or equivalent EPA approved method)	Prior to a debris waste being commingled with other debris wastes, the waste is tested to verify compatibility. Debris wastes are combined in a manner to simulate the commingling in order to assess their compatibility. Tolerance limits: NA
Heat Content	M-14	ASTM D240 ASTM D5468 (or equivalent EPA approved method)	Indicates if the waste meets the minimum BTU value required for fuel blending. The fuel blended waste must have adequate heating value to ensure its use for energy recovery. The WDNR has established 5,000 BTUs per pound as a minimum heat of combustion for waste that are fuel blended.

NOTE: For Level II analysis, Methods M-11 and M-12 require testing by a laboratory certified under NR 149. For Level III analysis, Methods M-3, M-11, and M-12 require testing by a laboratory certified under NR 149.

15.0 Test Methods

The test methods used to confirm that the waste received by the facility conforms to the corresponding WIP are described below. Each layer or phase in a container is subject to these test methods.

M-1: Physical Description
The physical examination includes, at a minimum, appearance, color, layering, viscosity, and odor if detected. The physical description includes:

1. Color.
2. Physical state (% solid, % sludge, % liquid).
3. Layers/phases (single, bi-layered, multi-layered).
4. Viscosity.
5. If an odor is detected, then note if the odor is applicable to the waste. Precautions to safely assess odors in a waste should be followed by personnel performing the examination.

If necessary, a COLIWASA or sample thief is used to check for layering and to determine the approximate percentage of each different layer (e.g., solid, sludge, aqueous liquid, oily liquid, light liquids). Containers of solids and semi-solid should be examined with as augers or shovel-like devices to identify the presence of differing materials. These same sorts of devices can also assist in gathering a representative sample. Representative samples must properly represent all phases, layers, and other varying components of the waste. Additional discussion of representative sampling is included in section 5.1.

M-2: pH Screen
The pH of liquids and sludges is measured using SW-846 test methods 9040C, 9041, or equivalent EPA Approved method.

The pH of a solid is measured by placing 20 grams of the sample into a cup and adding 20 milliliters (ml) of deionized water to the mixture and then stirring for 30 seconds. The pH of the slurry is then taken and recorded using SW-846 test methods 9040C or 9041.

M-3: Ignitability
The ignitability screen is determined by using a Pensky−Martens Closed Cup Tester (using the test method specified in ASTM Standard D 93−79 or D 93−80) or a Setaflash Closed Cup Tester (using the test method specified in ASTM Standard D 3278−78), or equivalent EPA Approved method. Although there is not an approved EPA method for determining solids ignitibility, SW-846 Method 1030 (Ignitability of Solids) or SW-846 Method 1050 (Test Methods to Determine Substances Likely to Spontaneously Combust), or equivalent method will be used as an indicator of solids ignitabilty. Note: testing of ignitable solids will be conducted at Wisconsin NR 149 certified laboratories.

M-4: Water Reactivity

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The water reactivity of a liquid or solid is determined by adding approximately 3 mL of water to 0.1 mL of liquid or 0.1 gram of solid. The mixture is observed to detect heating (more than 15o C temperature rise) or turbulent gas evolution (more than 10% of the mixture volume). If the mixture reacts as described above, the test is considered positive. If the addition of water causes the material to be considered reactive under any definition of s. NR 661.0023 Wis. Adm. Code, then the material is considered water reactive.

M-4: Reactive Sulfides Screen (Spot Test)
2 to 4 drops of the material are placed on a spot plate. Then, a strip of lead-acetate paper moistened with 1 drop of water is placed over the spot plate cavity containing the waste. Next, 2 to 3 drops of 3M HCl are added. Black PbS forms in the paper after 0.5 to 1 minute if sulfide is present.

M-5: Reactive Cyanides Screen (Spot Test)
Cyanide is determined by placing 2 to 4 drops or a small spatula tip of the sample on a spot plate. Two drops of water are then added to the waste. Next, one drop of chloramine-T solution followed by one drop of pyridine-barbituric acid solution is added to the waste. If the solution turns dark red or carmine after 10 to 30 seconds, this is a positive response.

The presence of cyanide can be detected above 60 ppb in aqueous samples (3 drop size) and 10 ppm in solid samples (1-gram size).

Reagents:

1. Chloramine-T solution: 1 gram of Chloramine-T is dissolved in 100 ml of distilled water.
2. Pyridine-barbituric acid: 1.5 g of barbituric acid is mixed with 5 mL of water and 7.5 mL of pyridine. The mixture is treated with 1.5 mL of concentrated HCl and diluted to 25 mL.

M-7: Oxidizer Screen
The method used is a qualitative examination for the presence of oxidizing materials in liquid, sludge, and solid samples.

Liquids and Sludges: The procedure for liquid and sludge waste consists of wetting a strip of KI-Starch paper in HCl. The wetted strip is then dipped into the sample. The color change is then noted. If the color turns light brown to dark purple or black, then the result is interpreted as positive, and the waste is managed as an oxidizer. The color is indicative of the type of oxidizer present.

Solids: The procedure requires that 2 mL of deionized water be added to 11 grams of sample. The mixture is then stirred for 30 seconds. A strip of KI-starch paper is wetted in HCl and then dipped into the slurry. The color change of the KI paper is then noted. If the color turns light brown to dark purple or black, then the result is interpreted as positive, and the waste is managed as an oxidizer. The light brown color is indicative of nitric acid while the purple/black color results from the presence of peroxides.

M-8: Specific Gravity
The Specific Gravity of a liquid is determined by weighing 10 mL of the sample (at room temperature) and dividing this value by 10. The alternate method of using a hydrometer may be used if sufficient sample is present.

M-9: Percent Suspended Solids
EPA method 160.2 is used to determine total suspended solids or equivalent EPA Approved method.

M-10: Chlorine (Spot Test)
A small amount of the sample is placed in a test tube. Litmus paper is placed over the sample as heat is applied. A red coloration of the paper indicates the presence of chlorine. An additional test is done by placing a small amount of the material in a flame on a wire loop. A green color indicates the presence of chlorine.

M-11: Polychlorinated Biphenyls Screen
EPA method 8082 is used to determine PCB content. or equivalent EPA Approved method.

M-12: Toxicity Characteristic Leaching Procedure (TCLP)
TCLP test using SW 846 test method 1311 for digestion and one or more of the following analytical methods to analysis the leachate (see Figure 1: TCLP Analytical Requirements). For waste that are 100% physical solid (i.e., contains no filterable liquids) the total concentration can be used in lieu of TCLP test when the total concentration for that analyte is less than 20 times the TCLP value for that TCLP analyte.

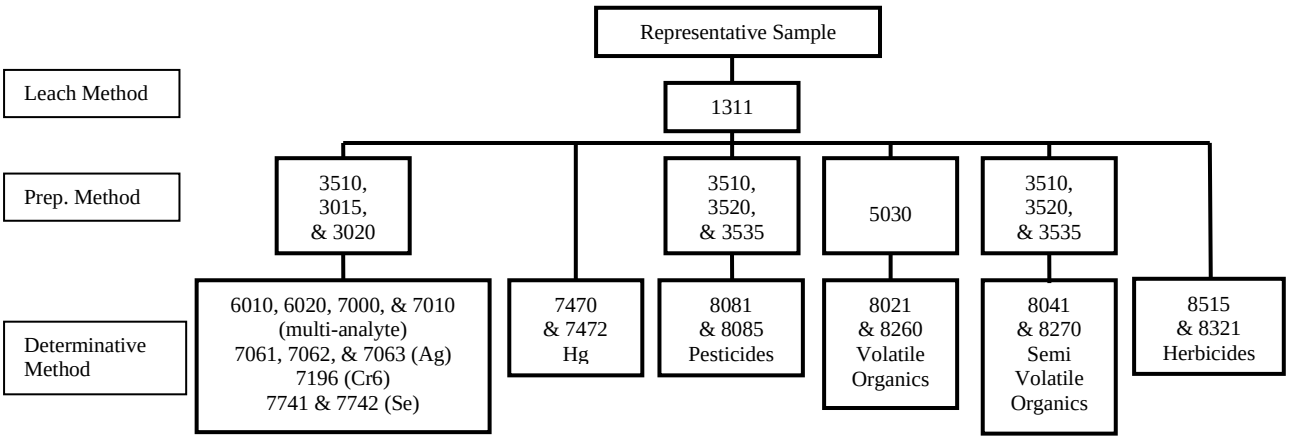

Figure 1: TCLP Analytical Requirements

M-13: Compatibility Testing

To determine if the wastes are compatible prior to commingling, the facility performs a bench-test to simulate the bulk mixture process. The bench test involves mixing representative samples of the waste to be blended (each must be at the same temperature) and then observing the mixture for undesirable chemical reactions such as bubbling, splattering or frothing, heat rise, and/or hazardous polymerization. This is done under controlled conditions with all applicable safety precautions in place by personnel trained to assess and manage chemical reactions.

More specifically, a mixture is observed for the following:

1. Evolution of gas characterized by bubbling or foaming.
2. Heat release evidenced by a temperature increase of more than 15 degrees over the measured temperature.
3. Polymerization of the mixture to an un-pumpable viscosity within 30 minutes.
4. Miscibility or the formation of layers.
5. Precipitate formation.
6. Emulsification.
7. Any other indication of heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases.

If the facility observes any of these conditions, then the wastes are considered incompatible and cannot be mixed.

M-14: Heat Content

The heating content (i.e., BTU value) is determined using an oxygen bomb calorimeter.

16.0 Quality Assurance and Quality Control

The following quality assurance/quality control (QA/QC or "quality") information for this facility is being provided as required by s. NR 670.030(5) Wis. Adm. Code and in accordance with the following EPA guidance documents:

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, Third Edition, Final Update I, U.S. EPA, Office of Solid Waste, Washington, DC, July 1992, Chapter One, updated editions.
2. Handbook for analytical Quality Control in Water and Wastewater laboratories, EPA 600/4-79-019, March 1979, US Environmental Protection Agency (USEPA), Environmental Monitoring and Support Laboratory (EMSL), Cincinnati, OH.

These quality protocols are applicable to waste sampling, evaluation techniques (e.g., physical appearance) and analytical methods.

16.1 Sampling Program

Individual container samples that are related may be composited prior to analysis only when appropriate(e.g., same WIP) to form a representative sample.

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Sampling procedures are described in section 14.0 Parameters and Rationale of this WAP. The selection of the sample collection device depends on the type of sample, the sample container, the sampling location and the nature and distribution of the waste components. In general, the methodologies used for specific materials correspond to those referenced in Chapter NR 661, Attachment 2-8. The selection and use of the sampling device is supervised or performed by a person thoroughly familiar with the sampling requirements.

16.2 Analytical Program

The facility performs physical waste evaluations and Level I analytical testing on-site. The QA/QC Plan for the analytical testing (M-2 and M-3) to be performed in the on-site laboratory is based on the guidance described in Section 16.0 and maintained onsite.

The onsite laboratory will also comply with the WM Laboratory Corporate Governance (LCG) Program for WM-owned laboratories. The LCG Program is a technical support and quality systems monitoring program designed to assure laboratory data integrity and fitness for use, as well as independence from facility operations, especially for regulatory compliance decisions that are driven by data generated at the laboratory. The LCG Program is based on the environmental laboratory industry-standard NELAC quality systems approach described in the Corporate Quality Assurance Guidance (CQAG) that establishes the program's governance and monitoring elements and uses lab-level template standard operating procedures to establish minimum lab-level QA/QC requirements and foster overall consistency while accommodating local differences across WM laboratories.

The program focus includes adherence to overall Data Quality Objectives (DQOs) established at the corporate level, establishment of consistent standards across all labs, and ensuring that laboratory decisions are not overly influenced by operational pressures, thus ensuring data integrity and quality

The facility subcontracts with independent laboratories certified or registered under ch. NR 149 for Level II and III analyses. These laboratories have developed programs of analytical quality control practices and procedures to ensure that precision and accuracy are maintained. These programs – which include use of control standards, duplicates, spikes, and blanks – are required. Chapter NR 149 Wis. Adm. Code requires the establishment, implementation and documentation of analytical quality control protocols that are followed.

Good laboratory practices which encompass sampling, sample handling, housekeeping and safety are required and implemented by all laboratories used by the facility.

16.3 Training

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All personnel that implement the procedures of this WAP will be competent and properly trained. The facility maintains and implements a training plan that describes personnel training requirements, procedures. and protocols. In addition, the facility must meet the requirements of the training requirements of NR 664.0016 and the approved training plan required by NR 670.014(2)(L) and included in the facility's approved FPOR.

16.4 Conclusion

These sampling and analysis quality practices help ensure the data obtained are precise and accurate for the waste stream being evaluated, sampled and tested. The analytical results are used by facility management to decide whether or not to accept a particular waste and, upon acceptance, to determine the appropriate method of treatment, storage, and disposal. Results are also important to ensure that wastes are managed properly by the facility and that incompatible wastes are not inadvertently combined or improperly containerized. The quality of these results is as important as the results themselves. Thus, the quality of the analytical data, along with the thoroughness and care with which the sampling and analyses are performed and reported, provides an important basis for day-to-day operational decisions, compliance, and safety.

17.0 Recordkeeping and Reporting

Recordkeeping: The following WAP records are maintained in the facility's operating record and are made available to WDNR and EPA when requested. Unless specified otherwise, records will be retained for at least three years.

1. Documentation on how the facility obtained representative samples.
2. Documentation of any discrepancies identified by the Level I, II, and III analysis and how the facility resolved those discrepancies.
3. Results of all Level I, II, and III analysis for each waste sampled/analyzed:
    a. If applicable, a copy of the chain of custody document (see Attachment 2-5 of this WAP)
    b. Copies of all applicable analytical test results and lab reports.
    c. A copy of the generator's manifest(s).
    d. A copy of the generator's original WIP and, if applicable, a copy of the generator's revised WIP.
    e. Level I QA/QC checklist (see Attachment 2-6).
    f. Level II/Level III QA/QC checklist (see Attachment 2-7 of this WAP)
4. Records of all compatibility testing and necessary sampling and testing prior to commingling any wastes (see Attachment 2-4 of this WAP).
5. Records of analyses, corrective action plans and other actions taken under the Rejection Policy and Discrepancy Policy in this WAP.
6. Other specific documentation and records as specified in this WAP.

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Information regarding acceptable knowledge must be organized or presented in a logical way that illustrates how it supports the WIP approval. The information and documentation comprising acceptable knowledge needs to be accurate and complete in order to correctly identify the waste.

Reporting: The following reports related to WAP activities will be provided to WDNR. All reports will be provided to the WDNR Region contact person (field inspector) assigned to the facility and to the WDNR TDSF inspector. If these individuals are not known, the Facility will contact the Hazardous Waste Section Chief for instructions.

1. Amended manifest report required in NR 664.0072(7)
2. Unmanifested waste reports required in NR 664.0076
3. All reports applicable to WAP topics required by NR 600 – 670 and by the facility license.

18.0 Corrective Action

The facility subcontracts with an independent laboratory certified or registered under ch. NR 149 for all Level II and III analyses. The facility and subcontracted laboratories have processes in place to ensure quality assurance and quality control (see Section 16.0 Quality Assurance and Quality Control of this WAP). In addition, the facility and subcontracted laboratories have methods for correcting problems when they are identified. If problems/discrepancies are found, the facility must take corrective actions, such as performing an audit of the laboratory, reviewing and revising applicable SOPs, evaluating subcontracted laboratories and entering into new subcontracts if the facility has a concern about the quality of work.

19.0 Attachments

Attachment 2-1
Waste Information Profile (WIP) Form
Example WIP Approval Form

EZ Profile™

Requested Facility: _____ ❑ Unsure Profile Number: _____

❑ Multiple Generator Locations (Attach Locations) ❑ Request Certificate of Disposal ❑ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: _____
2. Site Address: _____
   (City, State, ZIP) _____
3. County: _____
4. Contact Name: _____
5. Email: _____
6. Phone: _____ 7. Fax: _____
8. Generator EPA ID: _____ ❑ N/A
9. State ID: _____ ❑ N/A

B. BILLING INFORMATION ❑ SAME AS GENERATOR

1. Billing Name: _____
2. Billing Address: _____
   (City, State, ZIP) _____
3. Contact Name: _____
4. Email: _____
5. Phone: _____ 6. Fax: _____
7. WM Hauled? ❑ Yes ❑ No
8. P.O. Number: _____
9. Payment Method: ❑ Credit Account ❑ Cash ❑ Credit Card

C. MATERIAL INFORMATION

1. Common Name: _____
   Describe Process Generating Material: ❑ See Attached

2. Material Composition and Contaminants: ❑ See Attached

1.	
2.	
3.	
4.	
Total comp. must be equal to or greater than 100%	≥100%

3. State Waste Codes: _____ ❑ N/A
4. Color: _____
5. Physical State at 70˚F: ❑ Solid ❑ Liquid ❑ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ❑ N/A
7. pH: _____ to _____ ❑ N/A
8. Strong Odor: ❑ Yes ❑ No Describe: _____
9. Flash Point: ❑ <140˚F ❑ 140˚–199˚F ❑ ≥200˚ ❑ N/A

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ❑ Yes* ❑ No
   Code: _____
2. State Hazardous Waste? ❑ Yes ❑ No
   Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ❑ Yes* ❑ No
4. Contains Underlying Hazardous Constituents? ❑ Yes* ❑ No
5. From an industry regulated under Benzene NESHAP? ❑ Yes* ❑ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ❑ Yes* ❑ No
7. CERCLA or State-mandated clean-up? ❑ Yes* ❑ No
8. NRC or State-regulated radioactive or NORM waste? ❑ Yes* ❑ No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? → If Yes, answer a, b and c. ❑ Yes ❑ No
   a. Regulated by 40 CFR 761? ❑ Yes ❑ No
   b. Remediation under 40 CFR 761.61 (a)? ❑ Yes ❑ No
   c. Were PCB imported into the US? ❑ Yes ❑ No
10. Regulated and/or Untreated Medical/Infectious Waste? ❑ Yes ❑ No
11. Contains Asbestos? ❑ Yes ❑ No
    → If Yes: ❑ Non-Friable ❑ Non-Friable – Regulated ❑ Friable

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ❑ Yes
   Please identify applicable samples and/or lab reports:

2. Other information attached (such as MSDS)? ❑ Yes

F. SHIPPING AND DOT INFORMATION

1. ❑ One-Time Event ❑ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: _____
   ❑ Tons ❑ Yards ❑ Drums ❑ Gallons ❑ Other: _____
3. Container Type and Size: _____
4. USDOT Proper Shipping Name: ❑ N/A
   _____

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

❑ I am an Authorized Agent signing on behalf of the Generator, and I have confirmed with the Generator that information contained in this profile, as well as supporting documents provided, are accurate and complete.

Name (Print): _____ Date: _____

Title: _____

Company: _____

Certification Signature

THINK GREEN.®

QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE

EZ Profile™ Addendum

Only complete this Addendum if prompted by responses on EZ Profile™ (page 1) or to provide additional information. Sections and question numbers correspond to EZ Profile™.

Profile Number: _____

C. MATERIAL INFORMATION

Describe Process Generating Material (Continued from page 1): If more space is needed, please attach additional pages.

Material Composition and Contaminants (Continued from page 1): If more space is needed, please attach additional pages.

5.	
6.	
7.	
8.	
9.	
Total composition must be equal to or greater than 100%	≥100%

D. REGULATORY INFORMATION

Only questions with a "Yes" response in Section D on the EZ Profile™ form (page 1) need to be answered here.

1. EPA Hazardous Waste
   a. Please list all USEPA listed and characteristic waste code numbers:

   b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)? ❑ Yes ❑ No
   c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4. ❑ Yes ❑ No
   d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083)? ❑ Yes ❑ No
      → If Yes, please check **one** of the following:
      ❑ Waste meets LDR or treatment exemptions for organics (40 CFR 264.1082(c)(2) or (c)(4))
      ❑ Waste contains VOCs that average <500 ppmw (CFR 264.1082(c)(1)) – will require annual update.
2. State Hazardous Waste → Please list all state waste codes: _____
3. For material that is Treated, Delisted, or Excluded → Please indicate the category, below:
   ❑ Delisted Hazardous Waste ❑ Excluded Waste under 40 CFR 261.4 → Specify Exclusion: _____
   ❑ Treated Hazardous Waste Debris ❑ Treated Characteristic Hazardous Waste → If checked, complete question 4.
4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents:

5. Industries regulated under Benzene NESHAP include petroleum refineries, chemical manufacturing plants, coke by-product recovery plants, and TSDFs.
   a. Are you a TSDF? → If yes, please complete Benzene NESHAP questionnaire. If not, continue. ❑ Yes ❑ No
   b. Does this material contain benzene? ❑ Yes ❑ No
      1. If yes, what is the flow weighted average concentration? _____ ppmw
   c. What is your facility's current total annual benzene quantity in Megagrams? ❑ <1 Mg ❑ 1–9.99 Mg ❑ ≥10 Mg
   d. Is this waste soil from a remediation? ❑ Yes ❑ No
      1. If yes, what is the benzene concentration in remediation waste? _____ ppmw
   e. Does the waste contain >10% water/moisture? ❑ Yes ❑ No
   f. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw? ❑ Yes ❑ No
   g. Is material exempt from controls in accordance with 40 CFR 61.342? ❑ Yes ❑ No
      → If yes, specify exemption: _____
   h. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF? ❑ Yes ❑ No
6. 40 CFR 63 GGGGG → Does the material contain <500 ppmw VOHAPs at the point of determination? ❑ Yes ❑ No
7. CERCLA or State-Mandated clean up → Please submit the Record of Decision or other documentation with process information to assist others in the evaluation for proper disposal. A "Determination of Acceptability" may be needed for CERCLA wastes not going to a CERCLA approved facility.
8. NRC or state regulated radioactive or NORM Waste → Please identify Isotopes and pCi/g: _____

Revised June 30, 2015

Additional Profile Information

Profile Number: _____

C. MATERIAL INFORMATION

Material Composition and Contaminants (Continued from page 2): If more space is needed, please attach additional pages.

10.	
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34.	
35.	
36.	
37.	
38.	
39.	
40.	
Total composition must be equal to or greater than 100%	≥100%

D. REGULATORY INFORMATION

1. EPA Hazardous Waste
   a. Please list all USEPA listed and characteristic waste code numbers (Continued from page 2):

2. Form Code:

3. Source Code:

Additional Profile Information

Profile Number: _____

F. SHIPPING AND DOT INFORMATION

4. USDOT Proper Shipping & Technical Name (Continued from page 1):

2.	❑ N/A
3.	❑ N/A
4.	❑ N/A
5.	❑ N/A
6.	❑ N/A
7.	❑ N/A
8.	❑ N/A
9.	❑ N/A
10.	❑ N/A
11.	❑ N/A
12.	❑ N/A
13.	❑ N/A
14.	❑ N/A
15.	❑ N/A
16.	❑ N/A
17.	❑ N/A
18.	❑ N/A
19.	❑ N/A
20.	❑ N/A
21.	❑ N/A
22.	❑ N/A
23.	❑ N/A
24.	❑ N/A
25.	❑ N/A
26.	❑ N/A
27.	❑ N/A
28.	❑ N/A
29.	❑ N/A
30.	❑ N/A
31.	❑ N/A
32.	❑ N/A
33.	❑ N/A
34.	❑ N/A
35.	❑ N/A
36.	❑ N/A
37.	❑ N/A
38.	❑ N/A
39.	❑ N/A
40.	❑ N/A
41.	❑ N/A
42.	❑ N/A
43.	❑ N/A
44.	❑ N/A
45.	❑ N/A
46.	❑ N/A
47.	❑ N/A
48.	❑ N/A
49.	❑ N/A
50.	❑ N/A
51.	❑ N/A

Additional Profile Information

Profile Number: _____

C. MATERIAL INFORMATION

3. State Waste Codes (Continued from page 1):

2.
3.
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19.
20.
21.

Revised June 30, 2015

WM Waste, Inc.
Waste Profile Addendum

1. In accordance with NR 662.011(3) and (4), generator knowledge has been utilized to complete this waste determination and characterization. A description of the process generating the waste and any other information and data supporting the generator determination have been provided to the receiving facility as required by NR 664.013(1).

   ☐ Yes ☐ No

2. Analytical data has been provided in support of the waste determination. The analytical data provided is representative of the waste. All waste tested in support of the waste determination was done in accordance with NR 662.011(4)(b), and all analysis was performed by a laboratory certified or registered under NR 149, except for filed analysis for pH, specific conductance, and temperature.

   ☐ Yes ☐ No

3. In accordance with NR 662.011(1), the waste characterization and determinations included in this profile have been made at the point of generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the RCRA classification of the waste may change.

   ☐ Yes ☐ No

By signing this addendum, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management

Name (Print):_____ Date:_____

Title: _____ Company: _____

Certification Signature: _____

Hazardous WAM Approval

Requested Management Facility: WM Waste, Inc.

Profile Number: WI758776 Waste Approval Expiration Date: 02/10/2023

APPROVAL DETAILS

Hazardous Classification: RCRA Hazardous Profile Renewal: ☐ Yes ☑ No

Management Method: Transship for Alternate Treatment

Generator Name: ABC Manufacturing Inc

Material Name: Generic Hazardous Waste

Management Facility Precautions, Special Handling Procedures or Limitation on approval:

Generator Conditions

- WMWI has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.
- An EPA form 8700-22 must be used for all hazardous shipments and may be ordered from an authorized vendor or your TSC.
- The WM decision is based on specific parameters defined within this waste profile. Waste received that is non-conforming in any way will need to be re-evaluated and managed in accordance with all RCRA and State regulations. If alternative treatment is not available and the waste cannot be managed it will be rejected back to the generator.
- Must meet applicable OSHA, DOT packaging, labeling, shipping and manifesting requirements per 49 CFR.
- Approval number must accompany shipment.
- A signed Land Ban Notification/Certification must accompany the first shipment to the disposal facility. A new certification must be provided upon any change in the wastestream.
- Drummed waste must be marked with profile number on top & side of the containers & bear only the appropriate labeling under RCRA and/or DOT provisions

WM Authorization Name: Vanessa Caraway Title: Waste Approval Manager

WM Authorization Signature: Vanessa Caraway Date: 02/10/2022

Agency Authorization (if Required): Date:

Attachment 2-2
Lab Pack Contents Form

Attachment 2-2
WM Waste, Inc.
Example Lab Pack Inventory Form

Lab Pack Inventory Form		Page	of		
Generator Name					
Generator ID					
Chemical Name	EPA Codes	Number of Containers	Container Size	Type	Physical State

Attachment 2-3
Standard Operating Procedures for Opening and Sampling Containers

Appendix C: Standard Operating Procedures for Opening and Sampling Containers

Sampling of Containers
Coliwasas, tubes, drum thieves, and corers are examples of the devices used to sample containers. Samples are taken from locations displaced both vertically and horizontally throughout the waste. For liquids (or liquids with precipitated solids), the sample collector uses a Coliwasa or equivalent. The sampling device is inserted into the container from the top and is pushed down slowly until the bottom of the container is reached or as close as possible to the bottom. The device is sealed to retain the contents. The contents of the sampling device are then transferred to a polyethylene or glass bottle that is labeled with waste identification information.

A corer or equivalent device is used to sample containers that are solid in nature. These containers are generally filled with dirt and sludges. Several areas from the container are sampled and composited into a sample jar in order to ensure a representative sample. The sample collector removes a sample that uniformly represents the waste composition of the container (i.e., all layers and phases are represented in the sample).

When a container contains waste with multiple layers or phases, particular care must be taken to ensure that a representative sample (or samples) is obtained to ensure that each phase/layer is represented.

Sampling of Bulk Material
Bulk solids are sampled using a simple random sampling strategy. The bulk solids container, usually a roll-off box or a dump trailer, is divided into sections. A corer or other similar device is used in each section to draw a sample from varying depths as needed for a representative sample. On occasion, a shovel is used to access lower levels of a bulk container. The samples are composited together so that there is one sample that represents that particular bulk solids shipment.

Bulk liquids are sampled using a Coliwasa or similar device that can sample vertically. Each compartment of a tanker truck is sampled. Compartment samples from the same generator and waste stream are not composited prior to analysis.

Tank trucks without manways are sampled through a valve. The valve is flushed prior to drawing the sample.

Debris
Not all wastes are amenable to sampling (e.g., universal waste batteries, CRTs, lamps or ballasts, lab packs, etc.). A container of debris often contains a wide variety of materials. For example, it may contain spill absorbent, Tyvek suits, rubber booties, gloves, and paper towels. It may be difficult to obtain a representative sample.

Frozen Waste
The facility does not sample waste that is frozen. The container is labelled as quarantined and remains in the receiving area or placed in a licensed storage area until the waste can be sampled and be stored on pallets.

Attachment 2-4
Bulk Consolidation Tracking Sheet

Attachment 2-4: Example Bulk Consolidation Tracking Sheet

Outbound Facility: _____ Date: _____

Type of Shipment: _____ Initial: _____

Container #	Location	Weight	Size	Waste Codes	Notes

Attachment 2-5
Chain of Custody Form

Company Name/Address:

Billing Information:

Report to:

Email To:

Project Description:

City/State Collected:

Please Circle: PT MT CT ET

Phone:

Client Project #

Lab Project #

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)

____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Pres Chk	Analysis / Container / Preservative										Remarks	Sample # (lab only)

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG #

Table #

Acctnum:

Template:

Prelogin:

PM:

PB:

Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	__NP __Y __N
COC Signed/Accurate:	__Y __N
Bottles arrive intact:	__Y __N
Correct bottles used:	__Y __N
Sufficient volume sent:	__Y __N
If Applicable	
VOA Zero Headspace:	__Y __N
Preservation Correct/Checked:	__Y __N
RAD Screen <0.5 mR/hr:	__Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: / Condition: NCF / OK

Attachment 2-6
Level I QA/QC Form

Attachment 2-6: Example Level I QA/QC Form
WM Waste, Inc.

Date: _____

Time: _____

Initials: _____

Manifest Number:_____

Waste Information Profile (WIP) Number:_____

Number of Drums in Batch: _____

Profile Description of Waste: _____

Description of Waste (Observed):_____

Physical Characteristics/Screen Results: _____

% Liquids:_____

% Solids:_____

% Sludge:_____

Color:_____

Viscosity:_____

pH:_____

Flash Point:_____

Odor_____

Perform a visual inspection on each waste container, including covers and closure devices. Check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. Examine the physical and structural integrity of the container (e.g., is it bulging, etc.):

Acceptable ☐ Unacceptable ☐

If "Unacceptable", explain corrective actions taken:

_____

_____

_____

Attachment 2-7
Level II/III QA/QC Form

Attachment 2-7: Example Level II QA/QC Form

Sample Date:_____

Generator:_____

Profile Number: _____

Manifest Number:_____

Drum #(s): _____

Results of Level II Analysis:

_____

_____

_____

Documents to be included in Level II WAP file:

- Copy of Original Manifest
- Copy of Original Profile
- Copy of Level I QA/QC Report
- Original Chain of Custody
- Analytical Results

Additional documentation to be included in Level II WAP file (check if applicable):

- Revised Profile _____
- Manifest Discrepancy Letter _____
- Correspondence with Generator/Customer _____

Attachment 2-8
Part A Waste Codes

Attachment 2-8: Part A Waste Codes

D001	F003	K035	K110	P011	P063	P119	U027	U075	U123	U170	U222
D002	F004	K036	K111	P012	P064	P120	U028	U076	U124	U171	U225
D004	F005	K037	K112	P013	P066	P121	U029	U077	U125	U172	U226
D005	F006	K038	K113	P014	P067	P123	U030	U078	U126	U173	U227
D006	F012	K039	K114	P015	P068	P127	U031	U079	U127	U174	U228
D007	F019	K040	K115	P016	P069	P128	U032	U080	U128	U176	U235
D008	F024	K041	K116	P017	P070	P185	U034	U081	U129	U177	U236
D009	F025	K042	K117	P018	P071	P188	U035	U082	U130	U178	U237
D010	F032	K043	K118	P020	P072	P189	U036	U083	U131	U179	U238
D011	F034	K046	K123	P021	P073	P190	U037	U084	U132	U180	U239
D012	F035	K048	K124	P022	P074	P191	U038	U085	U134	U181	U240
D013	F037	K049	K125	P023	P075	P192	U039	U086	U135	U182	U243
D014	F038	K050	K126	P024	P076	P194	U041	U088	U136	U183	U244
D015	F039	K051	K131	P026	P077	P196	U042	U089	U137	U184	U246
D016	K001	K052	K132	P027	P078	P197	U043	U090	U138	U185	U247
D017	K002	K060	K136	P028	P082	P198	U044	U091	U140	U186	U248
D018	K003	K061	K141	P029	P084	P199	U045	U092	U141	U187	U249
D019	K004	K062	K142	P030	P085	P201	U046	U093	U142	U188	U271
D020	K005	K069	K143	P031	P087	P202	U047	U094	U143	U190	U278
D021	K006	K071	K144	P033	P088	P203	U048	U095	U144	U191	U279
D022	K007	K073	K145	P034	P089	P204	U049	U097	U145	U192	U280
D023	K008	K083	K147	P036	P092	P205	U050	U098	U146	U193	U328
D024	K009	K084	K148	P037	P093	U001	U051	U099	U147	U194	U353
D025	K010	K085	K149	P038	P094	U002	U052	U101	U148	U196	U359
D026	K014	K086	K150	P039	P095	U003	U053	U102	U149	U197	U364
D027	K015	K087	K151	P040	P096	U004	U055	U103	U150	U200	U367
D028	K016	K088	K156	P041	P097	U005	U056	U105	U151	U201	U372
D029	K017	K093	K157	P042	P098	U007	U057	U106	U152	U202	U373
D030	K018	K094	K158	P043	P099	U008	U058	U107	U153	U203	U387
D031	K019	K095	K159	P044	P101	U009	U059	U108	U154	U204	U389
D032	K020	K096	K171	P045	P102	U010	U060	U109	U155	U206	U394
D033	K021	K097	K172	P046	P103	U011	U061	U110	U156	U207	U395
D034	K022	K098	K174	P047	P104	U012	U062	U111	U157	U208	U404
D035	K023	K099	K176	P048	P105	U014	U063	U112	U158	U209	U409
D036	K024	K100	K177	P049	P106	U015	U064	U113	U159	U210	U410
D037	K025	K101	K178	P050	P108	U016	U066	U114	U161	U211	U411
D038	K026	K102	P001	P051	P109	U017	U067	U115	U162	U213	
D039	K028	K103	P002	P054	P110	U018	U068	U116	U163	U214	
D040	K029	K104	P003	P056	P111	U019	U069	U117	U164	U215	
D041	K030	K105	P004	P057	P113	U021	U070	U118	U165	U217	
D042	K031	K106	P005	P058	P114	U022	U071	U119	U166	U218	
D043	K032	K107	P007	P059	P115	U024	U072	U120	U167	U219	
F001	K033	K108	P008	P060	P116	U025	U073	U121	U168	U220	
F003	K034	K109	P010	P062	P118	U026	U074	U122	U169	U221	

Appendix 3 Inspection Plan and Schedule

APPENDIX 3
INSPECTION PLAN AND SCHEDULE

WM WASTE, INC.
2122 DURAND AVE.
UNION GROVE, WISCONSIN
EPA ID No. WIR000000356

FEBRUARY 2023

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

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WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

3-1.0 General

This plan has been prepared in accordance with NR 664.0015 to document WM Waste, Inc.'s (WM Waste) approach and schedule of preventive inspections and procedures for responses thereto. The inspection schedule at the WM Waste facility meets the inspection frequency requirements of NR 664.0015(2)(d). Each inspection sheet/report, at a minimum, includes the following:

- Date and time of inspection
- Name of inspector
- Notation of the observations made
- Date and nature of any repairs or other remedial actions taken, including the name of the person that attests to this entry

NOTE: WM Waste shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule that ensures the problem does not result in an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

Inspection sheets are kept on file for at least three years from the date of inspection. Any deficiencies discovered during inspections will be remedied in a timely and appropriate manner to prevent environmental and/or human health hazards.

3-2.0 Inspection Areas and Schedule

The areas/topics to be inspected are included in the inspection schedule displayed in **Table 3-1**. Details of what is inspected and the criteria for that inspection are shown in **Attachments 3-1, 3-2,** and **3-3** to this Inspection Plan. The locations of areas and equipment to be inspected are depicted in **Figure 3-1**. Individual container storage area drawings are provided in Appendix 16 of the FPOR.

WM Waste, Inc.
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262.878.2699 Fax

Table 3-1: WM Waste, Inc. Inspection Schedule

Area to be Inspected	Frequency	Form
S-1	Weekly	Weekly Inspection Form
S-2	Weekly	Weekly Inspection Form
S-3	Weekly	Weekly Inspection Form
S-4	Weekly	Weekly Inspection Form
S-5	Weekly	Weekly Inspection Form
S-6	Weekly	Weekly Inspection Form
S-7	Weekly	Weekly Inspection Form
S-8	Daily (when in use)	Daily Inspection Form
S-12	Weekly	Weekly Inspection Form
Loading/Unloading Area	Daily (when in use)	Daily Inspection Form
Loading/Unloading Area Sump Valve	Weekly	Weekly Inspection Form
Floor Underneath Roll-off Boxes in S-8 and S-12	Monthly	Monthly Inspection Form
Emergency Equipment	Monthly	Monthly Emergency Equipment Checklist

3-2.1 Licensed Container Storage Areas

In accordance with NR 664.0174, the facility conducts weekly inspections in the licensed container storage areas to prevent releases of hazardous waste and to protect human health. The objective of this program is to promptly reveal and correct conditions that may lead to releases inside or outside the unit, injury to personnel, or threats to human health or the environment.

The weekly inspection is intended to detect unsafe conditions, compliance problems, the readiness of equipment needed to fight fires and control spills and to ensure that emergency and personnel safety equipment is available. The weekly inspection also requires inspection for cracks and gaps in secondary containment systems. If discovered, such conditions shall be promptly repaired to maintain the integrity of the system. The floors in the areas are inspected to detect waste from leaks and spills that must be immediately collected and cleaned up, and to remove debris or other obstacles to allow safe passage of personnel and forklifts. Any discovery of waste from leaks or spills must be promptly investigated to determine the source and to provide for prompt repair/correction of the causal condition. All liquids, snow, ice, spillage and debris must be removed as necessary to prevent overflow of the containment system but no less frequently than within 24 hours of the inspection in which it was observed. All non-bulk containers must be inspected to ensure they are elevated (e.g., upon pallets or racks). The number and size of containers are reviewed and compared to the WM Waste inventory database

to ensure compliance with the permitted storage capacities both for the overall facility and for each container storage area. Containers are inspected for pinholes or signs of leakage, damage, and compatibility with respect to the type of waste contained. Upon detection, a leaking container will be placed in an overpack drum. Bung and lid closures for drums and roll-off tarps are inspected and repaired if dislodged. Markings are reviewed for completeness of the hazardous waste codes, storage date, and DOT description on the hazardous waste label and drum identification number on the container. The hazardous waste codes and hazard class shown on the label are reviewed to ensure the waste is permitted at the facility. The compatibility label of each container is inspected to ensure that each container is stored in the correct location in each container storage area. The containers are inspected to ensure that they are stable (e.g., not leaning) and the labels can be read. The issues that are inspected within each container storage area are shown in **Attachment 3-1.**

3-2.2 Emergency and Safety Equipment

Emergency and safety equipment is inventoried and inspected monthly. The monthly inspection ensures that the emergency and personnel safety equipment is complete and in good condition. The equipment on site is listed in the Integrated Contingency Plan and depicted on **Figure 3-1**. Upon inspection, any missing or faulty equipment shall be replaced. The issues that are inspected for monthly are shown in **Attachment 3-3**.

3-2.3 Facility Security

WM Waste complies with the security requirements of NR 664.0014. The perimeter fence, authorized entry gates, posted danger signs and 24-hour security system are inspected at least monthly to verify the structures are intact and/or working as intended. The issues that are inspected for monthly are shown in **Attachment 3-3**.

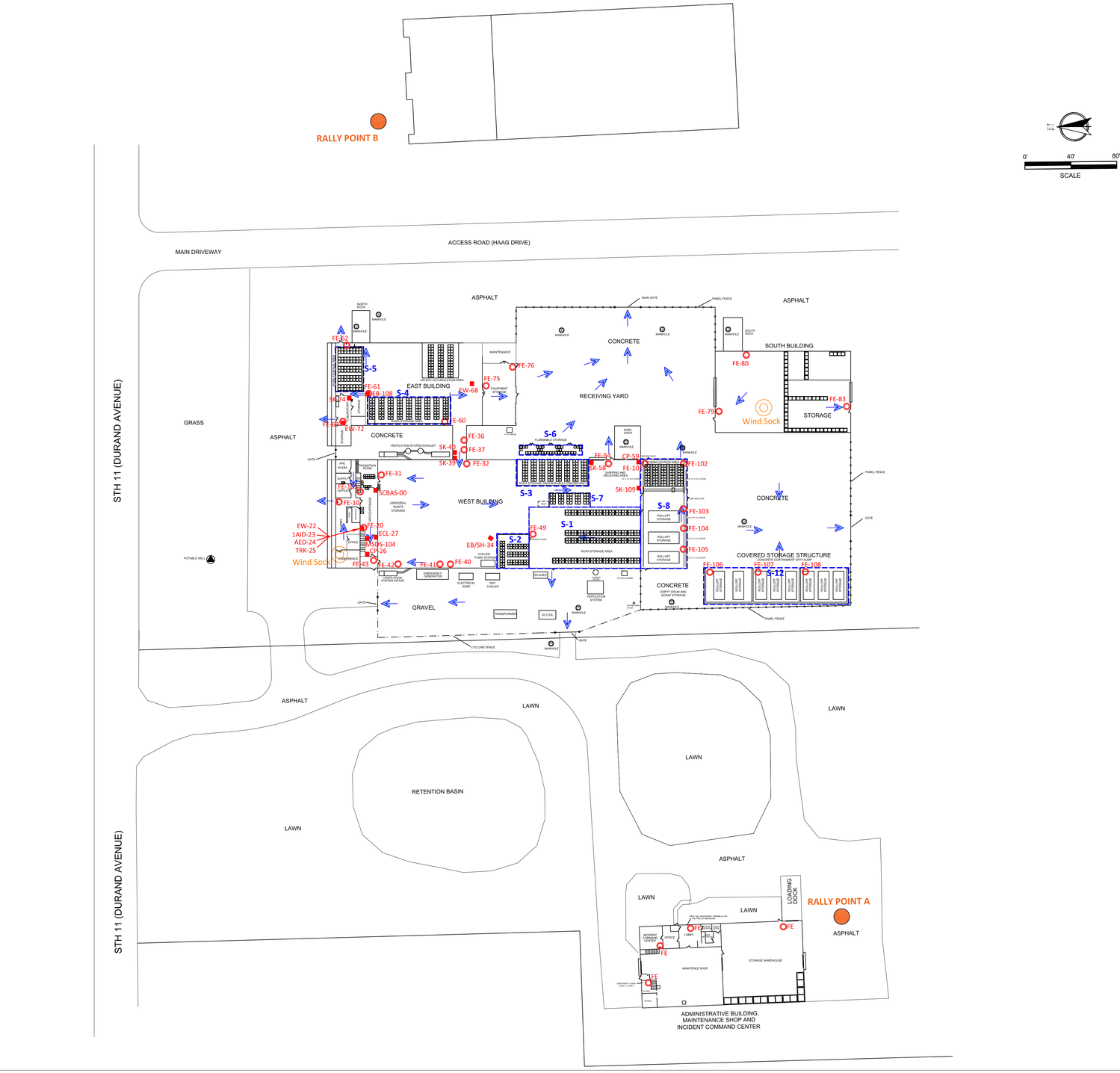
3-2.4 Loading/Unloading/Consolidation Areas

WMWI complies with the inspection requirements of NR 664.0015(2)(d). All areas subject to spills, such as loading and unloading areas as well as consolidation areas, are inspected daily when in use. The areas that are inspected daily and weekly are shown in **Attachment 3-2**.

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

Figure 3-1

Site Layout and Emergency Equipment



Unit	Capacity	
S-1	33,000 gal.	600 55-gal. Drum Equivalent (DE)
S-2	7,480 gal.	136 55-gal. DE
S-3	14,080 gal.	256 55-gal. DE
S-4	14,080 gal.	256 55-gal. DE
S-5	8,800 gal.	160 55-gal. DE
S-6	2,035 gal.	37 55-gal. DE
S-7	4,400 gal.	80 55-gal. DE
S-8	120 Cu. Yds. and 8,800 gal.	(3) 40-yd rolloff equivalents and 160 55-gal. DE
S-12	320 Cu. Yds.	(8) 40-yd rolloff equivalents

EMERGENCY EQUIPMENT AND SCBA LOCATION

- AED–00 AED (Battery Indicator Ok)
- CP–00 Contingency Plan
- EB–00 Eye Bath
- EB/SH–00 Eye Bath/Shower
- ECL–00 Emergency Coordinators Phone Numbers List
- EW–00 Eye Wash
- PPE–00 Personal Protection Equipment
- SCBA–00 Self–Contained Breathing Apparatus
- SK–00 Spill Kit Drum
- TRK–00 Trauma Kit
- 1AID–00 First Aid Cabinet
- MSDS–00 Material Safety Data Sheets
- FE–00 Fire Extinguisher

Licensed Container Storage Area
Drums
Panel Fencing
Cyclone Fencing
Evacuation Routes

Basemap from Waste Management

Revision:	2
Drawn:	CAL
Date:	8/20/2021

WM Waste, Inc.
Union Grove, Wisconsin

Site Layout and Emergency Equipment

Racine County, WI

CK Associates Environmental Consultants

Drawn:	CAL	Checked:	BHR
Date:	2/7/2023	Approved:	LEC
Dwg. No.:	WA5011-18114-41		Figure 3-1

P:\7_ZWaste Management Mercury Waste, Inc. - Union grove, WI - WA5011\018114 - PDFs, Licenses, Renewals\MAPS AND MAPS\WA5011-18114-41 Site Layout and Emergency Equipment.dwg 2/8/2023 - 8:19am

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

ATTACHMENT 3-1

WM WASTE, INC.
CONTAINER STORAGE AREAS DAILY AND WEEKLY INSPECTION ITEMS

Each container storage area is inspected and documented individually

Container Storage Area Inspection Issues	**Inspection Criteria**
WEEKLY	
Container Labels	Completed correctly Hazardous Waste Labels Compatibility Group Labels Hazardous waste codes are reviewed to ensure they are permitted at the facility Hazard classes are reviewed to ensure that the waste is compatible with other wastes in the container storage area
Container Orientation	Labels oriented to be readable from aisle
Container Closure	Lids, tarps, covers in place and secure
Container Storage Area Inventory	Number and size of containers in each area match inventory database Inventory within the permitted area does not exceed the permitted maximum All containers < 1-year since receipt
Container Condition	Container in good condition Not leaking Free of excessive corrosion No evidence of over-pressurization
Container Storage	All non-rolloff containers properly placed on pallets or racks Pallets/racking in good condition to ensure container stability No containers located in yellow aisle space
Container Storage Area	Clean; Free of evidence of spills/leaks Coating in good condition with no unsealed cracks, gaps, expansion joints, or holes Sumps, trenches, and low points are clean and empty (see Section 3-2.0 for reference to container storage area figures) S-12 has no accumulated ice or snow.
MONTHLY	
Floor underneath Roll-Off Boxes in S-8 and S-12	Move roll-off boxes to check floor for damage, cracks, or significant wear and tear.

WM Waste, Inc.
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262.878.2699 Fax

ATTACHMENT 3-2

WM WASTE, INC.
LOADING/UNLOADING/CONSOLIDATION AREAS DAILY AND WEEKLY INSPECTION ITEMS

Loading/ Unloading/Consolidation Areas Inspection Issues	**Inspection Criteria**
DAILY (when in use)	
Receiving Yard Shipping and Receiving Area Consolidation Area (S-8)	Free of evidence of spills / leaks, when in use Drainage sump valve closed
WEEKLY	
Receiving Yard Shipping and Receiving Area	Drainage sump valve properly working

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ATTACHMENT 3-3
WM WASTE, INC.
SAFETY, EMERGENCY, SECURITY, MONITORING EQUIPMENT MONTHLY INSPECTION ITEMS

Inspection Issues	Inspection Criteria
Fire Extinguishers	Placed in all identified locations Accessible Show full charge Tag dated & initialed
Exit Signs	All exit doors marked with illuminating EXIT sign. EXIT Sign properly working and visible
Emergency Exit Doors	Doors clear of all blockage & debris Doors not locked on the inside Door easily operable and well maintained
Emergency Lighting	Emergency lighting successfully tested for performance
Emergency Generator	Emergency generator successfully tested for performance
Personnel Protection Equipment	In place and in good condition
Trauma Kit	In place and in good condition
AED Device	Battery indicator ok
Eyewash Stations (Individual Bottles)	Eye wash bottles are not beyond their expiration dates. Clear access to the stations
Eyewash *I* Safety Showers	Proper water flow Area clear of blockage or debris
First Aid Cabinet	Clear access to the unit Properly stocked
Spill Kit	Contents match spill kit inventory Clear access to the unit
Self-Contained Breathing Apparatus	Clear access to the unit Tank pressure adequate (>2000 psi**)** Face piece is clean and ready to use
Security	Gates and doors in good condition Gates and doors to the outside are secured when not being used or observed Proper signage posted at facility entrances

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	Fence in good condition Security system working
Contingency Plan	In place and current
Safety Data Sheets	In place and current

Appendix 4 Integrated Contingency Plan (One Plan)

APPENDIX 4
INTEGRATED CONTINGENCY PLAN

WM WASTE, INC.
21211 DURAND AVE.
UNION GROVE, WISCONSIN
EPA ID No. WIR000000356

FEBRUARY 2023

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Quick Reference Guide

WM Waste, Inc.
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Contingency Plan Quick Reference Guide

This Quick Reference Guide (QRG) has been prepared by WM Waste, Inc. (WM Waste) in accordance with NR 662.262(2) to provide local emergency responders with easy access to the most critical information for an immediate response to an event.

The regulatory requirements for the QRG are provided below with WM Waste's response in bold.

NR 662.262(2)

a. the types and names of hazardous wastes in layman's terms and the hazard associated with each hazardous waste present at any one time such as toxic paint waste, spent ignitable solvent, or corrosive acid.

WM Waste is licensed to accept all types of hazardous waste except reactive and dioxin-containing wastes.

b. the estimated maximum amount of each hazardous waste that may be present at any one time;

WM Waste has nine (9) licensed container storage areas as identified in the following table. The types and maximum quantities of waste stored in each area will vary depending on customer receipts; however, the quantities will not exceed the licensed capacities.

Storage Area Name	ID	Description	Capacity (Basis)
Licensed Container Storage Area #1	S-1	Container storage area in West Building	33,000 gal (600 55-gal equiv.)
Licensed Container Storage Area #2	S-2	Container storage area in West Building	7,480 gal (136 55-gal equiv.)
Licensed Container Storage Area #3	S-3	Container storage area in West Building	14,080 gal (256 55-gal equiv.)
Licensed Container Storage Area #4	S-4	Container Storage on west wall of East Building	14,080 gal (256 55-gal equiv.)
Licensed Container Storage Area #5	S-5	Container Storage in East Building	8,800 gal (160 55-gal equiv.)

Licensed Container Storage Area #6	**S-6**	**Flammable liquid container storage area adjacent to West Building in Receiving Yard**	**2,035 gal (37 55-gal equiv.)**
<90-day Accumulation Area	**N/A**	**Container storage area in East Building**	**N/A**
Licensed Container Storage Area #7	**S-7**	**Container storage area in West Building**	**4,400 gal (80 55-gal equiv.)**
Licensed Container Storage Area #8	**S-8**	**Container storage (roll-off) in south end of West Building**	**140 cubic yards (3 40 yd^3 roll-offs) and 8,800 gal (160 55-gal equiv.)**
Licensed Container Storage Area #12	**S-12**	**Container (roll-off) storage**	**320 cubic yards (8 40 yd^3 roll-off)**

c. the identification of any hazardous waste where exposure would require unique or special treatment by medical or hospital staff;

It is unlikely that there would be hazardous wastes where exposure would require unique or special treatment by medical or hospital staff. In any case, Chemtrec may be contacted for emergency treatment information at 1-800-424-9300.

d. a map of the facility showing areas where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes;

T**he locations of the above areas are depicted in Figure QRG-1.**

e. a street map of the facility in relation to surrounding businesses, schools, and residential areas to understand how best to get to the facility and also evacuate citizens and workers;

A street map of the facility in relation to surrounding businesses, schools, and residential areas is provided as Figure QRG-2.

f. the locations of water supply (e.g., fire hydrant and its flow rate);

A fire water hookup is located at the retention pond. Its location is depicted in Figure QRG-2.

g. the identification of on-site notification systems such as a fire alarm that rings off-site, or smoke alarms; and

In the event of an emergency, any person observing, involved with, or recognizing an emergency situation should identify the problem to the best of his/her ability and immediately contact one of the Emergency Coordinators listed below. The emergency coordinator shall then communicate the actual or imminent emergency to all facility

employees via the intercom and hand-held radio systems. The Emergency Coordinators shall also immediately determine whether emergency services via 911 are needed to respond to the identified situation.

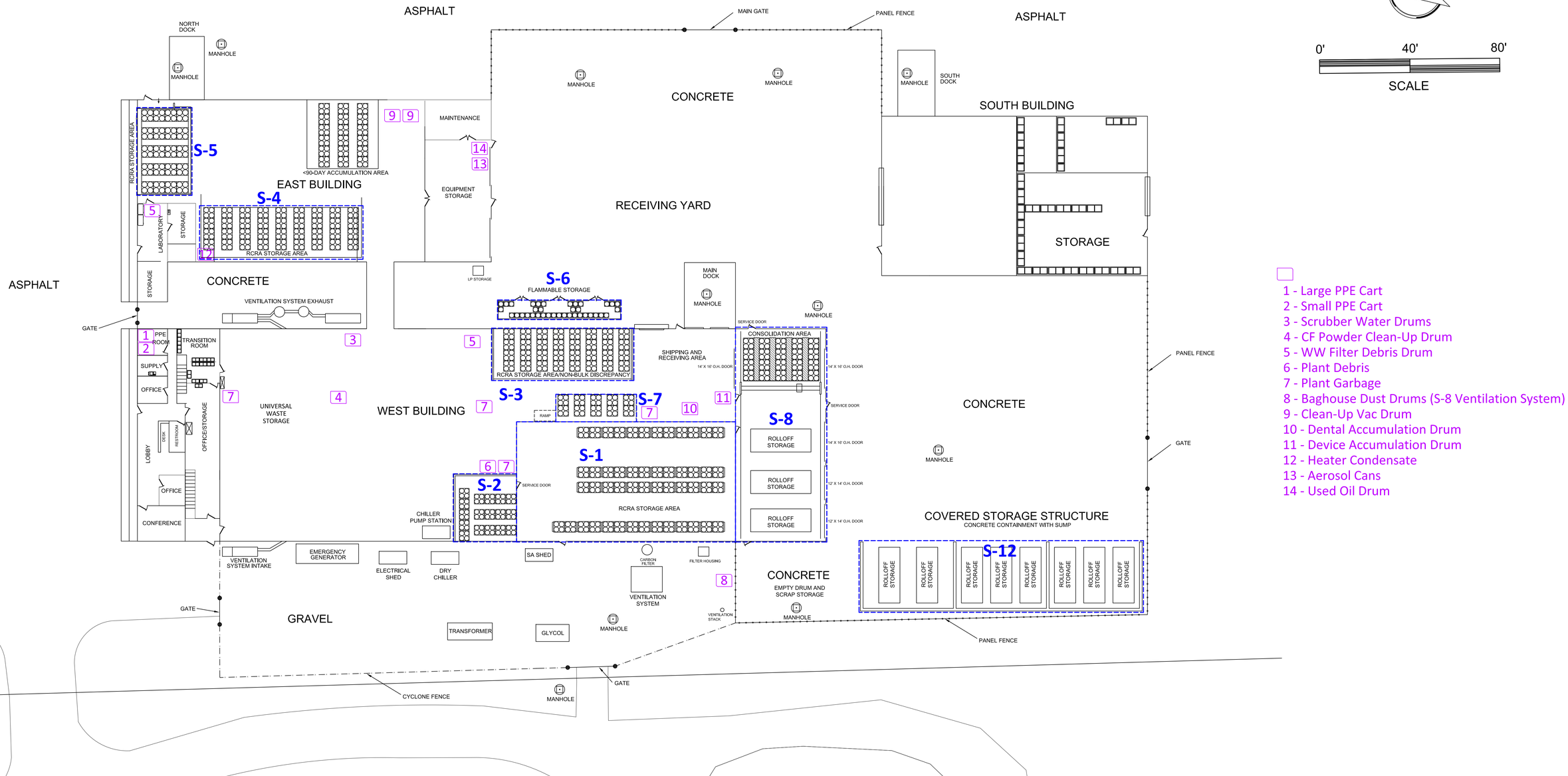
At least one of the Emergency Coordinators is available at all times (i.e., either on the premises or able to respond within a short period of time). The emergency coordinator and alternate emergency coordinator have been provided the appropriate training and have the requisite authority and experience to act as the emergency coordinator, and are authorized to commit company resources to address an emergency subject to this Plan.

h. the name of the emergency coordinator(s) and 7/24-hour emergency telephone number(s) or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator.

Emergency Coordinators		
Primary Coordinator	**First Alternate Coordinator**	**Second Alternate Coordinator**
Steve Smolko	**Dan Knudson**	**Robert Lund**
Sr. Manager Operations	**Material Handler Sr – Hazardous Waste**	**Material Handler Sr – Hazardous Waste**
6015 Greenway Ln Mount Pleasant, WI 53406	**8639 33 Avenue Kenosha, WI 53142**	**324 Edward Street Burlington, WI 53105**
None	**None**	**262 - 763-0903 (Home)**
262-498-3072 (cell)	**262-496-5630 (cell)**	**None**

FIGURE QRG-1

LICENSED STORAGE AREAS



1 - Large PPE Cart
2 - Small PPE Cart
3 - Scrubber Water Drums
4 - CF Powder Clean-Up Drum
5 - WW Filter Debris Drum
6 - Plant Debris
7 - Plant Garbage
8 - Baghouse Dust Drums (S-8 Ventilation System)
9 - Clean-Up Vac Drum
10 - Dental Accumulation Drum
11 - Device Accumulation Drum
12 - Heater Condensate
13 - Aerosol Cans
14 - Used Oil Drum

LEGEND

- LICENSED CONTAINER STORAGE AREA
- DRUMS
- PANEL FENCING
- CYCLONE FENCING

Unit	Capacity	
S-1	33,000 gal.	600 55-gal. Drum Equivalent (DE)
S-2	7,480 gal.	136 55-gal. DE
S-3	14,080 gal.	256 55-gal. DE
S-4	14,080 gal.	256 55-gal. DE
S-5	8,800 gal.	160 55-gal. DE
S-6	2,035 gal.	37 55-gal. DE
S-7	4,400 gal.	80 55-gal. DE
S-8	120 Cu. Yds. and 8,800 gal.	(3) 40-yd rolloff equivalents and 160 55-gal. DE
S-12	320 Cu. Yds.	(8) 40-yd rolloff equivalents

Basemap from Waste Management.

WM Waste, Inc.
Union Grove, Wisconsin

Waste Locations

Racine County, WI

CK Associates Environmental Consultants

Drawn:	CAL	Checked:	BHR
Date:	1/30/2023	Approved:	LEC
Dwg. No.:	WA5011-18114-27		Figure QRG-1

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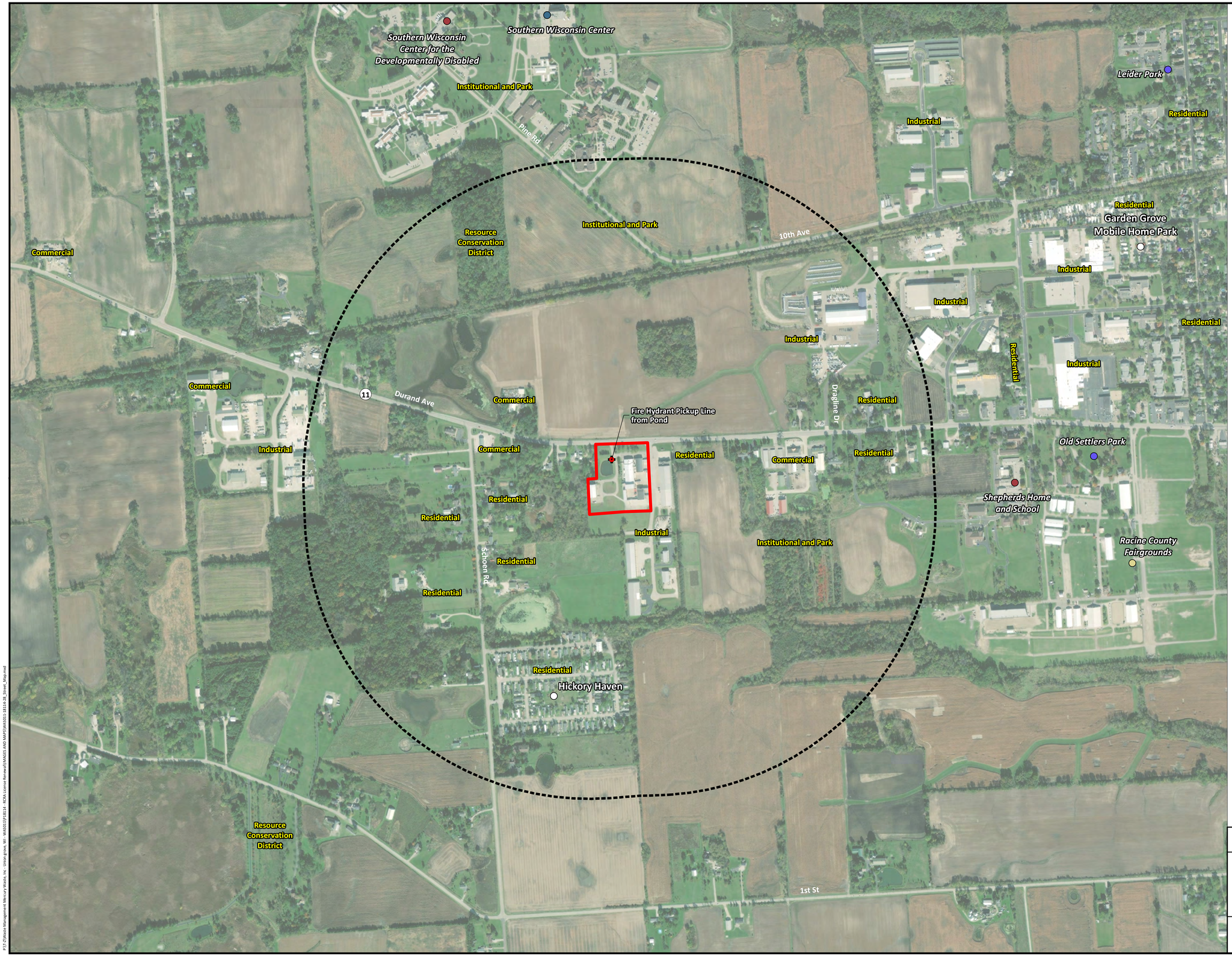
FIGURE QRG-2

STREET MAP



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Feet

Racine County

Legend

- Populated Place
- Building
- Locale
- Park
- School
- Facility Boundary
- 1/2-Mile Buffer

ESRI: World Transportation, Imagery: Vivid Maxar 10/20/2019
Racine County Zoning Authority

WM Waste, Inc.
Union Grove, Wisconsin

Street Map

Racine County, WI

CK Associates Environmental Consultants

Drawn: CAL	Checked: BHR
Date: 12/18/2020	Approved: RTK
Dwg. No.: WA5011-18114-28	**Figure QRG-2**

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4-1.0 Plan Introduction Elements

4-1.1 Purpose and Scope of Plan Coverage

This Integrated Contingency Plan (ICP) has been prepared to meet the requirements of the Wisconsin Department of Natural Resources (WDNR) regulations for preparation of a RCRA Contingency Plan [NR 664.0050 - 664.0056], the Spill Prevention, Control, and Countermeasure Plan (SPCC Plan) requirements [40 CFR 112], and the Toxic Substance Control Act PCB regulations [761.65(c)(l)(iv)]. The use of the ICP format ensures ready use and organization of the document.

This ICP also addresses WM Waste, Inc. (WM Waste) compliance with the OSHA Hazardous Waste Operations Emergency Response Program in accordance with 29 CFR 1910.120, which requires an Emergency Response Plan to be developed and implemented by all employers. In addition, this procedure is written to assure compliance with several other OSHA regulations in 29 CFR 1910 including Design of Exit Routes (1910.36); Maintenance of Exit Routes (1910.37); Emergency Action Plans (1910.38); Fire Prevention Plans (1910.39); Portable Fire Extinguishers (1910.157); and Employee Alarm Systems (1910.165).

The RCRA Contingency Plan is required as part of the requirements for WM Waste's submission of a license reissuance application for a hazardous waste storage permit.

WM Waste does not formally require an SPCC Plan since the inventory of "oil" that meets the definition of 40 CFR 112.2 does not exceed the 1,320 gallons inventory threshold. However, WM Waste has elected to prepare this ICP consistent with the SPCC requirements. This ICP documents conformance with the SPCC Plan regulatory requirements.

Operation Description

WM Waste operates a commercial hazardous waste storage facility that stores and consolidates containers of various hazardous and universal wastes. For this ICP, facility is defined as the structures and improvements used for hazardous waste storage. Hazardous wastes are stored in licensed container storage areas prior to shipment to off-site, appropriately permitted/licensed treatment, storage and disposal facilities.

Site Location

The site (i.e., the property upon which the facility is located) is located on the south side of State Trunk Highway 11 (21211 Durand Avenue) in the Town of Dover, Racine County, Wisconsin, just west of the Village of Union Grove, Wisconsin. The site is surrounded by agricultural land to the north, light industry to the south, and light industrial/residential land to the east and west. Commercial development increases to the east along Durand Avenue toward Union Grove. The town of Union Grove (population of approximately 5,000) is located

approximately one-half mile east of the site. The estimated population around the site is approximately 1,909 people within 1 mile, and 7,978 people within 3 miles, according to the U.S. Census Bureau, 2019 American Community Survey. The site rises slightly from south to north and is characterized by relatively flat topography. The elevation of the site is approximately 835 feet national geodetic vertical datum . The operating areas of the facility are enclosed within a fence and or wall system to prevent unauthorized access to the subject material. The waste storage areas are fully lit to assist in discovery of potential releases.

Site Buildings

The WM Waste site is comprised of four buildings as shown in **Figure 4-1**. The buildings are the West, East, South, and the Admin Buildings. Each of these buildings is described below.

1. West Building

The West Building has a total area of about 18,000 square feet and houses the following operations.

- shipping and receiving dock;
- five (5) licensed container storage areas (S-1, S-2, S-3, S-7, and S-8);
- universal and generator waste storage;
- offices and conference room;
- control room;
- transition room; and
- employee locker rooms and breakroom.

The Offices, Control Room, Break Room, and Transition Room are separated by walls from the operation areas and have separate air handling systems.

2. East Building

The East Building has an area of about 7,200 square feet and houses the following operations.

- two (2) licensed container storage areas (S-4 and S-5);
- maintenance shop.

The East Building is divided by walls into three separate areas. An enclosed hallway connects the East and West Buildings.

3. South Building

The South Building has an area of approximately 6,000 square feet and houses the a general storage area.

4. Admin Building

The Admin Building has an area of approximately 7,200 square feet. The building is broken into two equal halves. One half is used for equipment storage. The other half houses the WM Waste maintenance shop and an Incident Command Center. In the event of an emergency requiring implementation of this Plan, this location will act as an incident command center for both WM Waste and Fire Department personnel and is stocked with computer equipment to remotely operate the processing equipment, emergency response equipment, and documentation materials needed to respond to an incident within the processing buildings.

Waste Storage Areas

Container Storage Area Designation	Gallons	Cubic Yards	Location
S-1	33,000		West Bldg.
S-2	7,480		West Bldg.
S-3	14,080		West Bldg.
S-4	14,080		East Bldg.
S-5	8,800		East Bldg.
S-6	2,035		Receiving Yard
S-7	4,400		West Bldg.
S-8	8,800	120	West Bldg.
S-12		320	Outdoor Shed
TOTAL	92,675	440	

Soils and Groundwater

Shallow surface soils from 0 to 2 feet beneath ground surface (bgs) at the site have been classified by the Unified Soil Classification System as silt loam (ML-CL), silty clay (CH), and clay loam (CL). The uppermost bedrock at the site is a Silurian age dolomite located about 180 feet bgs and includes the Cayugan; Niagaran, and Alexandrian series.

The depth to useable groundwater at the site is estimated to be between 60 and 80 feet bgs with intermittent perched water occurring at depths between 5 and 15 feet bgs.

Storm Water and Surface Water

Surface (storm) water from the active portions of the facility is drained from the site to a stormwater retention basin west of the West Building. Each loading dock is constructed of concrete and is provided with a drain valve that is kept closed to contain and hold storm water until it can be released after inspection which confirms that there is no visible sheen or hazardous waste is present in the storm water. The loading dock drains are connected to

underground storm water sewer lines, which carry the storm water to the retention basin. In addition, several catch basins/manholes at the site convey storm water through an underground line to the stormwater retention basin. The locations of the drains are depicted in **Figure 4-1**. The catch basins and manholes associated with this system are periodically emptied of collected grit and solids and the collected material containerized for characterization and disposal. The West Branch Root River and Des Plaines River are located more than one mile to the east and southeast of WM Waste, respectively. Eagle Lake is located approximately three miles northwest of the site. Eagle Lake is a small lake that is used for recreational purposes. No other surface waters or other sensitive areas including wetlands, floodplains, springs, etc., were noted within one mile of the site.

Nature of Hazards or Events

The Integrated Contingency Plan will be applicable to the following situations:

a. Fire and/or Explosion

i. A fire that causes the release of potentially hazardous materials.
ii. A fire that spreads and could possibly ignite materials at other locations on site or could cause heat-induced explosions.
iii. A fire that could possibly spread to off-site areas.
iv. Use of water and chemical fire suppressants that could result in contaminated run off.
v. There is an imminent danger that an explosion could occur causing a safety hazard because of flying fragments.
vi. There is an imminent danger that an explosion could ignite other hazardous waste at the facility.
vii. There is an imminent danger that an explosion could result in a release of hazardous material.
viii. An explosion that has occurred.

b. Spills or Material Releases

i. A spill that could result in a release of liquids or vapors that could cause the need for evacuation. A spill that could cause the release of hazardous liquids off-site.
ii. A spill that can be contained on site, but with a potential for soil contamination.
iii. A spill that cannot be contained on site, resulting in off-site soil and/or surface water contamination.
iv. All potential releases are expected to remain on site due to the combination of containment measures and site drainage to the on-site stormwater retention basin.

c. Natural Disaster

i. A tornado that has damaged hazardous waste management facility property.
ii. An earthquake that has occurred and has damaged the facility.
iii. Severe thunderstorms that have occurred and caused a release of hazardous waste at the facility.

d. Civil Unrest

i. The facility is involved in a violent labor strike resulting in damage to the hazardous waste management facility.
ii. The facility's security has been breached by individuals intent on sabotage.

e. Bomb Threat

i. An employee or outside caller makes a bomb threat against the facility.

f. Workplace Violence

i. An employee threatens or commits workplace violence at the facility.

g. Electrical Power Outage

i. Facility power is lost or interrupted.

h. Injury/Illness

i. An employee, visitor, or contractor becomes seriously ill or is seriously injured at the facility such that emergency medical services are needed.

4-1.2 General Facility Identification Information

a. Facility name
WM Waste, Inc.

b. Owner/operator/agent
Land owners:

WM Waste, Inc.
21211 Durand Ave.
Union Grove, WI 53182

c. Physical address of the facility

21211 Durand Avenue Union Grove, WI 53182
Latitude: 42.681635
Longitude: -88.07678

d. Township and Range

NE ¼ of Section 36, Township 3 North, Range 20 East Town of Dover, Racine County, Wisconsin

e. Key contact for plan development, maintenance, and discharge prevention

Steve Smolko
21211 Durand Avenue Union Grove, WI 53182
(262) 878-2599
ssmolko@wm.com

f. Facility phone numbers

(800) 741-3343
(262) 878-2599
(262) 878-2699 (fax)

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4-2.0 Core Plan Elements

4-2.1 Discovery

In the event of an emergency, any person observing, involved with, or recognizing an emergency situation will identify the problem to the best of his/her ability and immediately contact one of the Emergency Coordinators. Refer to Section 4-3.2.1 Internal notifications.

4-2.2 Initial Response

In the event of an emergency, the emergency coordinator shall Communicate the actual or imminent emergency to all facility employees via the intercom and hand-held radio systems and assess the actual or potential hazards to human health or the environment.

The following procedures below are used to deal with any emergency that may arise. Section 4-3-10 provides specific guidance for emergency response presented for each chemical class in the WM Waste facility.

4-2.3 Emergency Action Procedure A: Fire and/or Explosion

Fire trucks and emergency vehicles can access all portions of the facility from Durand Avenue via the driveways east and west of the WM Waste facility

The Emergency Coordinator shall initiate the following steps:

1. Communicate the actual or imminent emergency to all facility employees via the intercom and hand-held radio systems.
2. Assess the actual or potential hazards to human health or the environment
3. Contact the appropriate emergency contacts listed in Tables 4-3.2.2-1 and 4-3.2.2-2, if the required response is beyond facility capabilities.
4. Control access to the area--clear all personnel from the area who are not actively involved in fighting the fire or responding to the explosion. These persons are to report to the designated upwind rally point, depending on wind direction) via the evacuation routes depicted on **Figure 4-1**.
5. Direct all semi-truck drivers to move their trailers to allow fire department unfettered access.
6. Immediately discontinue work with hazardous waste in all areas.
7. Shut down all feed lines, including power, as necessary and practical.
8. Extinguish fire with portable fire extinguishers, if possible, or take other immediate action to mitigate the emergency until the Fire Department arrives.
9. If possible, remove all injured persons and administer appropriate first aid medical treatment. (Medical treatment will be administered by qualified personnel.)

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10. Take all reasonable measures necessary to ensure that subsequent fires, explosions, or releases do not occur or spread to other areas of the plant.
11. Follow the appropriate Action Procedure if fire or explosion causes the release of any harmful substance.
12. Deploy additional manpower and equipment as required.
13. Document the emergency event and response.
14. Continually re-evaluate the situation for changes in conditions that warrant changes in response tactics.

Fire extinguishers at WM Waste are the basic dry chemical fire extinguisher type. In order to operate you can follow the PASS SYSTEM.

In the event of a fire, the following procedures should be taken

P	Pull the pin
A	Aim the extinguisher at the base of the fire
S	Squeeze the trigger while holding the extinguisher upright
S	Sweep the extinguisher nozzle from side to side covering the base area of the fire

If the fire requires more than one fire extinguisher, call 911 for the Town of Dover (Kansasville) Fire Department

SEE RESPONSE SHEET FOR SPECIFIC FIRE FIGHTING TECHNIQUES IN SECTION 4-3.10.

4-2.4 Emergency Action Procedure B: Spills or Material Release

Upon discovery of any spill, the Emergency Coordinator will initiate the following steps:

A. Evaluate Emergency:

A. Identify material spilled or released.
B. Identify location of the release or spillage of hazardous material.
C. Estimate the quantity released and the rate at which it is being released.
D. Determine the direction in which the spill or vapor or smoke release is heading.
E. Identify and evaluate any injuries involved.
F. Determine if there is a fire and/or explosion or possibility of these events occurring.

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G. Determine the capability to mitigate with in-plant personnel.

2. **Notify the appropriate Emergency Contacts** in **Tables** 4-3.2.2-1 and 4-3.2.2-2 if the incident response required is beyond plant capabilities.

3. **Control access to the area**- evacuate if necessary. Establish an area of isolation around the spill.

4. **Contain Spill/Confine Danger**

A. Identify spilled material and have employees suited in appropriate PPE.
B. Contain and absorb spilled material with solid adsorbents (sawdust or floor dry). Containerize used absorbent for proper disposal.
C. Minimize migration or run-off of spilled material, if necessary, by creating berms, channels, or dikes using sawdust or floor-dry.
D. In the event that a leaking drum is identified, carefully remove it from its location using a forklift and place it into a recovery or over-pack drum. The leaked materials will be collected as follows:

- wastes that are in solid form will be swept together for collection and placement into a secure drum;

- wastes containing oil or liquids will be covered with oil-dry clay absorbent, collected and shoveled into a secure drum.

E. Decontaminate the area which contacted the waste.

F. Incompatible wastes shall not be stored until cleanup is completed.

Outgoing wastes will be analyzed in accordance with WM Waste's Waste Analysis Plan before shipment for off-site treatment or disposal.

5. **Eliminate Ignition Sources**

Starting with downwind areas, eliminate all sources of heat, open flame, sparks, or friction both indoors and out. Use non-sparking tools for spills clean up.

6. **Document the Emergency Event**

SEE RESPONSE SHEET FOR SPECIFIC FIRE FIGHTING TECHNIQUES IN SECTION 4-3.10.

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4-2.5 Emergency Action Procedure C: Natural Disasters

This procedure will be followed in the event of any emergency caused by severe weather (tornadoes, earthquakes, high-intensity thunderstorms, floods, etc.).

The WM Waste Emergency Coordinator will direct and control the following actions if they can be accomplished without endangering the lives of WM Waste personnel:

1. Discontinue any processes that may be impacted by severe weather conditions.
2. Close any open containers; secure all containers to the extent practicable.
3. Close all doors and windows.
4. Instruct employees to proceed to safe and secure areas of the facility.
    i. Administrative Office Personnel
    Upon notification of a tornado warning, office personnel are to take shelter in the Men's & Women's locker rooms
        1. No one is allowed to leave the building.
        2. Keep calm.
        3. Shut off power to machines, if it can be done safely.
        4. Stay clear of windows.

    ii. Plant Personnel
    NOTE: A Weather Alert Radio is located in the Control Room.
    Upon notification of a tornado warning, plant personnel are to take shelter in one of the following areas:
        - Transition Room
        - Office Hallway - close the exterior office doors

        1. No one is allowed to leave the building.
        2. Keep calm.
        3. Shut off power to machines, if it can be done safely.
        4. Stay clear of windows.

4-2.6 Emergency Action Procedure D: Civil Unrest

This procedure will be followed if the WM Waste facility is subject to civil disturbance. The WM Waste Emergency Coordinator will initiate the following actions:

1. Secure all facility entrances to control access to or exiting from the buildings by either demonstrators or WM Waste employees.
2. Notify local law enforcement authorities by dialing 911. Authorities should be notified, but summoned to take action only as a last resort. There should be an agreement upon conditions under which outside authorities will be summoned. WM Waste employees should be made aware of any planned police action.

3. Approach demonstrators to inform them that WM Waste does not allow such activity on its premises, if necessary. They should be requested to leave in a restrained and courteous manner.
4. Allow authorities to handle the situation and consult the legal department for further guidance.
5. Communications: Delay as long as possible the widespread communication of the threatened activity in order to avoid the possibility that additional communication may complicate or aggravate the situation. During an actual demonstration, direct communications between demonstrators and facility management and/or employees should be kept to a minimum.

4-2.7 Emergency Action Procedure E: Bomb Threat

This procedure will be followed if the WM Waste facility is subject to a bomb threat. The WM Waste Emergency Coordinator will initiate the following actions:

Personnel receiving telephone call of bomb threat should note the subjects as listed in the Bomb Threat Worksheet (next page) the following procedures should be followed

1. Try to keep the person on the phone as long as possible.
2. Remain calm, pay attention to the speech pattern and other remarks by the caller.
3. If possible, notify a co-worker to contact the Racine County Sheriff (for a possible trace of the call).
4. Evacuate the building as orderly as possible and assemble at the meeting area.
5. No one is allowed to leave the area; all workforce members are to be accounted for.

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TELEPHONE BOMB THREAT FORM

Stay calm get as much information as you can and do not hang up the line used in the threat. Immediately report the threat to your local Law Enforcement.

Date:	Time:	Length of Call:	Number rec'd. on:

ASK THESE QUESTIONS:	DESCRIBE CALLERS VOICE:
1. When will the bomb explode? 2. Where is it right now? 3. What does it look like? 4. What kind of bomb is it? 5. What will cause it to explode? 6. Did you place the bomb? 7. Why? 8. What is your address? 9. What is your name?	___Calm ___Nasal ___Angry ___Stutter ___Excited ___Lisp ___Slow ___Raspy ___Rapid ___Deep ___Soft ___Ragged ___Loud ___Clearing throat ___Laughter ___Crying ___Deep ___Normal Breathing ___Distinct voice ___Slurred accent ___Disguised ___Cracking ___Whisper ___Familiar If voice is familiar, who did it sound like?
EXACT WORDING (Use back, if necessary)	BACKGROUND SOUNDS: ___Street ___Factory noises or machines ___Crockery ___Animal Noises ___Voices ___Clear ___PA System ___Static ___Music ___Office ___House ___Other noises
Caller's sex: ___ Race: ___ Age: ___ Threat Language: ___ Well Spoken (educated) ___Incoherent ___Foul ___Taped message read ___Irrational by threat maker	REPORT CALL IMMEDIATELY TO: Sheriff's Office: 911 Name _____ Position _____ Ph. No. _____

4-2.8 Emergency Action Procedure F: Workplace Violence

This procedure will be followed if the WM Waste facility is subject to workplace violence. The

WM Waste Emergency Coordinator will initiate the following actions:

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262.878.2699 Fax

1. Evacuate the building as quickly and calmly as possible.
2. Call 911 for emergency assistance - try to describe the situation as best as possible.
3. Noting - Person I Location / Situation / Visible Weapon

4-2.9 Emergency Action Procedure G: Electrical Power Outage

This procedure will be followed if the WM Waste facility is subject to an electrical power outage.

Following an interruption of electricity supply to the facility, the emergency generator will automatically engage to maintain operation of the following primary systems:

- supplied air drier;
- supplied air compressor;
- plant ventilation unit - blowers/motor;
- emergency lights;
- water pump; and
- all 110-volt outlets.

In the event of an electrical power outage, all plant personnel will switch off any equipment that they may be operating. All personnel will remain at their workstation until otherwise directed by supervision.

When electrical power fails, supervisors should check equipment in their areas to ensure that power is shut off and emergency lights are working. Supervisors are to then account for all technicians reporting to them and direct them to proceed to the Control Room (if required) until management gives further instructions.

All personnel will remain on site during a power outage unless otherwise directed by management.

4-2.10 Sustained Actions

In the event that actions to address an event are required beyond the time of the initial response, the facility will conduct response and cleanup activities consistent with remediation activities.

4-2.11 Termination and Follow-Up Actions

4-2.11.1 Emergency Action Procedure: Fire and/or Explosion

1. Investigate and determine the cause of the fire.

2. Review this Plan to determine if changes need to be made to prevent similar future occurrences.
3. Assess the effectiveness of this Plan.
4. Written reports requiring 15-day notification may be required. Refer to Section 4-3.2.3.

4-2.11.2 Emergency Action Procedure: Spills and/or Material Release

1. In the event of a spill requiring cleanup, all emergency equipment will be decontaminated, inspected, replaced, or refilled to ensure availability of said materials before restarting operations. Decontamination of reusable equipment will be accomplished with an appropriate cleaning agent. Personnel decontamination will be accomplished through doffing of emergency response equipment (for decontamination), doffing of personal protective equipment (into containers for proper disposal), and removal of soiled facility uniforms (to be laundered appropriately). Emergency decontamination may be necessary if a worker shows signs of acute chemical exposure.
2. Investigate the cause of the spill.
3. Review this Plan to determine if changes need to be made to prevent similar future occurrences.
4. Assess the effectiveness of this Plan.
5. Written reports requiring 15-day notification may be required. Refer to Section 4-3.2.3.
6. The Emergency Coordinator will notify WDNR and the appropriate state and local authorities that incompatible wastes have not been treated, stored or disposed of until cleanup procedures are completed and that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

Emergency Action Procedure C - G

1. In the event that Emergency Actions Procedures C through G outlined in Section 4-2.2 are initiated, review this Plan to determine if any changes need to be made.
2. Assess the effectiveness of this Plan in dealing with the applicable event.

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4-3.0 Annexes

4-3.1 Facility and Locality Information

4-3.1.1 Facility Maps and Drawings

See the following Figures attached to this ICP for information on the location and arrangement of operations at WM Waste and the evacuation routes and rally points.

Figure 4-1 Site Layout

4-3.1.2 Discharge Sources

There are no drains (other than sanitary sewer connections) from inside the buildings to the environment. Stormwater from the facility is discharged to a stormwater retention basin located on the west side of the West Building, on WM Waste property.

4-3.1.3 Emergency Shut-off Valves

The natural gas shut-off valve is located in the front courtyard by the ventilation unit between the East and West Buildings.

The emergency power shut-off to the building ventilation is located on the west side of the West Building by the emergency generator.

4-3.1.4 Response Equipment Location

WM Waste has placed a set of primary emergency response equipment outside of the operating areas, located in the Admin Building. The locations and types of this emergency equipment as well as emergency equipment located site-wide are included in **Figure 4-1**. Table 4-3.1.4 below provides a brief outline of the equipment capabilities.

Table 4-3.1.4: Emergency Response Equipment

Equipment	Capability	Location
Automatic External Defibrillator (AED)	Assistance with sudden cardiac arrest	See Figure 4-1
Contingency Plan	Describes emergency procedures	
Eye Bath	Quick flushing of eyes if exposed to injurious materials	
Eye Bath/Shower	Quick flushing of eyes if exposed to injurious materials	
Eye Wash	Quick flushing of eyes if exposed to injurious materials	

Equipment	Capability	Location
Emergency Coordinators Phone Numbers List	Provides quick contact information	
Personal Protective Equipment (outer gloves, glove liners, Tyvek suits, Tyvek shoe covers, goggles, face shields, safety glasses, respirators)	Minimizes exposure to hazards	
Self-Contained Breathing Apparatus (SCBA)	Provides breathable air in a dangerous atmosphere	
Spill Kit Drum	Contains equipment to control and cleanup leaks or spills	
Trauma Kit	Contains supplies to control bleeding and injuries	
First Aid Cabinet	Contains supplies used for giving emergency treatment to sick or injured person	
Safety Data Sheets	Lists information relating to occupational safety and health for substances and products	
Sodium Sulfate	For containing spills	
Portable Pressure Sprayer	For spraying down spills	
Absorbent materials (sawdust, oil-dry, clay absorbent floor-dry)	Used to absorb spills	
Shovels	For dispensing absorbent materials	
Recovery Drums	To enclose and protect leaking drums	
Polyethylene Sheeting	To provide temporary liner beneath drums	
Vacuum Pumps	Wet/dry vacuum with an 8-gallon capacity	
Portable ABC Fire Extinguishers	Used to extinguish or control small fires	
Evacuation Alarm	To signal plant evacuations	
Telephone/Intercom	Internal and external communications	

4-3.1.5 Environmentally Sensitive Locations

There are no environmentally sensitive areas identified by the Wisconsin DNR on the property.

The Region 5 Area Contingency Plan identifies the peregrine falcon as an endangered species within Racine County and Racine County has also been identified as a potential breeding ground for the threatened Eastern Prairie Fringe Orchid.

Lake Michigan is located 14 miles due east of the facility.

The headwaters to the Des Plains River are located about 1 mile to the southeast.

4-3.1.6 Economically Sensitive Locations

There are no economically sensitive areas within the vicinity of the WM Waste facility.

4-3.1.7 Human Population Sensitive Areas

The Southern Wisconsin Center for the Developmentally Disabled operated by the Wisconsin Department of Health Services, a Corrections Center and Girls School operated by the Wisconsin Department of Corrections, and a Veterans Affairs clinic operated by the Department of Veterans Affairs, are co-located on property located about 0.5 to 1 mile northwest of the facility.

The following schools are located within 2-miles of the WM Waste facility:

- Union Grove Elementary School, 1745 Milldrum Street, Union Grove, 262-878-2015 – 1.4 miles to the east.

- Union Grove High School - 3433 S. Colony Ave., Union Grove, 262-878-2434 – 1.5 miles to the northeast.

- Union Grove Christian School - 417 15th Ave., Union Grove, 262-878-1264 – 1.1 miles due east.

- Kansasville Grade School, 4101 South Beaumont Ave., Kansasville, 262-878- 3773 – 1.8 miles to the west.

The following Nursing Home is located within a 2-mile radius of the facility:

- Oak Ridge Care - Center 1400 8th Ave, Union Grove, 262-878-2788 – 1.1 miles to the east.

4-3.2 Notification

4-3.2.1 Internal Notifications

In the event of an emergency, any person observing, involved with, or recognizing an emergency situation should identify the problem to the best of his/her ability and immediately contact one of the Emergency Coordinators listed in Table 4-3.2.1 below. The emergency coordinator shall then communicate the actual or imminent emergency to all facility employees via the intercom and hand-held radio systems. The Emergency Coordinators shall also immediately determine whether emergency services via 911 are needed to respond to the identified situation.

At least one of the Emergency Coordinators is available at all times (i.e., either on the premises or able to respond within a short period of time). The emergency coordinator and alternate emergency coordinators have been provided the appropriate training and have the requisite experience to act as the emergency coordinator, and are authorized to commit company resources to address an emergency subject to this Plan.

Table 4-3.2.1: WM Waste Emergency Coordinators

Primary Coordinator	**First Alternate Coordinator**	**Second Alternate Coordinator**
Steve Smolko	Don Knudson	Robert Lund
Sr. Manager Operations	Material Handler Sr. – Hazardous Waste	Material Handler Sr. – Hazardous Waste
6015 Greenway LN Mount Pleasant, WI 53406	8639 33 Avenue Kenosha, WI 53142	324 Edward Street Burlington, WI 53105
262-498-3072 (Cell)	262-496-5630 (Cell)	262 -763-0903 (Home)

4-3.2.2 Community Notifications

When an incident occurs, the Emergency Coordinator must determine the type of emergency and its exact location and then notify the appropriate community organizations, as needed. Table 4-3.2.2-1 illustrates which agencies coordinate each type of emergency that could be encountered. Table 4-3.2.2-2 lists the contact information for each of these agencies.

Table 4-3.2.2-1: Coordinating Agencies

Organization	Purpose
Town of Dover (Kansasville) Fire Department	Fire/Explosion (primary)
Union Grove Fire Department	Fire/Explosion (support)
Burlington Fire Department	Fire/Explosion (support)
Memorial Hospital of Burlington	Injury/Illness
Union Grove/Yorkville Fire & Rescue	Ambulance
Union Grove Police (Racine County Sheriff)	Site Control/Evacuation
Racine County Office of Emergency Management	Evacuation
Racine County Sheriff's Office	Site Control/Evacuation/Bomb Threat
WE Energies	Electrical Power Outage

Table 4-3.2.2-2 - Emergency Response Organizations

Organization	Address	Telephone
Sheriff Racine County Sheriff's Office	717 Wisconsin Avenue Racine, WI 53403	262-636-3211
Ambulance Union Grove/Yorkville Fire & Rescue	700 Main Street Union Grove, WI 53182	262-878-4181
Fire	700 Main Street Union Grove, WI 53182	262-878-4181
Union Grove Fire Department	23730 Durand Avenue Kansasville, WI 53139	262-878-3811
Town of Dove (Kansasville) Fire Department		
City of Burlington Fire Department	165 West Washington Street Burlington, WI 53105	262-763-7842
Town of Burlington Fire Department	32288 Bushnell Road Burlington, WI 53105	262-763-3070
Emergency: Management Racine County Office of Emergency Management		262-636-3515
Racine County Office of Emergency Management (LEPC)	730 Wisconsin Avenue Racine, WI 53403	262-636-3515
Wisconsin Division of Emergency Government (SEPC)		800-943-0003
Hospital Memorial Hospital of Burlington	252 McHenry Street Burlington, WI 53105	262-767-6102

Energy Supplier WE Energies	231 W. Michigan Street Milwaukee, WI 53203	414-221-2345 (office) 800-662-4PWR (4797) (electric emergency, power emergency) 800-261-LEAK (5325) (gas leak, odor, or emergency)

4-3.2.3 Federal and State Agency Notifications and Reports

WM Waste operates under many regulatory notification and reporting requirements. WM Waste has agreed to site-specific incident reporting requirements to satisfy both WDNR Spill and Hazardous Waste rule requirements. The reporting thresholds and reporting requirements, both immediate and written, are summarized below. Contact information for the federal and state agencies is included in Tables 4-3.2.2-1 and 4-3.2.2-2.

Immediate Notification Requirements

In accordance with NR 664.0056(4)(b), The emergency coordinator shall immediately the national response center (using its 24-hour toll free number 800-424-8802) and the division of emergency government (using its 24-hour toll free number 800-943-0003). The report shall include all of the following:

1. Name and telephone number of reporter.
2. Name and address of facility.
3. Time and type of incident (e.g., release, fire).
4. Name and quantity of materials involved, to the extent known.
5. The extent of injuries, if any.
6. The possible hazards to human health, or the environment, outside the facility.

Written Report Requirements

For all incidents requiring implementation of the Contingency Plan, WM Waste will submit a written report to both the WDNR-designated Hazardous Waste Inspector assigned to WM Waste and to the WDNR Southeast District Spills Coordinator within 15 days of the incident.

Written reports will contain the following information:

1. Name, address, and telephone number of the Emergency Coordinator
2. Name, address, and telephone number of the facility
3. Date, time, and type of incident (e.g., spill, fire or explosion)
4. Name and quantity of materials involved
5. Extent of injuries, if any

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6. Assessment of actual or potential hazards to human health or the environment, if applicable
7. Estimated quantity and disposition of recovered material that resulted from the incident
8. A narrative describing the known or suspected causes of the incident and a statement describing the measures taken to investigate the cause. The narrative shall also describe any necessary measures that have been or shall be taken to prevent incidents in the future.
9. Any amendments to the Contingency Plan required in section NR 630.22(l)(b) and (c), Wis. Adm. Code.

Notation to Operating Record

The WM Waste Emergency Coordinator will note in the operating record the date, time, and details of any incident that requires the implementation of the Integrated Contingency Plan and the submittal of a written report as described above.

When a fire or explosion occurs, WM Waste shall do the following:

1. Take photo documentation of the incident.
2. Identify the employees who have knowledge of, or were involved in the incident.
3. Retain and secure any data associated with the incident.
4. Retain and secure any equipment and/or parts that were involved in the incident.
5. Retain and secure wastes or residues that were involved in the incident.

Quarterly Spill Log

WM Waste will submit a quarterly log listing all visible spills of hazardous material greater than a gallon occurring at the facility over the previous three months. The report shall include the type and quantity of waste spilled, the location of the release, the source of the release, the actions that were taken to clean up the release and the actions that will be taken to prevent a release from recurring. The quarterly log shall be submitted to the WDNR- designated Hazardous Waste Inspector.

Oil Spills

For incidents involving a discharge of more than 1,000 gallons of oil or PCBs in a single discharge or more than 42 gallons of oil or PCBs in each of two discharges, WM Waste will submit a report to the USEPA Regional Administrator within 60 days containing the following information:

1. Name of the facility;
2. Name of the person completing the report;
3. Location of the facility;

4. Maximum storage or handling capacity of the facility and normal daily throughput;
5. Corrective action and countermeasures taken, including a description of equipment repairs and replacements;
6. An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;
7. The cause of such discharge as described in 40 CFR 112.6, including a failure analysis of the system or subsystem in which the failure occurred;
8. Additional preventive measures taken or contemplated to minimize the possibility of recurrence; and
9. Such other information as the Regional Administrator may reasonably

4-3.3 Response Management System

4-3.3.1 General

The WM Waste facility has elected to adopt the fundamental principles of the National Incident Management System (NIMS) Incident Command System (ICS) as described at www.nimsonline.com. The WM Waste emergency management will be turned over to the local incident commander (Emergency Coordinator) once that person is on-site.

4-3.3.2 Command

4-3.3.2.1 Incident Commander/Emergency Coordinator

The primary Incident Commander at WM Waste is the Operations Manager. Authority includes ability to commit WM Waste resources in response to an incident at WM Waste. His/her duties are as follows:

- Communicate the actual or imminent emergency to all facility employees via the intercom and hand-held radio systems
- Assess the actual or potential hazards to human health or the environment
- Identify the character, sources, amount, and extent of release
- Take responsible measures to ensure fire, explosions or releases do not occur or spread to other hazardous waste
- Notify local authorities if evaluation is necessary
- Notify emergency response officials of release outside facility
- Monitor for leaks, pressure build ups, and gas generation if operations stop
- Arrange for treatment, storage, and disposal of material after emergency
- Coordinate the response to an incident
- Obtain additional resources as required
- Notify other senior level management employees of the situation

- Ensure no incompatible waste is treated, stored, or disposal until cleanup is complete
- Ensure equipment is cleaned and fit for its intended use before operations are resumed
- Notify applicable local and state authorities before resuming operations

WM Waste has established the Admin Building as the incident command center in the event of an incident.

4-3.3.2.2 Information (i.e., internal and external communications).

The Emergency Coordinator is responsible for the dissemination of information to the public, or they may delegate the responsibility to another employee.

Radio stations in the vicinity of the WM Waste facility include:

- WRJN AMl400, Racine WI, 262-634-3311
- WLIP AM 1050, Kenosha WI, 262-694-7800
- WEZY FM92.1, Racine WI, 262-634-3311
- WKKV FMI00.7, Racine WI, 414-321-1007
- WEXT FM104.7, Sturtevant WI, 262-694-7800
- WXSS FM103.7, Wauwatosa WI, 414-529-1250

Newspapers in the vicinity of Union Grove include:

- Burlington Standard Press, 262-763-3511
- Racine Journal Times, 262-631-1723

Coordination with the Union Grove administrative offices will be made through:

Village President
Village of Union Grove
925 15th Avenue
Union Grove, WI 53182
262-878-1818

4-3.3.2.3 Safety

Safety of responders is paramount to WM Waste. The company has established an Incident Command Center to the west of the container storage areas in an area that is generally upwind of the facility. Information pertinent to properly responding to an incident at WM Waste is maintained in this building, including Safety Data Sheets, response equipment, and communication devices.

Evacuation routes have been established and are included in **Figure 4-1**.

4-3.3.2.4 Liaison Staff Mobilization

WM Waste personnel will be expected to take only initial response activities in the event of a significant event. Once the local Incident Commander arrives and takes control, WM Waste personnel will be at their disposal and will not be expected to take the lead in response activities.

4-3.3.3 Operations

4-3.3.3.1 Operational Response Objectives

The primary objective of a response to an incident at WM Waste is to control and minimize exposure to hazardous waste. As such, the control of water that may be used in response to a fire at the facility is important to prevent the further spreading of contamination.

In addition, drums may contain a flammable liquid waste, and buildings are provided with sufficient secondary containment. Liquid spills outside these secondary containment areas that could not be contained through emergency response measures will be captured by the on-site stormwater retention basin.

4-3.3.3.2 Discharge or Release Control

Any liquid releases that may exit the building will be captured in the on-site stormwater retention basin.

4-3.3.3.3 Assessment/Monitoring

If the facility stops operations in response to a fire, explosion or release, the emergency coordinator shall monitor for leaks or releases.

4-3.3.3.4 Containment

Containers containing free liquids may be stored in S-1 through S-6. These container storage areas are provided with secondary containment sized to prevent spills outside of containment. Liquid spills outside these secondary containment areas that could not be contained through emergency response measures will be captured by the on-site stormwater retention basin.

4-3.3.3.5 Recovery

WM Waste has materials and supplies to aid in the capture and recovery of hazardous waste, oil, and/or PCBs that may be released in the event of an incident. Recovered wastes are disposed of off-site as hazardous waste consistent with the disposal method of the original wastes.

4-3.3.3.6 Decontamination

Decontamination of reusable equipment will be accomplished with a suitable cleaning agent before operations are restarted. Personnel decontamination will be accomplished through doffing of emergency response equipment (for decontamination), doffing of personal protective equipment (into containers for proper disposal), and removal of soiled facility uniforms (to be laundered appropriately). Emergency decontamination may be necessary if a worker shows signs of acute chemical exposure.

4-3.3.3.7 Medical

The nearest hospital to the WM Waste facility is:
Memorial Hospital of Burlington
252 McHenry Street
Burlington, WI 53105
Phone 262-767-6102

4-3.3.3.8 Salvage Plans

Wastes captured during response activities may generally be containerized for shipping and disposal at an appropriate off-site facility.

4-3.3.4 Planning

4-3.3.4.1 Hazard assessment

The primary hazards associated with the WM Waste facility are the presence of hazardous wastes, flammable liquids and gases. Sensitive receptors in the area are identified in Sections 4-3.1.5 through 4-3.1.7 of this ICP.

4-3.3.4.2 Protection

Protection of the sensitive areas is accomplished by means of continued operation of the facility in accordance with its operating license and pollution control measures and designs incorporated into the facility operation.

4-3.3.4.3 Coordination with Wisconsin Department of Natural Resources.

In the unlikely event of an incident that results in an off-site release, WM Waste will work closely with the Wisconsin Department of Natural Resources to ensure that natural resources are not damaged. This may include protecting endangered species by working with the following department:

Wisconsin Department of Natural Resources
Endangered Resources Program
P.O. Box 7921
Madison, WI 53707-7921
Telephone: (608)-266-7012
FAX: (608)-266-2925
Website: http://dnr.wi.gov/

4-3.3.4.4 Waste Management.

Wastes generated during response to an incident at WM Waste will be characterized and managed in accordance with NR 662.

4-3.3.5 Logistics

4-3.3.5.1 Medical Needs of Responders

The medical needs of responders during the initial response will be provided through the responding Fire Department/EMS and in conjunction with the local hospital identified in Table 4-3.2.2-2. Ongoing medical needs will be arranged through local medical services providers.

4-3.3.5.2 Site Security

Site security within the confines of the buildings and walled storage yard is provided by the passive facility structures. If additional security is needed outside these areas, facility personnel will provide it or security services will be hired by WM Waste.

4-3.3.5.3 Communications (Internal and External Resources)

The facility has telephones at the plant in addition to a public address system and an outlook address book with facility personnel contact information. The facility is small enough that additional communication devices are not needed.

4-3.3.5.4 Transportation (Air, Land, Water)

In the event of an incident at the facility, equipment located at the site is expected to be adequate to deal with transportation needs, except if roll-off boxes need to be relocated off-site. In that event, local transportation companies will be used to obtain roll-off trucks.

4-3.3.5.5 Personnel Support (e.g., Meals, Housing, Equipment)

Personnel support will be arranged by WM Waste personnel in the event of an extended emergency response.

4-3.3.5.6 Equipment Maintenance and Support

WM Waste will provide equipment maintenance and support, or will hire the required services from local vendors.

4-3.3.5.7 Finance/Procurement/Administration

The General Manager has the authority and resources necessary to address responding to an event occurring at the WM Waste facility.

4-3.3.6 Incident Documentation

4-3.3.6.1 Post-Accident Investigation

After the incident response has been completed, the Incident Commander will lead the post-accident investigation, drawing upon skills and resources of other departments in the organization.

4-3.3.6.2 Incident History

Since WM Waste (or its predecessor) acquired the facility on September 27, 2010, there has only been one incident that required implementation of the ICP. A fire occurred in September 2011 in a Retort Oven used during previous mercury recycling operations. Mercury recycling operations are no longer conducted at the facility. A report describing the incident is provided in Attachment 4-1 of the ICP [Didn't this facility have fires – maybe pre-WM ownership? Yes, and one post-ownership in 2011, as I mentioned previously in a call.]

4-3.4 Training and Drills

Evacuation drills are held annually to ensure personnel are familiar with escape procedures. Also, each new employee receives detailed instruction on this ICP as part of both initial and annual refresher training programs. Logs for evacuation drills, initial training, and annual refresher training are kept in the Facility Training Records.

All alarm systems, emergency equipment, spill containment, and fire equipment are inspected and tested on a monthly basis. Records of all tests are kept by the Regulatory Affairs Department. On an annual basis, WM Waste will make service arrangements with the local fire and police departments to respond to emergencies at the facility. Police and fire personnel will be invited to visit the site to familiarize themselves with the WM Waste facility layout,

evacuation plans, employee workstations, and properties and hazards associated with waste handled at the facility.

Memorial Hospital of Burlington has been notified as to the hazards of the waste located at WM Waste. The hospital has been asked to prepare for and familiarize themselves with the possible trauma and emergency procedures required to respond to an emergency at the site.

4-3.5 Response Critique and Plan Review and Modification Process

The Integrated Contingency Plan is reviewed periodically (at least every five (5) years) by responsible personnel to ensure its accuracy and validity. The following events trigger amendments to the Integrated Contingency plan:

a. Periodic review discovers inaccuracies in the Integrated Contingency Plan;
b. The operating license is amended;
c. The Plan fails in an emergency;
d. The Emergency Coordinator changes;
e. The Emergency equipment changes; or
f. The facility has changes in its design, construction, operations, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste constituents, or changes in response necessary in an emergency.

In the event that the Integrated Contingency Plan must be amended, copies of the updates will be re-distributed to the following authorities:

a. Union Grove Fire Department;
b. Town of Dover (Kansasville) Fire Department;
c. Union Grove Police Department;
d. Racine County Sheriff's Office;
e. Memorial Hospital of Burlington;
f. Racine County Office of Emergency Management; and
g. Wisconsin Department of Natural Resources.

Additionally, existing copies of the Integrated Contingency Plan will be updated and kept in the Operation Manager's office, the control/observation room,

4-3.6 Prevention

No additional prevention activities beyond those previously discussed are required by the regulations for which this ICP is prepared.

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Care is taken to manage the subject materials in a manner that prevents or minimizes the potential for discharges, including, but not limited to:

- Containers are moved only when they are closed;
- Loading and unloading activities are supervised by or conducted by WM Waste employees trained in spill response and prevention;
- Pumping operations are carefully monitored by WM Waste employees;
- Filling of the emergency generator fuel oil tank is monitored by a WM Waste employee;
- All site stormwater drains to a controlled stormwater pond on WM Waste property to prevent release of potential spills to waters of the State; and
- Weekly inspection of container storage areas and daily inspections of loading/unloading.

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262.878.2699 Fax

4-3.8 Regulatory Compliance and Cross-Reference Matrices

Regulation	ICP Section
RCRA (Wisconsin NR 664)	
664.0052 Content of contingency plan:	
(1) Emergency response actions.	4-2.0
(2) Amendments to SPCC plan.	N/A
(3) Coordination with State and local response parties	4-3.2.3; 4-3.2.2
(4) Emergency coordinator(s)	4-3.3.2.1
(5) Detailed description of emergency equipment on-site	4-3.1.4
(6) Evacuation plan if applicable	4-2.2
664.0053 Copies of contingency plan.	
664.0054 Amendment of contingency plan	4-3.6
664.0055 Emergency coordinator	4-3.2.1
664.0056 Emergency procedures:	
(1) Notification	4-3.2
(2) Emergency identification/characterization	4-3.3.3.1
(3) Health/environmental assessment	4-3-3.2.1
(4) Reporting	4-2.0; 4-3.0; 4-3.2.3
(5) Containment	4-3.3.3.4
(6) Monitoring	4-3.3.3.3
(7) Treatment, storage, or disposal of wastes	4-3.3.4.4
(8) Cleanup procedures:	
(a) Disposal	4-3.3.4.4
(b) Decontamination	4-3.3.3.6
(9) Follow-up procedures	4-2.4
(10) Follow-up report	4-2.4; 4-3.2.3

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262.878.2699 Fax

4-3.9 Certification

WM Waste qualifies as a Tier I facility under the Spill Prevention, Countermeasure, and Control rules and therefore self-certifies this Plan as provided in 40 CFR 112.6. To meet the Tier I criteria:

- No container of oil is larger than 5,000 gallons;
- There has not been a single discharge of oil exceeding 1,000 gallons or two (2) discharges exceeding 42 gallons within any 12-month period in the three (3) years preceding the self-certification date of this Plan; and
- The aggregate aboveground oil storage capacity is less than 10,000 gallons.

The person certifying that this Plan meets the requirements 40 CFR 112 does so by:

- Being familiar with the requirements of this part;
- Having visited and examined the facility;
- Preparing this Plan in accordance with accepted and sound industry practices and standards, and with the requirements of this part;
- Establishing procedures for required inspections and testing;
- Fully implementing the Plan;
- Meeting the qualification criteria set forth under§ l 12.3(g)(2};
- Not including alternate methods for environmental equivalence;
- Not deviating from any requirement of this part as allowed by§ l 12.7(a)(2) and 112.7(d); and
- Having the full approval of management and the facility owner or operator and having committed the necessary resources to fully implement the Plan.

I certify that I have satisfied the requirement to prepare and implement a Plan under 40 CFR 112.3 and all of the requirements under 40 CFR 112.6(a). I certify that the information contained in this Plan is true.

Signature: _____ Title: _____

Name: _____ Date: ____/____/____

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

4-3.10 Incident Response Guides

The Emergency Coordinator will determine the appropriate Isolation Zone and Evacuation Zone, if needed.

The Emergency Coordinator will also make the determination for proper PPE such as:

Respiratory protection - SCBA / Supplied Air
Tyvek - yellow or white

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INCIDENT RESPONSE GUIDE – ACIDS

Fire / Explosion:

- Non-combustible substance, does not burn, but may decompose upon heating to produce corrosive and toxic fumes.

Health

- Toxic -Inhalation of vapors or contact with substance can result in severe injury or death.
- Fire may produce irritating, corrosive and/or toxic gases.

Evacuation

- To be determined by Emergency Coordinator.

Fire

- **Do not direct spray water inside burning containers.**
- Dry chemical, CO_2, water spray or regular foam.

Spill or Leak

- Do not touch or walk through spilled material.
- Do not touch damaged containers or spilled material unless wearing PPE.
- Prevent entry into waterways.

First Aid

- Move victim to fresh air.
- Call 911.
- Wash skin with soap and water.
- Remove and isolate contaminated clothing and shoes.
- **Do not use mouth-to-mouth resuscitation for victims that may have ingested or inhaled the substance, use artificial means.**

CLEAN UP PROCEDURES – ACIDS

- **Cover with oil dry, sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.**
- **Cover with oil dry, sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.**
- **Use clean non sparking tools to collect material and place it into loosely covered plastic container.**

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INCIDENT RESPONSE GUIDE – OXIDIZERS

Fire / Explosion:

- These substances will accelerate burning when involved in a fire.
- May explode from heat.
- Some may decompose when exposed to heat.

Health

- Inhalation of vapors or contact (Skin / Eyes) with substance can result in severe injury or death.
- Fire may produce irritating, corrosive and/or toxic gases.

Evacuation

- To be determined by Emergency Coordinator.

Fire

- **Flood fire area with water from a distance.**
- Use water; do not use dry chemical or foams. CO_2 or Halon may provide limited control.

Spill or Leak

- Do not touch or walk through spilled material.
- Do not touch damaged containers or spilled material unless wearing PPE.
- Prevent entry into waterways.
- Do not get water inside containers.

First Aid

- Move victim to fresh air – Call 911.
- Wash skin with soap and water.
- Remove and isolate contaminated clothing and shoes.

CLEAN UP PROCEDURES – OXIDIZERS

Small dry spill:

- **With clean shovel place material into clean, dry container and cover loosely: move containers from spill area.**

Small liquid spill:

- **Use a non-combustible material like vermiculite, sand or oil dry to soak up the product and place into a container for disposal.**

Large spill:

- **Dike far ahead of liquid spill for later disposal.**
- **Following product recovery, flush area with water.**

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INCIDENT RESPONSE GUIDE – BASE

Fire / Explosion:

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Containers may explode when heated.

Health

- Inhalation or contact may irritate or burn skin & eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Avoid skin contact.

Evacuation

- To be determined by Emergency Coordinator.

Fire

- Dry chemical, CO_2 or water spray.

Spill or Leak

- Eliminate ignition sources.
- Do not touch damaged containers unless wearing appropriate protective clothing.
- DO NOT GET WATER INTO CONTAINERS.

First Aid

- Move victim to fresh air – Call 911.
- Do not use mouth to mouth method if victim has ingested or inhaled the substance: induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Wash skin with soap and water – Remove contaminated clothing.

CLEAN UP PROCEDURE – BASES

- **Absorb or cover with oil dry, sand or other non-combustible material and transfer to containers.**
- **DO NOT GET WATER INSIDE CONTAINERS.**
- **Prevent entry into waterways.**
- **Do not touch damaged containers unless wearing proper PPE.**

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INCIDENT RESPONSE GUIDE – SLUDGE

Fire / Explosion:

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

Health

- Inhalation or contact may irritate or burn skin & eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Avoid skin contact.
- Runoff from fire control may cause pollution.

Evacuation

- To be determined by Emergency Coordinator.

Fire

- Dry chemical, CO_2 or water spray.

Spill or Leak

- Eliminate ignition sources.
- Do not touch damaged containers unless wearing appropriate protective clothing.

First Aid

- Move victim to fresh air.
- Call 911.
- Do not use mouth to mouth method if victim has ingested or inhaled the substance: induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Wash skin with soap and water.
- Remove contaminated clothing.

CLEAN UP PROCEDURE GUIDE – SLUDGE

- **Absorb or cover with oil dry, sand or other non-combustible material and transfer to containers.**
- **Prevent entry into waterways.**
- **Do not touch damaged containers unless wearing proper PPE.**
- **Use shovels and other tools to transfer into containers.**

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
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4-3.11 Certification of Applicability of Substantial Harm Criteria

Facility Name: WM Waste, Inc.
Facility Address: 21211 Durand Ave., Union Grove, WI 53182

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes ___ No _X_

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes ___ No _X_

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes ___ No _X_

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

Yes ___ No _X_

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes ___ No _X_

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature _____

Name (please type or print) _____

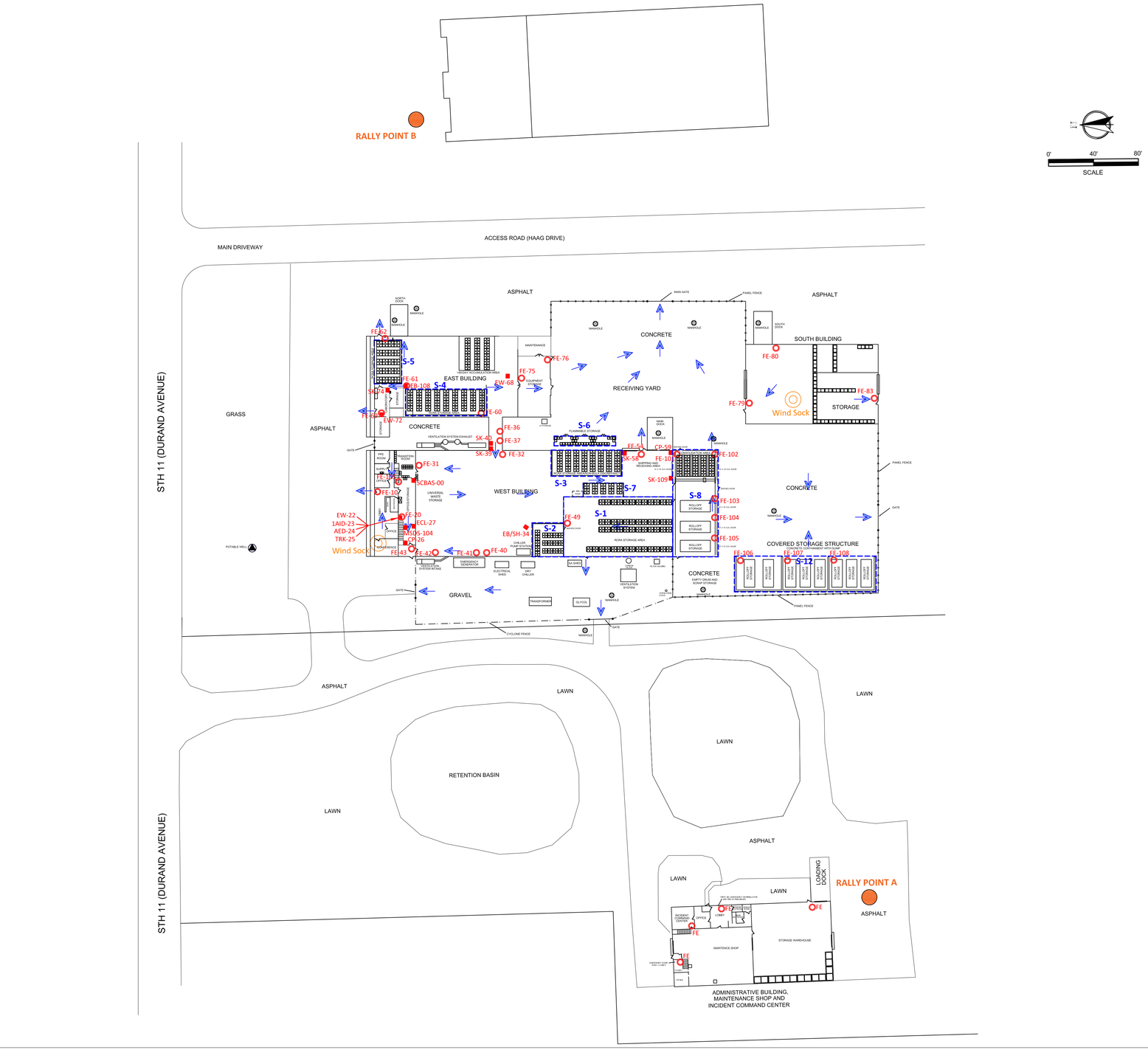
Title _____

Date _____

FIGURES

FIGURE 4-1

SITE LAYOUT



Unit	Capacity	
S-1	33,000 gal.	600 55-gal. Drum Equivalent (DE)
S-2	7,480 gal.	136 55-gal. DE
S-3	14,080 gal.	256 55-gal. DE
S-4	14,080 gal.	256 55-gal. DE
S-5	8,800 gal.	160 55-gal. DE
S-6	2,035 gal.	37 55-gal. DE
S-7	4,400 gal.	80 55-gal. DE
S-8	120 Cu. Yds. and 8,800 gal.	(3) 40-yd rolloff equivalents and 160 55-gal. DE
S-12	320 Cu. Yds.	(8) 40-yd rolloff equivalents

EMERGENCY EQUIPMENT AND SCBA LOCATION

- AED–00 AED (Battery Indicator Ok)
- CP–00 Contingency Plan
- EB–00 Eye Bath
- EB/SH–00 Eye Bath/Shower
- ECL–00 Emergency Coordinators Phone Numbers List
- EW–00 Eye Wash
- PPE–00 Personal Protection Equipment
- SCBA–00 Self–Contained Breathing Apparatus
- SK–00 Spill Kit Drum
- TRK–00 Trauma Kit
- 1AID–00 First Aid Cabinet
- MSDS–00 Material Safety Data Sheets
- FE–00 Fire Extinguisher

Licensed Container Storage Area
Drums
Panel Fencing
Cyclone Fencing
Evacuation Routes

Basemap from Waste Management

Revision:	2
Drawn:	CAL
Date:	8/20/2021

WM Waste, Inc.
Union Grove, Wisconsin

Site Layout

Racine County, WI

CK Associates Environmental Consultants

Drawn:	CAL	Checked:	BHR
Date:	1/30/2023	Approved:	LEC
Dwg. No.:	WA5011-18114-40		

Figure 4-1

P:\T-Z\Waste Management Mercury Waste, Inc - Union grove, WI - WA5011\18114 - ROA License Renewal\IMAGES AND MAPS\WA5011-18114-40_Site_Layout.dwg 1/30/2023 - 2:02pm

ATTACHMENTS

ATTACHMENT 4-1

INCIDENT REPORT

WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

WASTE MANAGEMENT®

October 7, 2011

Mr. Scott Ferguson
Hazardous Waste - Spills Coordinator
Southeast District Office
Wisconsin Department of Natural Resources
2300 North Dr. Martin Luther King Drive
Milwaukee, WI 53212

Re: 15-Day Report for Implementation of Contingency Plan
WM Mercury Waste, Inc, Union Grove, WI
EPA ID WIR000000356

Dear Scott:

Pursuant to the requirements of WM Mercury Waste, Inc's (WMMWI) Contingency Plan, enclosed is the incident report for a fire that occurred on Sunday, October 25, 2011. The fire was entirely contained within one room inside WMMWI buildings. The incident was immediately reported to the Wisconsin Emergency Government Line. All residuals from the fire and associated response have been cleaned up and will be processed on-site prior to proper off-site disposal.

Please feel free to contact me to discuss matters further at 262-878-0235.

Sincerely,

Joseph P. Carruth
Environmental Manager
WM Mercury Waste, Inc.

Attachment

Electronic cc:

Pat Baskfield, WMMWI, General Manager
John Kendall, WMMWI, Operations Manager

Mike Ellenbecker, WDNR
Sturtevant Service Center

15-DAY REPORT FOR IMPLEMENTATION OF CONTINGENCY PLAN

Name, address and telephone number of the Emergency Coordinator.

John Kendall
WM Mercury Waste, Inc
21211 Durand Avenue
Union Grove, Wisconsin 53182
262-878-2599

Name, address, and telephone number of the facility.

WM Mercury Waste, Inc
21211 Durand Avenue
Union Grove, Wisconsin 53182
262-878-2599

Date, time, and type of incident.

A fire occurred in the Retort Room at approximately 4:00 pm on Sunday, October 25, 2011. The fire was caused by a clogged vacuum line on Oven #4 that overheated, caught fire, and let loose from its filter assembly. The hose then ignited a drum of retort condensate staged in the vicinity of the Oven #4.

The local fire department was summoned. The fire fighters were able to extinguish the fire using 2-3 fire extinguishers. Several fire departments and a HAZMAT team responded to the incident as is typical for calls to our facility. Only four fire fighters entered the building.

Name and quantity of materials involved.

Approximately 15-20 gallons of retort condensate was consumed during the incident. The combustion products were properly managed through the Retort Room ventilation system, which contained the smoke and mercury vapors and did not spread to other parts of the building.

Extent of injuries, if any.

None.

Assessment of actual or potential hazards to human health or the environment, if applicable.

WMMWI assessed the potential hazards by conducting property line mercury vapor monitoring. Mercury vapor readings were taken at the 16 property line stations around the facility immediately after the incident, as observed by fire department personnel, and for several days after the incident. No mercury vapor was detected. The carbon for the ventilation system was changed out two days after the incident.

The mercury vapors in the Retort Room, according to our direct-reading area monitoring systems, did become elevated due to the fire. Fire department personnel wore protective equipment during the response. Their equipment and outerwear were left at WMMWI for appropriate decontamination/management. In the Retort Room, mercury levels remained high for several days as the cleanup of soot progressed. All staff involved in the clean-up wore appropriate respiratory protection and other personal protective equipment to control exposures. During the cleanup, the elevated vapor levels were contained to the Retort Room and were not elevated in any other areas of the facility.

Estimated quantity and disposition of recovered material that resulted from the incident.

Three 55-gallon drums were generated during the cleanup, which included soot from the walls and ceiling, rags, the burned hose, powder from the extinguishers, etc. This material will be managed as hazardous waste and processed the Retort Ovens for mercury recovery. Once it is rendered non-hazardous, it will be disposed with other materials that have been retorted and sent offsite to be landfilled.

Any amendments to the contingency plan required in s. NR 630.22(1) (b) and (c), Wis. Adm. Code.

No changes are recommended to Contingency Plan. The response was very effective, as were our remote building monitoring systems, enabling responders to view and monitor the inside of the building via computer from outside the building.

Additional Information

Photos of incident. Attached (2).

Employees associated with incident.

Anthony Wember
Bill Kasprowicz

Data Mercury vapors readings for 9-25-11 (attached)
Screen shot of vacuum readings at time of incident (attached)

Equipment Pot filter and hoses.

Waste Samples None required.

Mercury Monitoring System

Daily Record - Mean Values

Date: 25.09.2011

Time	Point 1 Office Lobby µg/m³	status	Point 2 Control Room µg/m³	status	Point 3 East Office µg/m³	status	Point 4 CF Oven Area µg/m³	status	Point 5 Retort South µg/m³	status	Point 6 Retort North µg/m³	status	Point 7 Regulated Storage µg/m³	status	Point 8 WWTP µg/m³	status	Point 9 Shipping and Receiving µg/m³	status	Point 10 Hg Purification Room µg/m³	status	Point 11 Lamp Room µg/m³	status	Point 12 Retorted Tray Storage µg/m³	status	Point 13 Transition Room µg/m³	status	Point 14 Locker Room µg/m³	status	Point 15 Lunch Room µg/m³	status	Point 16 Oven Batch Room µg/m³	status
01:00	1	-	2	-	1	-	9	-	-	-	-	-	6	-	15	-	5	-	17	-	7	-	2	-	2	-	2	-	2	-	93	-
02:00	1	-	2	-	1	-	13	-	-	-	-	-	7	-	16	-	5	-	17	-	10	-	6	-	1	-	2	-	2	-	91	-
03:00	1	-	2	-	1	-	17	-	-	-	-	-	15	-	21	-	6	-	18	-	10	-	3	-	2	-	2	-	2	-	97	-
04:00	1	-	2	-	1	-	8	-	-	-	-	-	8	-	10	-	4	-	17	-	10	-	4	-	2	-	2	-	2	-	88	-
05:00	1	-	2	-	1	-	9	-	-	-	-	-	6	-	11	-	4	-	18	-	11	-	6	-	2	-	2	-	2	-	99	-
06:00	1	-	2	-	1	-	28	-	-	-	-	-	11	-	19	-	4	-	21	-	21	-	6	-	1	-	2	-	1	-	155	-
07:00	1	-	2	-	1	-	25	-	-	-	-	-	16	-	20	-	7	-	59	-	36	H	8	-	1	-	2	-	2	-	131	-
08:00	1	-	3	-	1	-	22	-	-	-	-	-	16	-	19	-	7	-	29	-	29	-	4	-	2	-	2	-	2	-	128	-
09:00	1	-	3	-	1	-	10	-	116	-	97	-	8	-	11	-	4	-	25	-	14	-	5	-	3	-	3	-	2	-	75	-
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11:00	1	-	2	-	1	-	13	-	128	-	104	-	11	-	15	-	7	-	27	-	23	-	11	-	2	-	2	-	3	-	63	-
12:00	1	-	3	-	1	-	12	-	122	-	105	-	9	-	14	-	6	-	25	-	17	-	7	-	2	-	2	-	2	-	73	-
13:00	1	-	3	-	1	-	13	-	138	-	116	-	11	-	15	-	7	-	24	-	14	-	8	-	2	-	2	-	2	-	67	-
14:00	1	-	2	-	1	-	18	-	131	-	112	-	11	-	17	-	8	-	24	-	16	-	6	-	2	-	2	-	2	-	87	-
15:00	2	-	3	-	1	-	12	-	148	-	122	-	9	-	19	-	7	-	19	-	6	-	3	-	2	-	3	-	3	-	72	-
16:00	1	-	3	-	1	-	23	-	146	-	120	-	12	-	21	-	7	-	18	-	6	-	2	-	2	-	2	-	2	-	58	-
17:00	44	-	17	-	47	-	87	H	3161	H	3245	H	206	H	146	H	108	H	298	H	19	-	10	-	101	H	50	-	49	-	271	-
18:00	66	H	67	H	66	H	59	-	3007	-	3151	-	108	-	83	-	35	-	148	-	10	-	3	-	73	-	57	H	61	H	382	H
19:00	10	-	34	-	10	-	10	-	2913	-	2985	-	32	-	20	-	0	-	95	-	0	-	0	-	20	-	15	-	16	-	140	-
20:00	13	-	28	-	16	-	18	-	2913	-	2946	-	44	-	33	-	8	-	83	-	7	-	3	-	15	-	14	-	13	-	101	-
21:00	11	-	29	-	11	-	14	-	2902	-	2913	-	41	-	28	-	9	-	41	-	13	-	9	-	12	-	13	-	12	-	78	-
22:00	0	-	32	-	0	-	18	-	2794	-	2812	-	35	-	24	-	18	-	36	-	14	-	-	-	-	-	-	-	-	-	-	-
23:00	1	-	24	-	2	-	12	-	2748	-	2794	-	27	-	20	-	2	-	34	-	12	-	8	-	1	-	1	-	1	-	64	-
24:00	2	-	23	-	1	-	40	-	2700	-	2782	-	44	-	44	-	13	-	38	-	19	-	17	H	42	-	4	-	3	-	192	-
Daily Mean	6.8		12.2		7.0		21.1		1511.7		1531.6		29.3		27.3		12.3		48.2		14.2		6.3		12.8		8.2		8.2		116.8	
Standard Deviation	15.3		16.1		15.6		17.7		1384.1		1426.4		42.8		28.7		21.1		60.3		7.7		3.9		25.0		14.6		15.1		74.0	

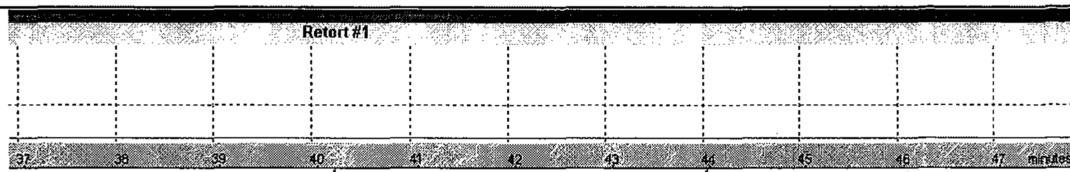
Mercury Monitoring System

Daily Record - Mean Values

Date: 26.09.2011

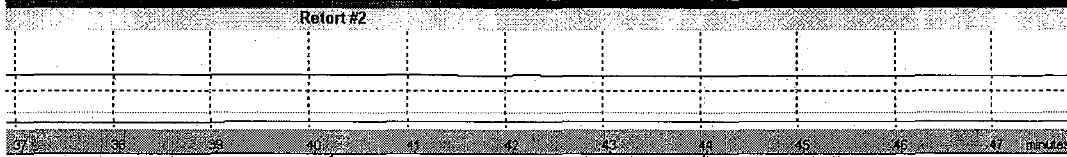
Time	Point 1 Office Lobby		Point 2 Control Room		Point 3 East Office		Point 4 CF Oven Area		Point 5 Retort South		Point 6 Retort North		Point 7 Regulated Storage		Point 8 WWTP		Point 9 Shipping and Receiving		Point 10 Hg Purification Room		Point 11 Lamp Room		Point 12 Retorted Tray Storage		Point 13 Transition Room		Point 14 Locker Room		Point 15 Lunch Room		Point 16 Oven Batch Room	
	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status	µg/m³	status
01:00	3	-	19	H	4	H	67	H	2614	H	2740	H	42	H	41	H	12	-	48	-	44	H	30	H	13	-	9	-	10	H	374	-
02:00	3	-	16	-	2	-	45	-	2578	-	2694	-	36	-	35	-	10	-	49	H	39	-	16	-	9	-	6	-	6	-	385	H
03:00	2	-	9	-	2	-	59	-	2549	-	2667	-	32	-	26	-	14	-	45	-	31	-	24	-	23	H	5	-	4	-	348	-
04:00	4	H	10	-	3	-	51	-	2488	-	2600	-	27	-	24	-	15	H	46	-	33	-	29	-	12	-	10	H	10	-	245	-
05:00	3	-	13	-	3	-	46	-	2445	-	2539	-	25	-	21	-	12	-	41	-	32	-	27	-	10	-	7	-	6	-	185	-
06:00	3	-	16	-	2	-	44	-	2403	-	2479	-	21	-	19	-	10	-	37	-	30	-	27	-	17	-	7	-	7	-	201	-
07:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily Mean	3.0		13.8		2.7		52.0		2512.8		2619.8		30.5		27.7		12.2		44.3		34.8		25.5		14.0		7.3		7.2		289.7	
Standard Deviation	0.6		3.5		0.7		8.4		74.2		90.3		7.0		7.8		1.9		4.1		5.0		4.6		4.8		1.7		2.2		82.1	

Retort #1



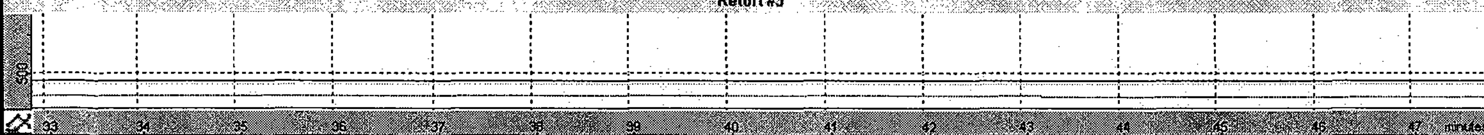
Batch Num	Batch Type	Vapor Front	Vapor Rear	Oven Top	Oven Bottom	Oven Tmp SP	Oven Vac	Collection Vac	KO Line Vac	Oven % Cap	Goto Detail	Abort Batch
-2994	Standard 1	1998.1	1994.4	86.2	84.9	0.0	0.7	26.0	1.3	0.0		

Retort #2



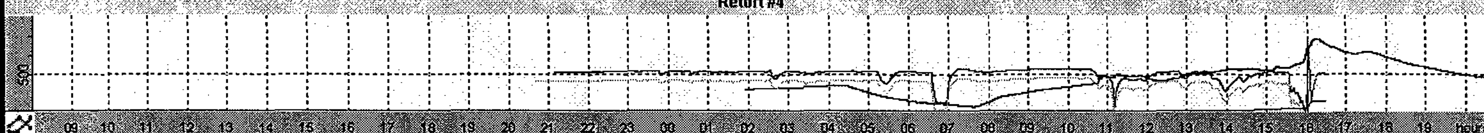
Start Cycle	Resume	Status	SP	ET	Batch Num	Batch Type	Vapor Front	Vapor Rear	Oven Top	Oven Bottom	Oven Tmp SP	Oven Vac	Collection Vac	KO Line Vac	Oven % Cap	Goto Detail	Abort Batch
		Soak4	26.0	22.4	2-3018	Standard 1	94.8	98.5	630.7	603.2	1000.0	1.3	3.1	3.2	0.0		

Retort #3



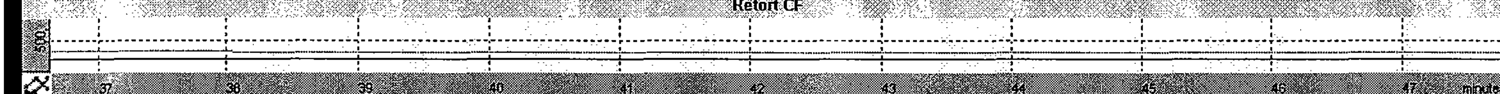
Start Cycle	Resume	Status	SP	ET	Batch Num	Batch Type	Vapor Front	Vapor Rear	Oven Top	Oven Bottom	Oven Tmp SP	Oven Vac	Collection Vac	KO Line Vac	Oven % Cap	Goto Detail	Abort Batch
		Ramp3	4.0	2.4	3-2975	Sludge	306.7	136.9	437.456	0.0	678.6	0.4	5.3	1.9	0.0		

Retort #4



Start Cycle	Resume	Status	SP	ET	Batch Num	Batch Type	Vapor Front	Vapor Rear	Oven Top	Oven Bottom	Oven Tmp SP	Oven Vac	Collection Vac	KO Line Vac	Oven % Cap	Goto Detail	Abort Batch
		Pause/Drain2	4.0	4.0	1-2999	K106	0.0	0.0	462.2	448.4	650.0	31.0	31.2	30.9	0.0		

Retort CF



Start Cycle	Resume	Status	SP	ET	Batch Num	Batch Type	Inside Tmp	Outside Tmp	Oven Tmp SP	Oven Vac	Oven % Cap	Element 1	Element 2	Element 3	CWS Tmp	CWR Tmp	DRY	Abort Batch
		Idle	0.0	0.0	CF-2918	Standard 1	258.4	342.7	800.0	1.0	75.5	0.0	0.0	0.0	28.8	27.9		

South Bed Inlet Temp	South Bed Outlet Temp	Nitrogen Release	South Bed Press Diff	North Bed Inlet Temp	North Bed Outlet Temp	Nitrogen Release	North Bed Press Diff	Blower Temp	Filter Dirty	MAIN VACUUM	PRV VACUUM	CF Tmp	CF Hz	ST 1	ST 2	ST 3	ST 4	View Vacuum Pumps
84.9	88.4	Off	1.4	128.0	72.5	Off	0.0	78.6	Off	0.0	1.4	0.0	6.2	Off	Off	Off	NotSet	

Appendix 5 Floodplain Map Detail

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 16N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from the National Agriculture Imagery Program's (NAIP) digital orthoimagery produced by the USDA, Farm Service Agency. The orthophoto was collected in the summer of 2005 and produced at a resolution of 1 meter.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center** (MSC) website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange (FMIX) at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- Cross section line
- Transect line
- Culvert
- Bridge
- 45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 3100000 FT — 5000-foot ticks: Wisconsin State Plane South Zone (FIPS Zone 4803), Lambert Conformal Conic projection
- 4889000mN — 1000-meter Universal Transverse Mercator grid values, zone 16N
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- 1,000 FT — River Station

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
May 2, 2012

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0187D

FIRM

FLOOD INSURANCE RATE MAP

RACINE COUNTY, WISCONSIN AND INCORPORATED AREAS

PANEL 187 OF 295
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RACINE COUNTY	550347	0187	D
UNION GROVE, VILLAGE OF	550586	0187	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
55101C0187D
EFFECTIVE DATE
MAY 2, 2012

Federal Emergency Management Agency

Appendix 6 Threatened or Endangered Species Habitats and Wetlands

Endangered Resources Preliminary Assessment

Created on **12/3/2020**. This report is good for one year after the created date.

DNR staff will be reviewing the ER Preliminary Assessments to verify the results provided by the Public Portal. ER Preliminary Assessments are only valid if the project habitat and waterway-related questions are answered accurately based on current site conditions. If an assessment is deemed invalid, a full ER review may be required even if the assessment indicated otherwise.

Results

A search was conducted of the NHI Portal within a 1-mile buffer (for terrestrial and wetland species) and a 2-mile buffer (for aquatic species) of the project area. Based on these search results, below are your follow-up actions.

No further action is necessary.

This project is covered by the Broad Incidental Take Permit/Authorization for No/Low Impact Activities (No/Low BITP/A) (https://dnr.wi.gov/topic/ERReview/ITNoLowImpact.html). This BITP/A covers projects that the DNR has determined will have no impact or a minimal impact to endangered and threatened species in the state. Due to this coverage under the No/Low BITP/A, a formal review letter is not needed and there are no actions that need to be taken to comply with state and/or federal endangered species laws, any take that may result from the proposed project is permitted/authorized.

A copy of this document can be kept on file and submitted with any other necessary DNR permit applications to show that the need for an ER Review has been met. This notice only addresses endangered resources issues. This notice does not constitute DNR authorization of the proposed project and does not exempt the project from securing necessary permits and approvals from the DNR and/or other permitting authorities.

Project Information

Landowner name	**WM Waste, Inc.**
Project address	**21211 Durand Avenue**
Project description	**Hazardous Waste License Renewal Application**

Project Questions

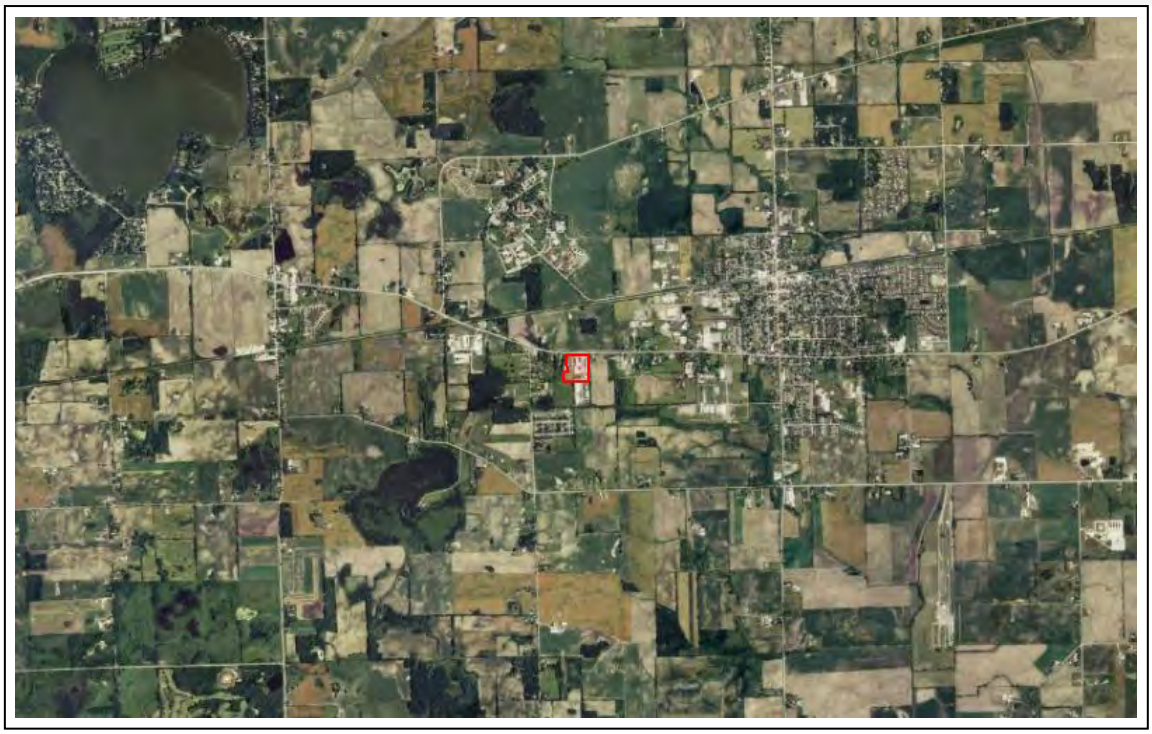
Does the project involve a public property?	**No**
Is there any federal involvement with the project?	**No**
Is the project a utility, agricultural, forestry or bulk sampling (associated with mining) project?	**No**
Is the project property in Managed Forest Law or Managed Forest Tax Law?	**No**
Project involves tree removal?	**No**
Is project near (within 300 ft) a waterbody or a shoreline?	**Yes**
Is project within a waterbody or along the shoreline?	**No**

Does the project area (including access routes, staging areas, laydown yards, select sites, source/fill sites, etc.) occur **entirely within** one or more of the following habitats?

Urban/residential	**Yes**
Manicured lawn	**No**

Artificial/paved surface	**Yes**
Agricultural land	**No**
Areas covered in crushed stone or gravel	**Yes**

Project Area Maps



Appendix 7 Training Plan

APPENDIX 7
TRAINING PROGRAM

WM WASTE, INC.
2122 DURAND AVE.
UNION GROVE, WISCONSIN
EPA ID No. WIR000000356

FEBRUARY 2023

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

Table of Contents

List of Attachments

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

7-1.0 INTRODUCTION – NR 664.0016(1)(a)

WM Waste, Inc. (WM Waste) facility personnel successfully complete a program that includes classroom training and on-the-job training that teaches them the proper performance of their duties. In particular, emphasis is placed on training facility personnel so they are able to ensure the facility's compliance with the requirements of the hazardous waste regulations and the facility's license. This training program has been prepared in accordance with NR 664.0016.

7-2.0 TRAINING DIRECTOR- NR 664.0016(1)(b)

The training program is directed by a person experienced in hazardous waste management procedures. The training includes classroom and computer-based training, and on-the-job instruction, which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the position in which a person is assigned. The Facility Manager is designated as the training director at WM Waste. Duties specific to the Facility Manager relating to training include compliance with environmental and safety regulations and development and presentation of the training programs at the WM Waste facility. The Facility Manager is provided training via computer based training and/or in-person instruction.

7-3.0 TRAINING PROGRAM - NR 664.0016(1)(c)

All employees at the facility undergo training pursuant to this plan. New employees, or employees new to a position, are considered trainees until they have successfully completed training relevant to their job position. The training program is designed so that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems.

All facility personnel must also complete job-specific training. The amount and scope of the job-specific training an employee receives depends on his or her job duties, regulatory requirements, and the employee's competency, which is based upon proper experience and skills.

7-3.1 Scope of Training

All trainees complete training in specific training modules to enable them to perform their assigned duties in a safe, healthful and a regulatorily compliant manner, so as not to endanger themselves, other employees, or the environment. NOTE: Non-WM Waste employees may not handle hazardous waste at the facility.

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
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262.878.2699 Fax

A training matrix which describes the relevant training modules for each job title is provided in Attachment 7-1.

7-3.2 Training Modules

A brief description of the topics within each training module is provided below:

Module	Topics
Overview of Facility Operations	• Nature of facility business • Layout of facility
RCRA Overview	• Regulatory background • Identification of hazardous waste • Types of hazardous waste managed at facility and associated hazards • Universal waste • Generator status • Training requirements
Emergency Response Communications and Evacuation Routes	• When to implement • Methods of communication • Alarms • Emergency contacts • Evacuation routes and staging areas
Contingency Plan Implementation	• Emergency Coordinator duties • Arrangements with local authorities • Emergency response procedures in response to fire, explosion, and spill incidents
Emergency Equipment Use, Inspection, and Repair	• Location and capability of emergency equipment • How to use emergency equipment • Inspection of emergency equipment • Repair of emergency equipment
Site Shutdown Procedures	• Procedures to take in the event of a site shutdown
Container Management	• Regulatory background • Types of allowable containers • Labeling • Accumulation (satellite/90 day)

Module	Topics
	• Locations • Placement within container storage areas • Capacities and inventory checks • Compatibility Groups • Incompatible/Flammable/Liquids management procedures • Handling procedures • Waste consolidation and precautions • Staging areas • Spill containment and cleanup • Emergency actions • Condition of containers • Overpacking • Universal waste
Inspections	• Areas to inspect • Frequency • Items to observe • Remediation • Recordkeeping
Shipping/Receiving	• Manifests • Labels/Placards • Compatibility groups • Container inspections • Exception reporting • Acceptable wastes • How to handle quarantined or rejected containers
Forklift	• Operation • Safe handling • Emergency actions • Maintenance
Inventory Management	• Database procedures • Storage of containers in appropriate areas • Identification/segregation of incompatible wastes • Designation of container storage area for each container • Inventory checks

Module	Topics
Waste Analysis	• Waste Analysis Plan • Profiles and Prequalification (see also Section 7-3.3) • Initial screening • Level I analysis (fingerprinting) • Level II analysis • Level III analysis • Off-site laboratory sample management • Sampling strategies and procedures • Waste acceptance/rejections requirements and procedures • Identification of hazardous waste • Waste classification
Sampling	• Sample collection and management
Laboratory Operations	• Waste Analysis Module • Laboratory equipment operation • Quality Assurance/Quality Control
Recordkeeping	• Inspection records • Manifests • Exception reports • LDR forms • Hazardous waste determinations • Waste Analysis Plan • Inspection records • Training records • Emergency responder arrangements • Contingency Plan • Biennial reports • License specific records
Reporting	• Annual/Biennial reporting • Exception reporting • Spill/release reporting • Contingency Plan implementation • License specific reporting

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Module	Topics
Personal Protective Equipment	• Types and when needed • Donning and doffing • Maintenance and decontamination

7-3.3 Waste Approvals

All waste approved to be shipped to or accepted by the facility must be approved through the waste prequalification process. As described in section 3.0 of the WAP , the prequalification process requires completion of a Waste Information Profile (WIP) by the generator or their authorized agent, and review and approval of the WIP by the WM Waste Approval staff. The WM Waste Approvals department is a corporate-level WM organization outside of the WM Waste facility which reviews and approves waste profiles for incoming waste streams across individual WM facilities to promote consistency. Training of WM Waste approval staff (referred to a Waste Approval Managers (WAMs)) is conducted at the corporate level. Prior to approving WIPs, WAMs must complete foundation training which addresses federal and state waste analysis requirements as well as pertinent sections of facility hazardous waste permits for which they have responsibility. WAMs must also complete refresher training on topics which are determined regulatory changes or changes to management facility requirements. Additionally, WAMs must complete recurrent RCRA training every five years. Training records for WAMs are maintained at the corporate level.

7-4.0 TRAINING SCHEDULE – NR 664.00016(2)

Facility personnel must successfully complete the training identified within this plan for their job description within six months after the date of their employment or assignment to a given position. No employee is permitted to work in an unsupervised situation until the initial training is successfully completed. Any personnel transferring between positions with new training requirements must be trained on the new requirements within the first month after being transferred.

7-5.0 TRAINING REVIEW – NR 664.0016(3)

Facility personnel take part in an annual review of the initial training identified in Section 7-3.

7-6.0 TRAINING RECORDKEEPING – NR 664.0016(4)

The facility maintains the following training documents and records:

a. The job title for each position at the facility related to hazardous waste management and the name of the employee filling each job. The list of

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current job titles and the personnel assigned to those positions is maintained in the facility's operating record.

b. A written job description for each position related to hazardous waste management. The WM Waste job descriptions are included in Attachment 7-2 to this Appendix. Job descriptions and job titles may change; however, training shall be provided for all duties and tasks.
c. A written description of the type and amount of both introductory and continuing training given to each person filling a position that relates to managing hazardous waste at the facility. A table identifying the type and amount of training provided to each job position is included in Attachment 7-1 to this Appendix.
d. Records that document that the training or job experience has been provided to meet the above requirements. An example of the form used to document completion of the training modules is included in Attachment 7-3 to this Appendix. The format and content of this form may be changed without a license modification as long as the minimum information continues to be included in the revised form.

7-7.0 DOCUMENTATION OF TRAINING – NR 664.0016(5)

Training records on current personnel are maintained in a paper or an electronic recordkeeping system available at the facility. The training files on current personnel are kept until closure of the facility. Training records for former employees are kept at least three years from the date the employee last worked at the facility.

ATTACHMENT 7-1

TRAINING MATRIX AND
TRAINING MODULE TOPICS

TRAINING MATRIX

Training Module[1]	Facility Manager	Materials Handler	Non-WM Waste Employees Who Enter Licensed Areas[2]							
Overview of Facility Operations	X	X								
RCRA Overview	X	X								
Emergency Response Communications and Evacuation Routes	X	X	X							
Contingency Plan Implementation	X	X								
Emergency Equipment Use, Inspection, and Repair	X	X								
Site Shutdown Procedures	X	X								
Container Management	X	X								
Inspections	X	X								
Shipping/Receiving	X	X								
Forklift	X	X								
Inventory Management	X	X								
Sampling	X	X								
Waste Analysis	X	X								
Laboratory Operations	X	X								
Recordkeeping	X	X								
Reporting	X	X								
Personal Protective Equipment	X	X								

[1] See Section 7-3.2 for a more detailed description of training modules.
[2] Includes visitors, contractors, vendors, casual laborers, and all other non-WM Waste emloyees.

ATTACHMENT 7-2

WM WASTE, INC.
JOB DESCRIPTIONS

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

Title: Facility Manager

Job Description

The facility manager is responsible to provide management oversight to the operations manager to provide for the efficient, safe and compliant operations of the Union Grove facility.

Reporting

The facility manager will report to the districtt manager or next level manager.

General Responsibilities

The facility manager shall be responsible for:

- Hiring and firing of operations personnel;
- Day to day scheduling of operations personnel;
- Implementing, monitoring and ensuring compliance with all plant and company procedures;
- Operating the plant in compliance with all applicable regulations and facility license conditions;
- Protecting the health and safety of all employees
- Acting as point of contact for regulatory agencies; and
- Implementing the hazardous waste training program as the training director.

Specific Responsibilities Related to Hazardous Waste Operations

- RCRA Awareness
- Emergency Response Communications
- Contingency Plan Implementation
- Emergency Equipment
- Site Shutdown Procedures
- Container Management
- Inspections
- Shipping/Receiving
- Forklift
- Inventory Management
- Waste Analysis
- Laboratory Operations
- Waste Profile Approval
- Recordkeeping

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21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
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262.878.2699 Fax

- Reporting
- Personal Protective Equipment

Desired Characteristics and Experience

- Ten years minimum experience in hazardous waste facility operations;
- Strong knowledge of EPA, DNR and OSHA hazardous waste regulations;
- Five years minimum experience managing; and
- Waste industry experience and management a definite plus.

Education

- Bachelor of Science Degree in any of the Sciences; and
- Ten years minimum experience in hazardous waste operations.

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Title: Materials Handler

Job Description

The Materials Handler will support the Facility Manager to complete the tasks required to service our customers, maintain compliance with State and Federal Regulations, follow company protocols and regulations and effectively manage the technicians.

Reporting

The Materials Handler will report to the Facility Manager.

General Responsibilities

The Materials Handler shall be responsible for:

- Monitoring and ensuring compliance with all plant and company procedures;
- Scheduling incoming and outgoing waste shipments, as required; and
- Operating the plant in compliance with all applicable regulations and license conditions

Specific Responsibilities Related to Hazardous Waste Operations

- RCRA Awareness
- Emergency Response Communications
- Contingency Plan Implementation
- Emergency Equipment
- Site Shutdown Procedures
- Container Management
- Inspections
- Shipping/Receiving
- Forklift
- Inventory Management
- Waste Analysis
- Laboratory Operations
- Recordkeeping
- Reporting
- Personal Protective Equipment

Desired Characteristics and Experience

WM Waste, Inc.
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- Two years minimum experience in hazardous waste facility operations;
- Strong knowledge of EPA, DNR and OSHA hazardous waste regulations; and
- Waste industry experience and management a definite plus.

Education

- Two years minimum experience in hazardous waste operations.

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ATTACHMENT 7-3

EXAMPLE TRAINING DOCUMENTATION PAGE

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TRAINING DOCUMENTATION

I have received training in the responsibilities necessary for my current position as:

_____

Area of Training: _____

I have received this training through one or more of the following methods:

- o read the job description
- o received classroom or Computer Based Training instruction
- o received on the job training

Print Name: _____

Signature: _____

Date: _____

The above-signed employee performs the indicated job function on a shift that I am assigned supervisory responsibilities.

Signature: _____ Date: _____

Appendix 8 Closure Plan and Closure Cost Estimate

APPENDIX 8
CLOSURE PLAN

WM WASTE, INC.
2122 DURAND AVE.
UNION GROVE, WISCONSIN
EPA ID No. WIR000000356

FEBRUARY 2023

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CLOSURE PLAN

WM Waste, Inc. (WM Waste) has prepared a written Closure Plan for its facility in accordance with 40 CFR 264.112(a)(l) and (2); NR 664.0112(l)(a) and (b); 40 CFR 270.14(b)(13); and NR 670.014(2)(m), (o), and (q).

WM Waste will keep a copy of the Closure Plan at the facility until the certificate of final closure has been accepted by the Wisconsin Department of Natural Resources (WDNR).

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8-1.0 General Closure Components

8-1.1 Closure Performance Standard

40 CFR 264.111 and NR 664.0111 require that closure of the facility be performed in a manner that minimizes the need for further maintenance and controls, minimizes, or eliminates threats to human health and the environment, and minimizes or eliminates the post-closure escape of hazardous waste and hazardous-waste constituents to the environment.

This Closure Plan achieves these objectives. Hazardous wastes, including decontamination residues, will either be treated on-site or transported off-site to a licensed or interim status hazardous waste treatment, storage, or disposal (TSD) facility. The equipment and plant areas which relate directly to the management of these wastes will be decontaminated to the levels specified in the Closure Plan, if appropriate, or removed and disposed of off-site at a licensed or interim status hazardous waste TSD facility.

While closure is underway, WM Waste will continue to comply with the monitoring, inspection, and recordkeeping requirements of its hazardous waste license.

8-1.2 Partial Closure

Partial closure is the closure of individual hazardous waste storage units, while other storage units at the facility are still operating. The licensed Professional Engineer shall assess, oversee, and certify closure of each unit at the facility as it is closed, in order ensure that the individual unit closure meets all license conditions and regulatory requirements, that all required data is collected, and that closure cost financial assurance is adjusted accordingly, at the time of individual unit closure. Partial closure procedures for closure of individual units will follow similar methodology, consistent with final closure procedures, and will meet all regulatory requirements. Upon individual unit closure certification by the Professional Engineer, the closure of the unit(s) shall be subject to WDNR approval

At present, WM Waste does not anticipate partial closure of individual units. However, in the event that partial closure of individual units occurs, it will be conducted in accordance with applicable regulations, including 40 CFR 264, and NR 664. If changes to partial closure procedures are required, this Closure Plan will be amended in accordance with the requirements of 40 CFR 264.l 12(c) and NR 664.0112(3), including submission of a written request for a license modification.

8-1.3 Location and Retention of Closure Plan

A copy of this Closure Plan and subsequent amendments shall be maintained electronically and in hardcopy format in the facility's Administrative offices until closure certifications have been submitted to and accepted by the WDNR.

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8-1.4 Notification of Partial or Final Closure

WM Waste will notify the WDNR in writing at least 180 days prior to the date on which the Company expects to begin partial or final closure of the facility.

Notification of state regulatory agencies is not required if the facility license is terminated or if the facility is ordered by judicial decree or final order under Section 3008 of RCRA to cease receiving hazardous waste or to close.

WM Waste may, at any time before or after notification of final closure, remove hazardous waste inventory from the facility and decontaminate or dismantle equipment in accordance with the approved final Closure Plan.

8-1.5 Schedule for Closure

WM Waste will begin closure within 90 days of the date on which the known final volume of hazardous waste is received at the facility. WM Waste intends to complete closure of the facility within 180 days of the date on which the known final volume of hazardous waste is received at the facility. The schedule of closure activities is shown in Table 8.1.5-1. This schedule complies with the time limitations of 40 CFR 264.113 and NR 664.0113 by anticipating full closure within 180 days of receipt of the final volume of hazardous waste.

Within 60 days of completion of closure, WM Waste will submit certification to the Agency, by registered mail, that the storage facility has been closed according to the approved Closure Plan. This certification will be signed by the owner or operator and by an independent registered Professional Engineer.

If closure cannot be accomplished within 180 days or if the Certificate of Closure cannot be prepared within the 60-day time period, WM Waste will submit to the WDNR a written request for an extension of the deadline. The request for an extension will be submitted at least 30 days before the expiration of the 180- or 60-day periods, whichever is applicable.

Table 8-1.5-1 WM Waste Facility Closure Schedule

Item	Days from Start of Closure
Dispose of waste inventories	90
Decontaminate container management areas	90
Decontaminate containment structures and unloading areas	120
Dispose of decontamination residuals and rinsates	120
Complete closure	180
Submit Certification of Closure to WDNR	240

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WM Waste will submit to the WDNR a written request for a permit modification, including a copy of an amended Closure Plan, for approval at least 60 days after unexpected events or 60 days before proposed changes in facility design or operation that affect this Closure Plan. If an unexpected event occurs during the closure period, WM Waste will request from the WDNR a permit modification no later than 30 days after the unexpected event.

WM Waste does not anticipate that closure activities will take more than 180 days to complete. If unforeseen circumstances result in a delay of the closure schedule, WM Waste will request a schedule extension from the WDNR in accordance with 40 CFR 264.113(c)(2) and NR 664.0112(4)(b).

8-1.6 Anticipated Closure Date

Final closure of the WM Waste facility is not expected to occur prior to the year 2050.

8-1.7 Description of Regulated Units

The regulated units at the WM Waste facility include container storage and roll-off storage areas. These units consist of:

- Nine container storage areas capable of handling the following containers:
  - Seven areas (S-1 through S-7) for containerized wastes (i.e., all containers except roll-off boxes); and,
  - One storage area(S-8) primarily for roll-off boxes but may also store containerized waste.
  - One storage area (S-12) for roll-off boxes.

8-1.8 Maximum Waste Inventory

This Closure Plan is based on the total design capacity for the storage of hazardous waste at the facility. Table 8.1.8-1 outlines this storage capacity. The layout of these licensed container storage areas is provided in Figure A-3 in Appendix 1.

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Table 8-1 WM Waste Permitted Storage Capacity

Storage Area Name	ID	Description	Waste Types	Indoors (I) or Outdoors (O)	Capacity (Basis)
Containerized Wastes					
Licensed Container Storage Area #1	S-1	Container storage area on west wall of West Building	Non-Flammable Liquids, Solids, Acids/Bases	I	33,000 gals (600 55-gal equiv.) *
Licensed Container Storage Area #2	S-2	Container storage area in West Building	Non-Flammable Liquids, Solids	I	7,480 gal (136 55-gal equiv.)*
Licensed Container Storage Area #3	S-3	Container Storage on east wall of West Building	Non-Flammable Liquids, Solids	I	14,080 gal (256 55-gal equiv.)*
Licensed Container Storage Area #4	S-4	Container Storage on west wall of East Building	Non-Flammable Liquids, Solids	I	14,080 gal (256 55-gal equiv.)*
Licensed Container Storage Area #5	S-5	Container Storage on north wall of East Building	Non-Flammable Liquids, Solids	I	8,800 gal (160 55-gal equiv.)*
Licensed Container Storage Area #6	S-6	Flammable liquid containers storage shed adjacent to West Building in Receiver Yard	Flammable Liquids, Solids	I	2,035 gal (37 55-gal equiv.)*
Licensed Container Storage Area #7	S-7	Container storage area in West Building	Non-Flammable Liquids, Solids	I	4,400 gal (80 55-gal equiv.)*
Licensed Container Storage Area #8	S-8	Container storage area in West Building	Non-Flammable Liquids, Solids	I	8,800 gal

Containerized Waste Total					92,675 (1,685 55-gal equiv.)
Roll-off Box Containers					
Licensed Container Storage Area #8	S-8	Container storage (typically roll-off in south end of West Building	Non-Flammable Solids	I	120 cubic yards (3 40 yd^3 roll-offs)**
Licensed Container Storage Area #12	S-12	Container (roll-off) storage	Non-Flammable Solids	O	320 cubic yards (8 40 yd^3 roll-off)**
Roll-off Box Container Storage Total					440 cubic yards

* The majority of hazardous waste containers managed in S-1 through S-7 will primarily contain liquids. Therefore, the capacity of these units is listed in gallons. S-8 will manage roll-off box containers as well as non-roll-off box containers. Containers containing solids that may be typically measured in cubic yards will be converted to gallons using a conversion factor of 1 cubic yard = 202 gallons. This conversion is implemented as part of the inventory management procedure.
** Note: alternative capacity roll-off containers (i.e., 20 yd^3, 25 yd^3) may also be used.

8-1.9 Inventory Removal and Disposal

Inventories of hazardous wastes at the time of closure will be transported to an off-site permitted/licensed or interim status hazardous waste TSD facility capable of proper treatment.

8-2.0 Closure Procedures

8-2.1 WM Waste Facility Closure Procedures

This section describes the closure procedures WM Waste will implement to close the facility, including procedures for container storage areas, secondary containment structures, and soils investigation. The Closure Plan addresses disposal and decontamination activities in accordance with 40 CFR 264.114 and NR 664.0114.

The following waste management units are not present at the facility, so closure of these items is not addressed within this Closure Plan:

- Disposal units for hazardous waste,
- Waste piles,
- Surface impoundments,
- Incinerators,
- Landfills, or

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- Land treatment units

8-2.1.1 Overview

Closure of the WM Waste facility will proceed, generally, as follows:

- Dispose of hazardous waste inventory from the facility;
- If present, remove residual residue of bulk waste from containment using dry methods;
- De-contaminate secondary containment using a pressure washer;
- Contain, collect, and dispose of all rinsates and expendable decontamination equipment; and,
- Decontaminate all nonexpendable equipment.

8-2.1.2 Container Storage Areas

The Plan provides for the removal of hazardous waste inventory followed by the decontamination of equipment and areas within the facility. The buildings and other structures will not be demolished as part of the Closure Plan. Sampling and testing of the rinsate will be required to verify acceptable decontamination, as discussed in the Sampling and Analysis Plan, Attachment 8-4. Sampling will be performed by applying a small volume of water and collecting the water after it flows across surfaces of the storage area. After the inventory of containers has been removed, the procedures necessary to achieve closure of the Container Storage Areas are as follows.

- **Dry Decontamination (if required)**
  WM Waste will visually inspect the surfaces and remove any visible residues or residual bulk material using dry methods as appropriate. Dry methods could include but not be limited to shovels, brooms, heavy equipment, etc.
- **Visual Inspection**
  WM Waste will visually inspect the surface of each secondary containment area. The surface will be inspected for cracks, fissures, gaps, or deterioration in the secondary containment structures and staining. The certified engineer will determine if temporary sealing should occur before pressure washing to prevent any migration and, if necessary, assist in locating borings/cores should soil sampling be necessary (see Section 8-2.1.3.
- **Decontaminate Floors, Sumps, Docks, and Ramps**
  Floors and sumps within, and docks and ramps adjacent to, the Container Storage Areas and truck unloading areas will be decontaminated using a high-pressure detergent wash with a second-stage water rinse. Detergents or solvents must be capable of removing hazardous waste constituents. Alternatively, steam cleaning, degreasing detergents, high-pressure water sprays, or other appropriate cleaning technology may be used to clean and decontaminate the floors, sumps, docks, and ramps. If possible, decontamination should proceed from clean to dirty areas. Where possible, rinsates will

be directed to permanent or temporary sumps for collection prior to pick up by wet vacuum units or portable pumps. Otherwise, rinsates will be immediately picked up by vacuum units and subsequently directed to portable storage containers (e.g., drums, totes, or frac tanks) or directly into tank trucks for off-site disposal. Rinsates generated will be managed as hazardous waste. Supplies and equipment used during decontamination also will be collected and managed as hazardous waste.

The "final rinse" will occur after the first two rinses, and will be considered the "testing rinse." The volume of the testing rinse will be minimized to avoid dilution of the sample water. In no case should the volume of testing rinse exceed 10% of the volume of the secondary containment. The test rinse will be sampled to confirm decontamination is complete.

- **Determine Acceptable Decontamination**
  Decontamination will be considered complete when the concentrations of all constituents of concern in the final rinse water are at or below levels as described in the Sampling and Analysis Plan, Attachment 8-4.

  Liquid decontamination wastes will be analyzed for the chemicals associated with the waste codes that have been stored or processed at the facility using one or more of the following analytical methods:

  Volatile organics according to Method 8260;
  - Semi-volatile organics according to Method 8270;
  - Total metals using the Method 3050 digestion procedure followed by Inductively Coupled Argon Plasma (ICAP) analysis for metals according to Method 6010/6020 and the 7000 series methods for specific metals (e.g mercury);
  - Chlorinated Herbicides using Method 8151.

  The Sampling and Analysis Plan, Attachment 8-4, contains a list of the hazardous constituents contained in the analytical suites with the associated Practicable Quantification Limit (PQL).

- **Dispose of Rinsates, Supplies, and Decontamination Equipment**
  Rinsates generated during rinsing of waste transfer equipment, floors, sumps, docks, and ramps will be managed as hazardous waste. The rinsates will be disposed of at a licensed or interim status hazardous waste TSD facility capable of treating the waste.

  Non-expendable decontamination equipment will be decontaminated by using a high-pressure detergent wash with a second-stage water rinse. An appropriate solvent or detergent will be used. Rinsates generated during rinsing of used decontamination equipment will be managed as hazardous waste and disposed of at a permitted or

interim status hazardous waste TSD facility. The containment areas and other structures will not be demolished as part of this Closure Plan.

8-2.1.3 Soils Investigation

After decontamination of the container storage areas, the certifying PE will determine whether soil sampling is necessary. To make this determination, the PE will evaluate factors including, but not limited to: an inspection of the floors, sumps, docks, and ramps to evaluate the potential of contamination to enter via pavement cracks or other damage to impervious surfaces or expansion joints; a review of inspection reports to determine whether there may have been spills that could have entered the soil; and a review of past soil sampling results. If there are indications of potential soil contamination, a Sampling and Analysis Plan will be prepared and submitted to WDNR. Upon approval, soil samples will be collected and analyzed in accordance with the approved Sampling and Analysis Plan.

8-2.1.4 Additional Closure Activities

It is anticipated that no additional groundwater monitoring, leachate collection, or additional run-on or run-off controls are required during the partial or final closure activities to ensure that closure standards are attained. After decontamination of the container storage areas, the certifying PE will determine whether additional partial or final closure activities are necessary to ensure that closure standards are attained. To make this determination, the PE will evaluate factors including, but not limited to: an inspection of the floors, sumps, docks, and ramps for the potential of contamination to enter via pavement cracks or other damage to impervious surfaces or expansion joints; a review of inspection reports to determine whether there may have been spills that could have entered the soil or groundwater; and a review of past soil sampling results. If there are indications of potential soil or groundwater contamination, a Sampling and Analysis Plan will be prepared and submitted to WDNR. Upon approval, soil samples will be collected and analyzed accordingly. Additional information on historical monitoring at the facility may be found in Section 4.28 of the FPOR.

8-2.2 Closure Certification

Within 60 days of completion of final closure of the WM Waste facility, a certification of completion of final closure will be submitted to the WDNR by registered mail. The certification will state that the facility has been closed in accordance with the approved Closure Plan. The certification will be signed by a representative of WM Waste and by an independent registered Professional Engineer. In accordance with 40 CFR 264.115 and NR 664.0115, documentation that supports the certification of closure will be generated and retained in the Operating Record of the facility. Upon release of WM Waste by the WDNR from the financial assurance requirements for closure per 40 CFR 264.143(i) and NR 664.0115, these data may be destroyed.

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As described in Section 8-2, partial closure of the facility, involving the closure of individual units while other units are still operational, shall be performed under the oversight of the licensed Professional Engineer, and closure certification of the Professional Engineer, as the individual units are closed. Closure of individual units will follow the same methodology and procedures as full closure of the facility. Closure of individual units will also require approval of WDNR as they are closed. WM Waste will maintain required data and records from the closure of each individual unit during partial closure activities, and will use these data to certify final closure for the facility when it occurs. In order to have the most current and accurate financial assurance data available for the facility, the Professional Engineer shall use all partial closure data to adjust financial assurance calculations, as needed, when individual units are closed.

8-3.0 Amendment of Closure Plan

Any modification to existing and currently planned equipment, structures, and management procedures or changes in applicable regulations may require revisions to this Closure Plan and its associated cost estimates. This Closure Plan will also be revised if the expected year of closure changes.

WM Waste may submit to the WDNR, in accordance with applicable procedures in 40 CFR Part 124, 40 CFR Part 270, and NR 664.0112(3)(a), a written notification of or a request for a permit modification to authorize a change in operating plans, facility design, or other procedures that would affect this Closure Plan. The written notification or request must include a copy of the amended Closure Plan for review and approval by the WDNR.

WM Waste may submit to the WDNR written notification of or request for a permit modification to amend the Closure Plan at any time before the notification of final closure of the facility. Generally, WM Waste must submit for approval by the WDNR a written request for a permit modification, including a copy of the amended Closure Plan, at least 60 days before a proposed change in facility design or operation that requires a change in the Closure Plan. If an unexpected event occurs during the partial or final closure period, WM Waste shall request an operating license modification no later than 30 days after the unexpected event. Other, more specific requirements for Modifying the Closure Plan are contained in 40 CFR 264. l 12(c)(3) and (4) and NR 664.0112(3).

8-4.0 Closure Cost Estimate

An estimate of the closure cost for each regulated unit at the WM Waste facility has been developed and is included in Attachment 8-1. Estimates of all closure costs have been based on selection of a qualified, experienced third-party contractor, as required by NR 664.0142(1)(b) of the Wisconsin Administrative Code (WAC). To satisfy these requirements, the closure cost estimate for waste inventories and decontamination rinsates has been based on treatment and disposal at an approved and licensed facility. Procedures and assumptions used to develop the closure cost estimate are provided in Attachment 8-2. The closure cost estimate

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is based on information derived from the RSMeans software, supplemented and/or validated, where appropriate, by quotes or estimates from waste services contractors and disposal facilities.

RSMeans is a web-based construction cost estimating tool and associated database. The database contains cost-related information for all phases of construction projects, including, but not limited to, labor rates, material costs, and transportation costs. The data are continuously researched, validated, and revised, and are based on location. RSMeans data can be obtained for approximately 1,000 locations in North America, and contain more than 85,000 unique line items.

Within the closure cost estimate, costs for decontamination of the various units are separately itemized. Disposal costs for waste inventories, rinsates, and decontamination supplies are separately itemized, as are the costs of transportation to the destination facility. The estimated decontamination costs for equipment and structures have been listed. The decontamination costs include labor, sampling, and testing. The cost of engineering oversight and closure certification from a registered professional engineer is also included. A 10% contingency of the total closure cost estimate is included in the estimate. No salvage value from the sale of dismantled equipment and scrap metal has been incorporated in the estimate. The engineering oversight/certification and contingencies have been included as a single step on the front page of the estimate report rather than being incorporated into each storage area's calculations.

Closure cost estimates are adjusted for inflation within 60 days prior to the annual date in which the financial assurance mechanism for closure was established, in accordance with 40 CFR 264.142(b) and NR 664.0142(2). The latest closure cost estimates and the latest adjustments for inflation are kept at the facility, in accordance with 40 CFR 264.142(d) and NR 664.0142(4).

8-5.0 Financial-Assurance Mechanism for Closure

Financial assurance for closure of the WM Waste facility has been obtained. The option chosen by WM Waste to provide financial assurance is through the use of a Surety Bond Guaranteeing Performance of Closure (Performance Bond), as provided in 40 CFR 264.143(c) and Chp. NR 664.0143(3), Wis. Admin. Code. Attachment 8-3 includes the current performance bond as of the date of submission of this license application as required by federal and state regulations to prove WM Waste has obtained a suitable financial assurance mechanism. The performance bond is updated within 60 days at any time in which the closure cost estimate increases to an amount greater than the face value of the policy. An updated performance bond or other financial assurance mechanism meeting the requirements of NR 664.0143 will be provided to the WDNR within 60 days of renewal of this license..

While this Closure Plan and Closure Cost Estimate provide for closure of all licensed areas at maximum capacity, the closure cost estimate will be maintained at a level consistent with the licensed storage areas in use at that time to take into account storage areas that are licensed and

either not used for hazardous waste storage or not constructed. Prior to initializing use of an individual storage area, the closure cost estimate and financial assurance mechanism will be adjusted to reflect those operations. Modifications and submittal of the financial assurance mechanism will be by means of a Class I permit modification.

8-6.0 Post-Closure Plan and Cost Estimate

A Post-Closure Plan is not currently necessary for the WM Waste facility since the facility's activities do not include land disposal of hazardous wastes. It is not anticipated that any hazardous waste, waste residuals, or waste constituents will remain at the facility after closure that would require post-closure maintenance. Additionally, since no Post-Closure Plan is necessary, a Post-Closure Cost Estimate has not been included with this Plan.

8-7.0 Notices Required for Disposal Facilities

Because WM Waste does not operate a disposal facility (i.e., surface impoundment, waste pile, land treatment unit, or landfill unit) for hazardous waste, these notices are not required.

8-8.0 Liability Requirements

WM Waste is covered for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operation of the facility through use of an insurance mechanism. See section NR 670.014(2)(q) of the FPOR for details.

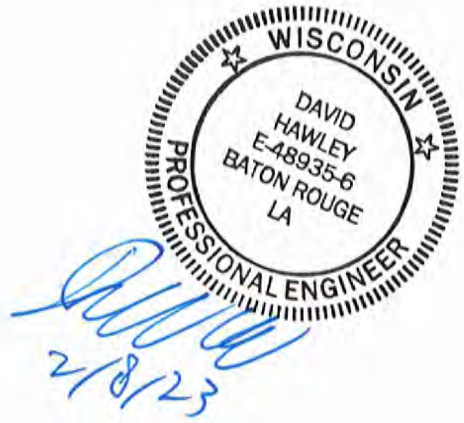
WM Waste does not operate any hazardous waste surface impoundments, landfills, land treatment facilities, or disposal miscellaneous units at the facility. Therefore, WM Waste is not required to maintain liability insurance coverage for non-sudden accidental occurrences under 40 CFR 264.147(b) and NR 664.0147(2).

8-9.0 State Mechanisms

Wisconsin's insurance liability requirements are equivalent to federal requirements; therefore, no additional State mechanisms are required.

ATTACHMENT 8-1

CLOSURE COST ESTIMATE SUMMARY FOR THE WM WASTE FACILITY



Cost Summary
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Storage Area		Total Cost
S-1	$	184,446.73
S-2	$	42,647.80
S-3	$	79,507.57
S-4	$	79,548.05
S-5	$	48,970.40
S-6	$	13,507.21
S-7	$	76,508.70
S-8	$	165,202.29
S-12	$	301,833.09
Decontamination Storage and Transportation	$	7,625.00
Subtotal	$	999,796.85
Engineering Certification	$	30,000.00
Contingency (10% total)	$	99,979.69
TOTAL (2022 DOLLARS)	**$**	**1,129,776.54**

S1 Containment Area Details
WM Mercury Waste, Inc.
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Unit S1		
Hazardous Waste Disposal Volumes		
Total Number of Liquid Hazardous Waste Drums	600	55-gallon drums
Total Number of Solid Hazardous Waste Drums	0	55-gallon drums
Volume of Liquid Waste	33,000	gallon
Volume of Solid Waste	0	cubic yard
Secondary Containment/Floor Dimensions		
Length (excluding Berm/Curb)	59.8	foot
Width (excluding Berm/Curb)	41.7	foot
Berm Area	0.0	square foot
Total Area	2,489.6	square foot
Thickness	0.4	foot
Total Volume	1,037.3	cubic foot
Decontamination		
Ratio of Decontamination Fluid to Area	0.6	gallon/square foot
Total Volume of Decontamination Liquid	1494	gallon
Work rate to clean one square foot	0.0097	work hr per square foot
labor hours	24.1	hour
Other Structures		
Area	0	square foot
Volume	0	cubic foot

S1 Closure Costs
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Removal, Transportation, and Disposal of Liquid Hazardous Waste Drums	**Unit**	**Quantity[1]**	**Unit Price**	**Total Cost**
Labor and Equipment Cost	per drum	600	3	$2,070.00
Transportation Cost	truckload (80 drums)	8	1,995	$15,960.00
Disposal Cost	per drum	600	265	$159,000.00
Removal, Transportation, and Disposal of Solid Hazardous Wastes	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost (drum management)	per drum	0	3	$0.00
Labor and Equipment Cost (roll-off management)	per day	0	505	$0.00
Drum Transportation Cost	per truckload (80 drums)	0	6,703	$0.00
Bulk Transportation Cost	truckload (25 cy)	0	6,703	$0.00
Drum Disposal Cost	per drum	0	265	$0.00
Bulk Disposal Cost	per ton	0	655	$0.00
Decontamination Labor, Equipment, and Disposal Costs	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost for Steam Cleaning or pressure washing	per hour	24	63.47	$1,532.73
Decontamination Water Disposal Cost	per gallon	1,494	1.30	$1,942.00
Sampling and Analysis	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Decontamination water analysis2	per sample	6	567	$3,402.00
Sample Collection Labor	per hour	6	90	$540.00

TOTAL COST **$184,446.73**

[1]See area detail sheet for quantity derivation.

[2]Decontamination is included in a separate cost summary sheet

S2 Containment Area Details
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Unit S2		
Hazardous Waste Disposal Volumes		
Total Number of Liquid Hazardous Waste Drums	136	55-gallon drums
Total Number of Solid Hazardous Waste Drums	0	55-gallon drums
Volume of Liquid Waste	7,480	gallon
Volume of Solid Waste	0	cubic yard
Secondary Containment/Floor Dimensions		
Length (excluding Berm/Curb)	24.00	foot
Width (excluding Berm/Curb)	24.92	foot
Berm Area	0.00	square foot
Total Area	598.00	square foot
Thickness	0.00	foot
Total Volume	0.00	cubic foot
Decontamination		
Ratio of Decontamination Fluid to Area	0.60	gallon/square foot
Total Volume of Decontamination Liquid	358.80	gallon
Work rate to clean one square foot	0.01	work hr per square foot
labor hours	5.80	hour
Other Structures		
Area	0.00	square foot
Volume	0.00	cubic foot

S2 Closure Costs
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Removal, Transportation, and Disposal of Liquid Hazardous Waste Drums	**Unit**	**Quantity[1]**	**Unit Price**	**Total Cost**
Labor and Equipment Cost	per drum	136	3	$469.20
Transportation Cost	truckload (80 drums)	2	1,995	$3,990.00
Disposal Cost	per drum	136	265	$36,040.00
Removal, Transportation, and Disposal of Solid Hazardous Wastes	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost (drum management)	per drum	0	3	$0.00
Labor and Equipment Cost (roll-off management)	per day	0	505	$0.00
Drum Transportation Cost	per truckload (80 drums)	0	6,703	$0.00
Bulk Transportation Cost	truckload (25 cy)	0	6,703	$0.00
Drum Disposal Cost	per drum	0	265	$0.00
Bulk Disposal Cost	per ton	0	655	$0.00
Decontamination Labor, Equipment, and Disposal Costs	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost for Steam Cleaning or pressure washing	per hour	5.80	63.47	$368.16
Decontamination Water Disposal Cost	per gallon	359	1.30	$466.44
Sampling and Analysis	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Decontamination water analysis2	per sample	2	567	$1,134.00
Sample Collection Labor	per hour	2	90	$180.00

TOTAL COST **$42,647.80**

[1]See area detail sheet for quantity derivation.

[2]Decontamination is included in a separate cost summary sheet

S3 Containment Area Details
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Unit S3		
Hazardous Waste Disposal Volumes		
Total Number of Liquid Hazardous Waste Drums	256	55-gallon drums
Total Number of Solid Hazardous Waste Drums	0	55-gallon drums
Volume of Liquid Waste	14,080	gallon
Volume of Solid Waste	0	cubic yard
Secondary Containment/Floor Dimensions		
Length (excluding Berm/Curb)	51.9	foot
Width (excluding Berm/Curb)	17.3	foot
Berm Area	33.9	square foot
Total Area	929.5	square foot
Thickness	0.0	foot
Total Volume	0.0	cubic foot
Decontamination		
Ratio of Decontamination Fluid to Area	0.6	gallon/square foot
Total Volume of Decontamination Liquid	641	gallon
Work rate to clean one square foot	0.0097	work hr per square foot
labor hours	10.4	hour
Other Structures		
Area	138.4	square foot
Volume	0	cubic foot

S3 Closure Costs
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Removal, Transportation, and Disposal of Liquid Hazardous Waste Drums	**Unit**	**Quantity[1]**	**Unit Price**	**Total Cost**
Labor and Equipment Cost	per drum	256	$3.45	$883.20
Transportation Cost	truckload (80 drums)	4	$1,995.00	$7,980.00
Disposal Cost	per drum	256	$265.00	$67,840.00
Removal, Transportation, and Disposal of Solid Hazardous Wastes	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost (drum management)	per drum	0	$3.45	$0.00
Labor and Equipment Cost (roll-off management)	per day	0	$505.00	$0.00
Drum Transportation Cost	per truckload (80 drums)	0	$6,703.20	$0.00
Bulk Transportation Cost	truckload (25 cy)	0	$6,703.20	$0.00
Drum Disposal Cost	per drum	0	$265.00	$0.00
Bulk Disposal Cost	per ton	0	$655.00	$0.00
Decontamination Labor, Equipment, and Disposal Costs	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost for Steam Cleaning or pressure washing	per hour	10.4	63.47	$657.44
Decontamination Water Disposal Cost	per gallon	641	$1.30	$832.93
Sampling and Analysis	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Decontamination water analysis2	per sample	2	$567.00	$1,134.00
Sample Collection Labor	per hour	2	$90.00	$180.00

TOTAL COST **$79,507.57**

[1]See area detail sheet for quantity derivation.

[2]Decontamination is include in a separate cost summary sheet

S4 Containment Area Details
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Unit S4		
Hazardous Waste Disposal Volumes		
Total Number of Liquid Hazardous Waste Drums	256	55-gallon drums
Total Number of Solid Hazardous Waste Drums	0	55-gallon drums
Volume of Liquid Waste	14,080	gallon
Volume of Solid Waste	0	cubic yard
Secondary Containment/Floor Dimensions		
Length (excluding Berm/Curb)	52.0	foot
Width (excluding Berm/Curb)	17.8	foot
Berm Area	35.2	square foot
Total Area	958	square foot
Thickness	0.0	foot
Total Volume	0.0	cubic foot
Decontamination		
Ratio of Decontamination Fluid to Area	0.6	gallon/square foot
Total Volume of Decontamination Liquid	658	gallon
Work rate to clean one square foot	0.0097	work hr per square foot
labor hours	10.6	hour
Other Structures		
Area	139	square foot
Volume	0	cubic foot

S4 Closure Costs
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Removal, Transportation, and Disposal of Liquid Hazardous Waste Drums	Unit	Quantity[1]	Unit Price	Total Cost
Labor and Equipment Cost	per drum	256	$3.45	$883.20
Transportation Cost	truckload (80 drums)	4	$1,995.00	$7,980.00
Disposal Cost	per drum	256	$265.00	$67,840.00
Removal, Transportation, and Disposal of Solid Hazardous Wastes	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost (drum management)	per drum	0	$3.45	$0.00
Labor and Equipment Cost (roll-off management)	per day	0	$505.00	$0.00
Drum Transportation Cost	per truckload (80 drums)	0	$6,703.20	$0.00
Bulk Transportation Cost	truckload (25 cy)	0	$6,703.20	$0.00
Drum Disposal Cost	per drum	0	$265.00	$0.00
Bulk Disposal Cost	per ton	0	$655.00	$0.00
Decontamination Labor, Equipment, and Disposal Costs	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost for Steam Cleaning or pressure washing	per hour	10.6	63.47	$675.30
Decontamination Water Disposal Cost	per gallon	658	$1.30	$855.56
Sampling and Analysis	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Decontamination water analysis2	per sample	2	$567.00	$1,134.00
Sample Collection Labor	per hour	2	$90.00	$180.00

TOTAL COST **$79,548.05**

[1]See area detail sheet for quantity derivation.

[2]Decontamination is included in a separate cost summary sheet

S5 Containment Area Details
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Unit S5		
Hazardous Waste Disposal Volumes		
Total Number of Liquid Hazardous Waste Drums	160	55-gallon drums
Total Number of Solid Hazardous Waste Drums	0	55-gallon drums
Volume of Liquid Waste	8,800	gallon
Volume of Solid Waste	0	cubic yard
Secondary Containment/Floor Dimensions		
Length (excluding Berm/Curb)	28.6	foot
Width (excluding Berm/Curb)	17.0	foot
Berm Area	25.0	square foot
Total Area	511.9	square foot
Thickness	0.0	foot
Total Volume	0.0	cubic foot
Decontamination		
Ratio of Decontamination Fluid to Area	0.6	gallon/square foot
Total Volume of Decontamination Liquid	307	gallon
Work rate to clean one square foot	0.0097	work hr per square foot
labor hours	5.0	hour
Other Structures		
Area	0.0	square foot
Volume	0	cubic foot

S5 Closure Costs
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Removal, Transportation, and Disposal of Liquid Hazardous Waste Drums	Unit	Quantity[1]	Unit Price	Total Cost
Labor and Equipment Cost	per drum	160	$3.45	$552.00
Transportation Cost	truckload (80 drums)	2	$1,995.00	$3,990.00
Disposal Cost	per drum	160	$265.00	$42,400.00
Removal, Transportation, and Disposal of Solid Hazardous Wastes	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost (drum management)	per drum	0	$3.45	$0.00
Labor and Equipment Cost (roll-off management)	per day	0	$505.00	$0.00
Drum Transportation Cost	per truckload (80 drums)	0	$6,703.20	$0.00
Bulk Transportation Cost	truckload (25 cy)	0	$6,703.20	$0.00
Drum Disposal Cost	per drum	0	$265.00	$0.00
Bulk Disposal Cost	per ton	0	$655.00	$0.00
Decontamination Labor, Equipment, and Disposal Costs	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost for Steam Cleaning or pressure washing	per hour	5.0	63.47	$315.14
Decontamination Water Disposal Cost	per gallon	307	$1.30	$399.26
Sampling and Analysis	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Decontamination water analysis2	per sample	2	$567.00	$1,134.00
Sample Collection Labor	per hour	2	$90.00	$180.00

TOTAL COST **$48,970.40**

[1]See area detail sheet for quantity derivation.

[2]Decontamination is included in a separate cost summary sheet

S6 Containment Area Details
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Unit S6		
Hazardous Waste Disposal Volumes		
Total Number of Liquid Hazardous Waste Drums	37	55-gallon drums
Total Number of Solid Hazardous Waste Drums	0	55-gallon drums
Volume of Liquid Waste	2,035	gallon
Volume of Solid Waste	0	cubic yard
Secondary Containment/Floor Dimensions		
Length (excluding Berm/Curb)	40.9	foot
Width (excluding Berm/Curb)	6.9	foot
Berm Area	60.6	square foot
Total Area	343.6	square foot
Thickness	0.0	foot
Total Volume	0.0	cubic foot
Decontamination		
Ratio of Decontamination Fluid to Area	0.6	gallon/square foot
Total Volume of Decontamination Liquid	206	gallon
Work rate to clean one square foot	0.0097	work hr per square foot
labor hours	3.3	hour
Other Structures		
Area	0	square foot
Volume	0	cubic foot

S6 Closure Costs
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Removal, Transportation, and Disposal of Liquid Hazardous Waste Drums	Unit	Quantity[1]	Unit Price	Total Cost
Labor and Equipment Cost	per drum	37	$3.45	$127.65
Transportation Cost	truckload (80 drums)	1	$1,995.00	$1,995.00
Disposal Cost	per drum	37	$265.00	$9,805.00
Removal, Transportation, and Disposal of Solid Hazardous Wastes	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost (drum management)	per drum	0	$3.45	$0.00
Labor and Equipment Cost (roll-off management)	per day	0	$505.00	$0.00
Drum Transportation Cost	per truckload (80 drums)	0	$6,703.20	$0.00
Bulk Transportation Cost	truckload (25 cy)	0	$6,703.20	$0.00
Drum Disposal Cost	per drum	0	$265.00	$0.00
Bulk Disposal Cost	per ton	0	$655.00	$0.00
Decontamination Labor, Equipment, and Disposal Costs	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost for Steam Cleaning or pressure washing	per hour	3.3	63.47	$211.54
Decontamination Water Disposal Cost	per gallon	206	$1.30	$268.01
Sampling and Analysis	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Decontamination water analysis2	per sample	2	$460.00	$920.00
Sample Collection Labor	per hour	2	$90.00	$180.00

TOTAL COST **$13,507.21**

[1]See area detail sheet for quantity derivation.

[2]Decontamination is included in a separate cost summary sheet

S7 Containment Area Details
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Unit S7		
Hazardous Waste Disposal Volumes		
Total Number of Liquid Hazardous Waste Drums	80	55-gallon drums
Total Number of Solid Hazardous Waste Drums	0	55-gallon drums
Volume of Liquid Waste	4,400	gallon
Volume of Solid Waste	0	cubic yard
Secondary Containment/Floor Dimensions		
Length (excluding Berm/Curb)	30.0	foot
Width (excluding Berm/Curb)	10.0	foot
Berm Area	0.0	square foot
Total Area	300.0	square foot
Thickness	0.0	foot
Total Volume	0.0	cubic foot
Decontamination		
Ratio of Decontamination Fluid to Area	0.6	gallon/square foot
Total Volume of Decontamination Liquid	180	gallon
Work rate to clean one square foot	0.0097	work hr per square foot
labor hours	2.9	hour
Other Structures		
Area	0	square foot
Volume	0	cubic foot

S7 Closure Costs
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Removal, Transportation, and Disposal of Liquid Hazardous Waste Drums	**Unit**	**Quantity[1]**	**Unit Price**	**Total Cost**
Labor and Equipment Cost	per drum	80	$3.45	$276.00
Transportation Cost	truckload (80 drums)	1	$1,995.00	$1,995.00
Disposal Cost	per drum	80.0	$900.00	$72,000.00
Removal, Transportation, and Disposal of Solid Hazardous Waste (Mecury Contaminated Waste)	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost (drum management)	per drum	0	$3.45	$0.00
Labor and Equipment Cost (roll-off management)	per day	1	$505.00	$505.00
Transportation Cost	per truckload (80 drums)	0	$6,703.20	$0.00
Transportation Cost	truckload (25 cy)	0	$6,703.20	$0.00
Disposal Cost	per ton	0	$655.00	$0.00
Decontamination Labor, Equipment, and Disposal Costs	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost for Steam Cleaning or pressure washing	per hour	2.9	63.47	$184.70
Decontamination Water Disposal Cost	per gallon	180	$1.30	$234.00
Sampling and Analysis	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Decontamination water analysis2	per sample	2	$567.00	$1,134.00
Sample Collection Labor	per hour	2	$90.00	$180.00

TOTAL COST **$76,508.70**

[1]See area detail sheet for quantity derivation.

S8 Containment Area Details
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Unit S8		
Hazardous Waste Disposal Volumes		
Total Number of Liquid Hazardous Waste Drums	160	55-gallon drums
Total Number of Solid Hazardous Waste Drums	0	55-gallon drums
Volume of Liquid Waste	0	gallon
Volume of Solid Waste	120	cubic yard
Secondary Containment/Floor Dimensions		
Length (excluding Berm/Curb)	78.9	foot
Width (excluding Berm/Curb)	39.0	foot
Berm Area	22.0	square foot
Total Area	3,099	square foot
Thickness	0.0	foot
Total Volume	0.0	cubic foot
Decontamination		
Ratio of Decontamination Fluid to Area	0.6	gallon/square foot
Total Volume of Decontamination Liquid	1,859	gallon
Work rate to clean one square foot	0.0097	work hr per square foot
labor hours	30.1	hour
Other Structures		
Area	0	square foot
Volume	0	cubic foot

S8 Closure Costs
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Removal, Transportation, and Disposal of Liquid Hazardous Waste Drums	**Unit**	**Quantity[1]**	**Unit Price**	**Total Cost**
Labor and Equipment Cost	per drum	160	$3.45	$552.00
Transportation Cost	truckload (80 drums)	2	$1,995.00	$3,990.00
Disposal Cost	per drum	160.0	$265.00	$42,400.00
Removal, Transportation, and Disposal of Solid Hazardous Waste (Mecury Contaminated Waste)	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost (drum management)	per drum	0	$3.45	$0.00
Labor and Equipment Cost (roll-off management)	per day	1	$505.00	$505.00
Transportation Cost	per truckload (80 drums)	0	$6,703.20	$0.00
Transportation Cost	truckload (25 cy)	5	$6,703.20	$33,516.00
Disposal Cost	per ton	120	$655.00	$78,600.00
Decontamination Labor, Equipment, and Disposal Costs	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost for Steam Cleaning or pressure washing	per hour	30.1	63.47	$1,907.99
Decontamination Water Disposal Cost	per gallon	1,859	$1.30	$2,417.30
Sampling and Analysis	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Decontamination water analysis2	per sample	2	$567.00	$1,134.00
Sample Collection Labor	per hour	2	$90.00	$180.00

TOTAL COST **$165,202.29**

[1]See area detail sheet for quantity derivation.

[2]Decontamination is included in a separate cost summary sheet

S12 Containment Area Details
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Unit S12		
Hazardous Waste Disposal Volumes		
Total Number of Liquid Hazardous Waste Drums	0	55-gallon drums
Total Number of Solid Hazardous Waste Drums	0	55-gallon drums
Volume of Liquid Waste	0	gallon
Volume of Solid Waste	320	cubic yard
Secondary Containment/Floor Dimensions		
Length (excluding Berm/Curb)	91.7	foot
Width (excluding Berm/Curb)	25.0	foot
Berm Area	53.1	square foot
Total Area	2,345	square foot
Thickness	0.0	foot
Total Volume	0.0	cubic foot
Decontamination		
Ratio of Decontamination Fluid to Area	0.6	gallon/square foot
Total Volume of Decontamination Liquid	1,407	gallon
Work rate to clean one square foot	0.0097	work hr per square foot
labor hours	22.7	hour
Other Structures		
Area	0	square foot
Volume	0	cubic foot

S12 Closure Costs
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Removal, Transportation, and Disposal of Liquid Hazardous Waste Drums	Unit	Quantity[1]	Unit Price	Total Cost
Labor and Equipment Cost	per drum	0	$3.45	$0.00
Transportation Cost	truckload (80 drums)	0	$1,995.00	$0.00
Disposal Cost	per drum	0.0	$900.00	$0.00
Removal, Transportation, and Disposal of Solid Hazardous Waste (Mecury Contaminated Waste)	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost (drum management)	per drum	0	$3.45	$0.00
Labor and Equipment Cost (roll-off management)	per day	1	$505.00	$505.00
Transportation Cost	per truckload (80 drums)	0	$6,703.20	$0.00
Transportation Cost	truckload (25 cy)	13	$6,703.20	$87,141.60
Disposal Cost	per ton	320	$655.00	$209,600.00
Decontamination Labor, Equipment, and Disposal Costs	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Labor and Equipment Cost for Steam Cleaning or pressure washing	per hour	22.7	63.47	$1,443.58
Decontamination Water Disposal Cost	per gallon	1,407	$1.30	$1,828.92
Sampling and Analysis	**Unit**	**Quantity**	**Unit Price**	**Total Cost**
Decontamination water analysis2	per sample	2	$567.00	$1,134.00
Sample Collection Labor	per hour	2	$90.00	$180.00

TOTAL COST **$301,833.09**

[1]See area detail sheet for quantity derivation.

[2]Decontamination is included in a separate cost summary sheet

Decontamination Costs
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Decontamination Storage and Transportation Costs	Unit	Quantity	Unit Price	Total Cost
storage of decontamination water in double walled Frac tank - 20,000 gallon	month	1	$1,500.00	$1,500.00
Transportation Cost	per truckload (6,900 gallons)	2	$3,062.50	$6,125.00

TOTAL COST **$7,625.00**

Note: cost includes transportation, and temporary storage of decontamination water (hazardous waste) from all container storage areas (S1 - S8, and S12)

Decontamination Details
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin

Storage Area	Total Labor Hours	Decontamination Volume (gallons)
S1	24.1	1,494
S2	5.8	359
S3	10.4	641
S4	10.6	658
S5	5.0	307
S6	3.3	206
S7	2.9	180
S8	30.1	1,859
S12	22.7	1,407
Total	**115.0**	**7,111**

ATTACHMENT 8-2

BASIS FOR AND ASSUMPTIONS MADE IN THE CLOSURE COST ESTIMATE

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

The closure cost estimate is based on labor cost information derived from the RSMeans, supplemented where appropriate by quotations from waste services contractors and disposal facilities. In general, the comments below apply to the calculation page for each storage area (S-1 through S-12) within the cost estimate.

REMOVAL OF WASTE INVENTORY

A labor cost to remove the waste inventory was calculated using a value of $3.45 per drum. This cost only applies to drummed waste removal for S1 through S-7.

A labor cost to oversee and coordinate the pickup and removal of roll-off bins was calculated at a rate of $505 per day per unit (S-8 and S-12).

TRANSPORTATION OF WASTE

Transportation costs were calculated using RSMeans default values for vehicle transport capacity. Transportation truckloads were assessed based on the following:

- 80 drums per truckload
- 25 cubic yards per truckload
- 6,900 gallons per truckload

Costs for transportation of waste, along with the disposal facility, is based on the following costs:

Waste	Facility	Location and distance	Truckload basis	Transportation Cost/mile	Transportation Cost per truckload	Source Cost/Mile
Non-Free Liquids Wastes	Waste Management	Emelle, AL 840 miles	80 drums or 25 cubic yards	$7.98	$6,703.20	RSMeans
Drummed Liquid Waste	Heritage	Indianapolis, IN 250 miles	80 drums	$7.98	$1,995.00	RSMeans
Decontamination water	Waste Management	Vickery, OH 350 miles	6,900 gallons	$8.75	$3,062.50	RSMeans

TREATMENT AND DISPOSAL OF WASTE

WAC NR 664.0142(1)(a) requires that "[t]he estimate shall equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive." Treatment and disposal costs were calculated according to the maximum

WM Waste, Inc.
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licensed volume of waste material present in each licensed storage area. WM Waste understands that the disposal of various materials in conformance with compliance limits can lead to highly variable disposal costs, depending upon whether the substance is a free liquid or non-free liquid waste. WM Waste will periodically evaluate worst-case closure scenarios, based on current market conditions for the two types of wastes, and will revise closure cost estimates accordingly.

Costs for the treatment and disposal of waste, based on disposal facility, is based on the following current disposal estimates for liquid and non-free liquid wastes:

Waste	Facility	Location	Disposal Cost	Source of Cost/Drum
Drummed Liquid Wastes	Heritage	Indianapolis, IN	$265 per drum	RSMeans
Drummed Non-Free Liquids Wastes	Waste Management	Emelle, AL	$265 per drum	RSMeans
Bulk Non-Free Liquids Wastes	Waste Management	Emelle, AL	$655 per ton [1]	RSMeans
Decontamination Water	Waste Management	Vickery, OH	$1.30 per gallon	Intercompany Quote

1. For the purpose of this cost estimate, one (1) ton is assumed to equal one (1) cubic yard, based on experience, i.e., typical density for this type of material.

DECONTAMINATION BY STEAM CLEANING OR PRESSURE WASH

Work rate to steam clean or pressure wash one square foot of surface area:

- Value used: 0.0097 Work hr per ft^2

  Justification: Field estimation based on experience using the same equipment to clean interiors of roll-off boxes.

As described in the Closure Plan, decontamination will be achieved using a two-step process. The first stage, a high-pressure detergent wash, is assumed to take 30 seconds to pressure wash 1 ft^2. The second stage, a water rinse, is assumed to take 5 seconds to rinse 1 ft^2.

$$\frac{35 \text{ seconds}}{1 \quad ft^2} \times \frac{1 \quad \text{work hour}}{3600 \quad \text{seconds}} = 0.0097 \frac{\text{work hour}}{ft^2}$$

Ratio of decontamination fluid to area:

- Value used: 0.6 gal per ft^2

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

Justification: Field estimation based on experience using the same equipment to clean interiors of roll-off boxes.

For the first stage, the application rate of decontamination fluid from the cleaning device is estimated to be 0.5 gallons per minute. Decontamination fluid is applied for 30 seconds per square foot. The application rate and required time for decontamination fluid application are based on experience, typical application rates for this type of surface and equipment, and typical required decontamination fluid application time, for this type of surface and decontamination fluid.

$$\frac{30 \text{ seconds}}{1 \text{ ft}^2} \times \frac{1 \text{ work hour}}{3600 \text{ seconds}} \times 0.5 \frac{\text{gallons}}{\text{minute}} \times \frac{60 \text{ minutes}}{1 \text{ work hour}} = 0.25 \frac{\text{gallons}}{\text{ft}^2}$$

For the second stage, ½" of rinse water is assumed to be applied per square foot.

$$\frac{0.5 \text{ inches}}{\text{ft}^2} \times \frac{1 \text{ foot}}{12 \text{ inches}} \times 1 \text{ ft}^2 = 0.04 \frac{\text{ft}^3}{\text{ft}^2} \times 7.48 \frac{\text{gallon}}{\text{ft}^3} = 0.31 \frac{\text{gallon}}{\text{ft}^2}$$

The summary below describes the approach used to derive the Closure Cost Estimate.

Decontamination
The labor cost and decontamination fluid generation amounts were calculated using the values indicated above. For the purpose of this cost estimate, decontamination fluid from each storage area is assumed to be directed to permanent or temporary sumps for collection and transferred to a rented 20,000-gallon double-walled frac tank via wet vacuum units or portable pumps. A total of 12,037-gallons of decontamination fluid will be generated that will require disposal. All labor, equipment, transportation, and disposal costs for decontamination are included as a separate line item.

SAMPLING AND ANALYSIS

Rinsate Samples
The labor cost associated with sampling final rinsate water was based on experience and assumes samples can be collected at a rate of 1 sample per hour. The analytical costs were obtained from a certified laboratory in Wisconsin.

Analytical Method Described in Closure Plan	Cost/Sample
Volatile organic analysis (SW-846 Method 8260)	$84
Semi-volatile organics (SW-846 Method 8270)	$183
Chlorinated herbicides (SW-846, Method 8151)	$215
Metals (SW-846 Method 6010 with appropriate Series 7000 individual Metal Methods (e.g	$85

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800.741.3343 or 262.878.2599
262.878.2699 Fax

Mercury, cold vapor (SW-846, Method 7470) with prep)	

ENGINEERING

The costs for an engineering firm to manage, oversee and certify the closure are based on a proposal from an engineering firm. The engineering cost estimate includes the following project management, administration, and oversight activities: procurement, contract administration, vendor performance review, payment processing, and other activities reasonably anticipated to complete the project.

CONTINGENCY

A contingency was calculated based on 10% of the total closure cost.

ATTACHEMENT 8-3

FINANCIAL ASSURANCE DOCUMENT

Bond No. 1057642

RIDER

To be attached to and form a part of Performance Bond, No. 1057642

dated the 1st day of November , 2010 issued by

LEXON Insurance Company, 10002 Shelbyville Road, Louisville, KY 40223 as Surety, on behalf of

WM Waste, Inc., 21211 Durand Avenue, Union Grove, WI 53182 , as Principal,

in the penal sum of Four Hundred Thirty-Six Thousand Two Hundred Eighty-One and 53/100

Dollars ($ 436,281.53), and in favor of Wisconsin DNR 101 South Webster, Madison, WI 53707-7921

In consideration of the premium charged for the attached bond, it is hereby agreed that the attached bond be amended as follows:

This rider will increase the bond amount as follows:

Current Closure Amount: $2,670,691.00
New Closure Amount: $2,703,274.00

Provided, However, that the attached bond shall be subject to all its agreements, limitations and conditions except as herein expressly modified, and further that the liability of the Surety under the attached bond and the attached bond as amended by this rider shall not be cumulative.

This rider shall become effective as of the 1st day of November , 2021

Signed, sealed and dated this 5th day of October , 2021

WITNESS:

Sandra L Fusinetti

PRINCIPAL

WM Waste, Inc.

By Susan Ritter

Susan Ritter, Attorney-in-Fact

WITNESS:

Sandra L Fusinetti

LEXON Insurance Company

By Theresa Pickerrell

Theresa Pickerrell , Attorney-in-Fact

POWER OF ATTORNEY

KNOWN ALL MEN BY THESE PRESENTS that Waste Management, Inc. and each of its direct and indirect majority owned subsidiaries (the "WM Entities"), have constituted and appointed and do hereby appoint Theresa Pickerrell, Sandra L. Fusinetti, and Susan Ritter of Acrisure, LLC DBA Smith Manus, each its true and lawful Attorney-in-fact to execute under such designation in its name, to affix the corporate seal approved by the WM Entities for such purpose, and to deliver for and on its behalf as surety thereon or otherwise, bonds of any of the following classes, to wit:

1. Surety bonds to the United States of America or any agency thereof, and lease and miscellaneous surety bonds required or permitted under the laws, ordinances or regulations of any State, City, Town, Village, Board or any other body or organization, public or private.

2. Bonds on behalf of WM Entities in connection with bids, proposals or contracts.

The foregoing powers granted by the WM Entities shall be subject to and conditional upon the written direction of a duly appointed officer of the applicable WM Entity (or any designee of any such officer) to execute and deliver any such bonds.

The signatures and attestations of such Attorneys-in-fact and the seal of the WM Entity may be affixed to any such bond, policy or to any certificate relating thereto by facsimile and any such bond, policy or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the applicable WM Entity when so affixed.

IN WITNESS WHEREOF, the WM Entities have caused these presents to be signed by the Vice President and Treasurer and its corporate seal to be hereto affixed. This power of attorney is in effect as of October 5, 2021.

Witness:

Diana Lea

On behalf of Waste Management, Inc. and each of the other WM Entities

David D. Reed

David Reed
Vice President and Treasurer

SOMPO INTERNATIONAL
INSURANCE

11078

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that **Endurance Assurance Corporation**, a Delaware corporation, **Endurance American Insurance Company**, a Delaware corporation, **Lexon Insurance Company**, a Texas corporation, and/or **Bond Safeguard Insurance Company**, a South Dakota corporation, each, a "Company" and collectively, "**Sompo International,**" do hereby constitute and appoint: **Brook T. Smith, Raymond M. Hundley, Jason D. Cromwell, James H. Martin, Barbara Duncan, Sandra L. Fusinetti, Mark A. Guidry, Jill Kemp, Lynnette Long, Amy Bowers, Deborah Neichter, Theresa Pickerrell, Sheryon Quinn, Beth Frymire, Leigh McCarthy, Michael Dix, Susan Ritter, Ryan Britt** as true and lawful Attorney(s)-In-Fact to make, execute, seal, and deliver for, and on its behalf as surety or co-surety; bonds and undertakings given for any and all purposes, also to execute and deliver on its behalf as aforesaid renewals, extensions, agreements, waivers, consents or stipulations relating to such bonds or undertakings provided, however, that no single bond or undertaking so made, executed and delivered shall obligate the Company for any portion of the penal sum thereof in excess of the sum of **One Hundred Million Dollars ($100,000,000.00).**

Such bonds and undertakings for said purposes, when duly executed by said attorney(s)-in-fact, shall be binding upon the Company as fully and to the same extent as if signed by the President of the Company under its corporate seal attested by its Corporate Secretary.

This appointment is made under and by authority of certain resolutions adopted by the sole shareholder of each Company by unanimous written consent effective the 15th day of June, 2019, a copy of which appears below under the heading entitled "Certificate".

This Power of Attorney is signed and sealed by facsimile under and by authority of the following resolution adopted by the sole shareholder of each Company by unanimous written consent effective the 15th day of June, 2019 and said resolution has not since been revoked, amended or repealed:

RESOLVED, that the signature of an individual named above and the seal of the Company may be affixed to any such power of attorney or any certificate relating thereto by facsimile, and any such power of attorney or certificate bearing such facsimile signature or seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached.

IN WITNESS WHEREOF, each Company has caused this instrument to be signed by the following officers, and its corporate seal to be affixed this 15th day of June, 2019.

Endurance Assurance Corporation
By: Richard M Appel
Richard Appel; SVP & Senior Counsel

Endurance American Insurance Company
By: Richard M Appel
Richard Appel; SVP & Senior Counsel

Lexon Insurance Company
By: Richard M Appel
Richard Appel; SVP & Senior Counsel

Bond Safeguard Insurance Company
By: Richard M Appel
Richard Appel; SVP & Senior Counsel

ACKNOWLEDGEMENT

On this 15th day of June, 2019, before me, personally came the above signatories known to me, who being duly sworn, did depose and say that he/they is an officer of each of the Companies; and that he executed said instrument on behalf of each Company by authority of his office under the by-laws of each Company.

By: Amy Taylor
Amy Taylor, Notary Public - My Commission Expires 5/9/23

CERTIFICATE

I, the undersigned Officer of each Company, DO HEREBY CERTIFY that:

1. That the original power of attorney of which the foregoing is a copy was duly executed on behalf of each Company and has not since been revoked, amended or modified; that the undersigned has compared the foregoing copy thereof with the original power of attorney, and that the same is a true and correct copy of the original power of attorney and of the whole thereof;
2. The following are resolutions which were adopted by the sole shareholder of each Company by unanimous written consent effective June 15, 2019 and said resolutions have not since been revoked, amended or modified:

   "RESOLVED, that each of the individuals named below is authorized to make, execute, seal and deliver for and on behalf of the Company any and all bonds, undertakings or obligations in surety or co-surety with others: RICHARD M. APPEL, BRIAN J. BEGGS, CHRISTOPHER DONELAN, SHARON L. SIMS, CHRISTOPHER L. SPARRO, MARIANNE L. WILBERT

   ; and be it further

   RESOLVED, that each of the individuals named above is authorized to appoint attorneys-in-fact for the purpose of making, executing, sealing and delivering bonds, undertakings or obligations in surety or co-surety for and on behalf of the Company."
3. The undersigned further certifies that the above resolutions are true and correct copies of the resolutions as so recorded and of the whole thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal this 5th day of October, 2021.

By:
Daniel S. Lurie, Secretary

NOTICE: U. S. TREASURY DEPARTMENT'S OFFICE OF FOREIGN ASSETS CONTROL (OFAC)

No coverage is provided by this Notice nor can it be construed to replace any provisions of any surety bond or other surety coverage provided. This Notice provides information concerning possible impact on your surety coverage due to directives issued by OFAC. **Please read this Notice carefully.**

The Office of Foreign Assets Control (OFAC) administers and enforces sanctions policy, based on Presidential declarations of "national emergency". OFAC has identified and listed numerous foreign agents, front organizations, terrorists, terrorist organizations, and narcotics traffickers as "Specially Designated Nationals and Blocked Persons". This list can be located on the United States Treasury's website – https://www.treasury.gov/resource-center/sanctions/SDN-List.

In accordance with OFAC regulations, if it is determined that you or any other person or entity claiming the benefits of any coverage has violated U.S. sanctions law or is a Specially Designated National and Blocked Person, as identified by OFAC, any coverage will be considered a blocked or frozen contract and all provisions of any coverage provided are immediately subject to OFAC. When a surety bond or other form of surety coverage is considered to be such a blocked or frozen contract, no payments nor premium refunds may be made without authorization from OFAC. Other limitations on the premiums and payments may also apply.

UPS CampusShip: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. **GETTING YOUR SHIPMENT TO UPS**
   Customers with a Daily Pickup
   Your driver will pickup your shipment(s) as usual.

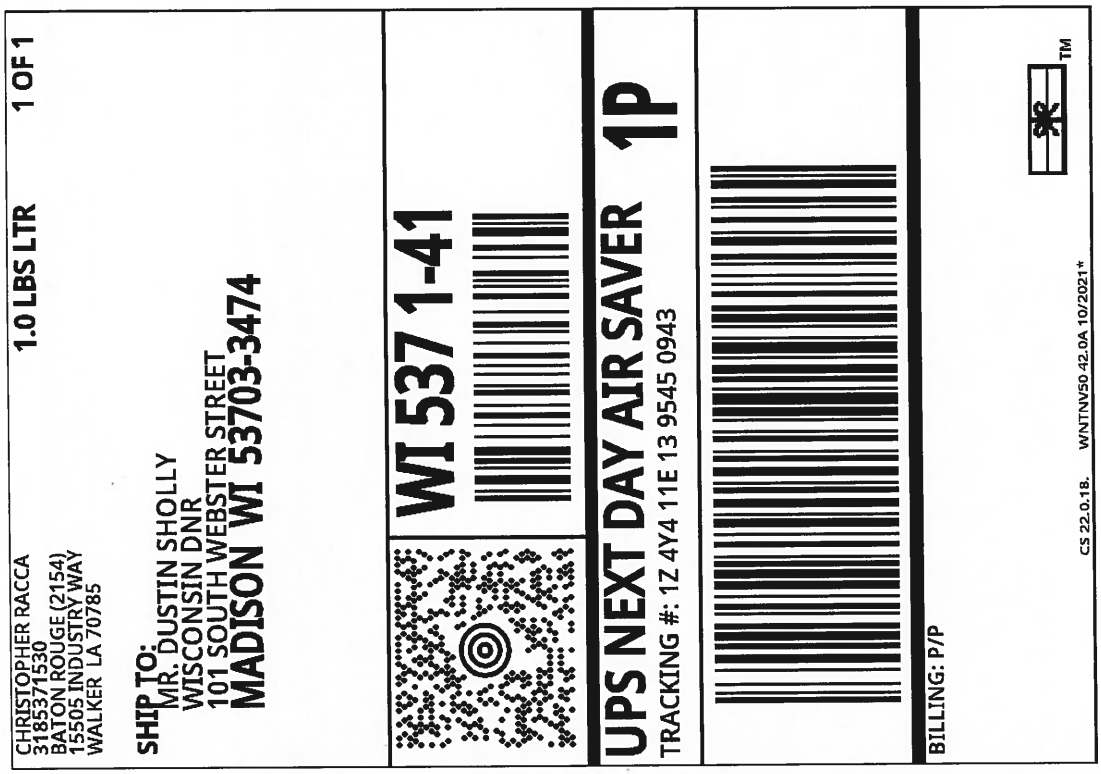
   Customers without a Daily Pickup
   Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.
   Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
   Hand the package to any UPS driver in your area.

UPS Access Point™
CVS STORE # 5617
29881 WALKER RD S
WALKER ,LA 70785

UPS Access Point™
JOHN'S SUPERMARKET & HARDWARE
34019 WALKER RD N
WALKER ,LA 70785

UPS Access Point™
THE UPS STORE
1113 S RANGE AVE
DENHAM SPRINGS ,LA 70726

FOLD HERE



ATTACHEMENT 8-4

SAMPLING AND ANALYSIS PLAN

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

Derivation of Estimated Sample Count in Sampling Schedule

Estimated number of decontamination samples in individual units is based on the decontamination and decontamination sampling strategies in Sections 8-2.1.1.2 and 8-2.1.1.3

TABLE 8-4-1
WM WASTE FACILITY
SAMPLING SCHEDULE

CSA	Number of Rinsate Samples			Number of QA/QC Samples[1]		
				Decontamination Blanks[3]	Field Blank	Number of Duplicate Samples
S-1[4]	1			2	2	1
S-2	1					1
S-3	1					1
S-4	1					1
S-5	1					1
S-6	1					1
S-7	1					1
S-8	1					1
S-12	1					1

[1]The final number of QA/QC samples will be determined by field conditions. However, QA/QC sampling protocols contained in EPA document SW-846 will be utilized as guidance for trip blanks, field blanks, decontamination blanks, and field duplicates. In addition to the blanks that are illustrated here, a trip blank will be included in every cooler containing VOCs.
[23]Background water samples are the input to cleaning devices and the water output from cleaning devices.
[4]All costs associated with taking background and QA/QC decontamination blanks, and field blank samples have been incorporated to the sampling and analysis cost of S-1.
5

WM Waste, Inc.
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Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

- **Sample Equipment Decontamination**

  Decontamination procedures during closure will include the washing of all non-disposable sampling equipment with a non-phosphate-based detergent or equivalent, followed by a tap water rinse. Additionally, dedicated sampling spoons and bailers will be used during sample collection. As appropriate, after collecting each discrete sample, decontamination procedures will be performed on sampling equipment. This procedure is designed to eliminate the possibility of contamination being introduced from an off-site source, preventing on-site cross-contamination between samples, and assuring that possible contamination encountered during the investigation does not leave the site.

  All decontamination fluids will be collected and transferred to a temporary holding unit of adequate capacity and construction for disposal and/or sampling and analysis. The soil cuttings accumulated while auguring soil samples will be replaced to the respective borehole. All PPE will also be properly disposed.

  The following constitutes a minimum list of supplies and equipment necessary for closure decontamination and sample equipment decontamination that will be available during the closure:

  - stainless steel or polyethylene tubs;
  - clean drums/containers for rinsate storage;
  - wash and rinse water;
  - steam cleaner;
  - long handled brush;
  - water sprayer;
  - duct tape;
  - paper towels;
  - trash bags;
  - surgical gloves;
  - hand cleaner;
  - non-phosphate soap;
  - potable water;
  - first-aid kit; and
  - work bench or equivalent work area.

Sample Custody and Laboratory Procedures

The samples collected will be analyzed for the applicable parameters listed in Tables 8-4-2 and 8-4-3, as required by the Closure Plan for the sample type.

Clean Closure Standards

Clean closure standards for liquid samples will be compared to the values developed in compliance with NR 140.

WM Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

TABLE 8-4-2
LIQUID SAMPLES - ANALYTICAL PARAMETERS

Test Parameters / Methods[1]	Analytes (CAS No., Waste Code)	Typical PQLs[2]
Total Metals SW6010/6020 (metals)	Arsenic (As) (7440-38-2, D004) Barium (Ba) (7440-39-3, D005) Cadmium (Cd) (7440-43-9, D006) Chromium (Cr) (7440-47-3, D007) Lead (Pb) (7439-92-1, D008) Selenium (Se) (7782-49-2, D010) Silver (Ag) (7440-22-4, D011)	0.06 (mg/l) 0.05 0.005 0.005 0.005 0.01 0.05
SW7470 (mercury)	Mercury (Hg) (7439-97-6, D009, K071, K106, U151, P092)	0.20 (ppm)
Organic Constituents SW8270 (semi-volatiles organics)	1,4-Dichlorobenzene (106-46-7, D027) 2,4,5-Trichlorophenol (95-95-4, D041) 2,4,6-Trichlorophenol (88-06-2, D042) 2,4-Dinitrotoluene (121-14-2, D030) Chlordane (57-74-9, D020) Cresol (D026) Endrin (72-20-8, D012) Heptachlor (76-44-8, D031) Hexachlorobenzene (118-74-1, D032) Hexachlorobutadiene (87-68-3, D033) Hexachloroethane (67-72-1, D034) Lindane (58-89-9, D013) m-Cresol (108-39-4, D024) Methoxychlor (72-43-5, D014) Nitrobenzene (98-95-3, D036) o-Cresol (95-48-7, D023) p-Cresol (106-44-5, D025) Pentachlorophenol (87-86-5, D037) Toxaphene (8001-35-2, D015)	10 (ppb) 10 10 10 10 10 10 10 10 10 10 10 50
SW8260 (volatiles organics)	Chloroform (67-66-3, D022) 2-Butanone (78-93-3, D035) Carbon Tetrachloride (56-23-5, D019) Benzene (71-43-2, D018) Pyridine (110-86-1, D038) Tetrachloroethene (127-18-4, D039) Chlorobenzene (108-90-7, D921) 1,2-Dichloroethane (107-06-2, D028) Vinyl Chloride (75-01-4, D043) Trichloroethene (79-01-6, D040) 1,1-Dichloroethene (75-35-4, D029)	3 (ppb) 57 2 2 2 3 2 4 3 4
SW8151 Chlorinated Herbicides	2,4,5-TP (Silvex) (93-72-1, D017) 2,4-D (94-75-7, D016)	0.08 (ppb) 0.2

[1]Methods are from Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, USEPA. The latest revisions of each method will be used.

[2]PQLs - Practical Quantitation Limits. These PQLs represent typical laboratory reporting limits for liquids.

Appendix 9 Insurance Documents

CERTIFICATE OF LIABILITY INSURANCE

1/1/2023

DATE (MM/DD/YYYY)
6/17/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	LOCKTON COMPANIES 3657 BRIARPARK DRIVE, SUITE 700 HOUSTON TX 77042 866-260-3538	CONTACT NAME:	
		PHONE (A/C, No, Ext):	FAX (A/C, No):
		E-MAIL ADDRESS:	
		INSURER(S) AFFORDING COVERAGE	NAIC #
		INSURER A : ACE American Insurance Company	22667
INSURED 1300299	WASTE MANAGEMENT HOLDINGS, INC. & ALL AFFILIATED, RELATED & SUBSIDIARY COMPANIES INCLUDING: WASTE MANAGEMENT OF WISCONSIN INC. W132 N 10487 GRANT DRIVE GERMANTOWN WI 53022	INSURER B : Indemnity Insurance Co of North America	43575
		INSURER C : ACE Fire Underwriters Insurance Company	20702
		INSURER D : ACE Property & Casualty Insurance Co	20699
		INSURER E :	
		INSURER F :	

COVERAGES WIGERMAN **CERTIFICATE NUMBER:** 17369339 **REVISION NUMBER:** XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR [X] XCU INCLUDED [X] ISO FORM CG00010413 GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [X] LOC [ ] OTHER:	Y	Y	HDO G72492365	1/1/2022	1/1/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$ 5,000,000 $ 5,000,000 $ XXXXXXX $ 5,000,000 $ 6,000,000 $ 6,000,000 $
A	AUTOMOBILE LIABILITY [X] ANY AUTO [X] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY [X] MCS-90	Y	Y	MMT H25550328	1/1/2022	1/1/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$ 1,000,000 $ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX
D	[X] UMBRELLA LIAB [X] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $	Y	Y	XEUG27929242 007	1/1/2022	1/1/2023	EACH OCCURRENCE AGGREGATE 	$ 15,000,000 $ 15,000,000 $ XXXXXXX
B A C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N [N] (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y	WLR C68918595 (AOS) WLR C68918558 (AZ,CA & MA) SCF C68918637 (WI)	1/1/2022 1/1/2022 1/1/2022	1/1/2023 1/1/2023 1/1/2023	[X] PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 3,000,000 $ 3,000,000 $ 3,000,000
A	EXCESS AUTO LIABILITY	Y	Y	XSA H25550286	1/1/2022	1/1/2023	COMBINED SINGLE LIMIT $9,000,000 (EACH ACCIDENT)	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

BLANKET WAIVER OF SUBROGATION IS GRANTED IN FAVOR OF CERTIFICATE HOLDER ON ALL POLICIES WHERE AND TO THE EXTENT REQUIRED BY WRITTEN CONTRACT WHERE PERMISSIBLE BY LAW. CERTIFICATE HOLDER IS NAMED AS AN ADDITIONAL INSURED ON ALL POLICIES (EXCEPT FOR WORKERS' COMP/EL) WHERE AND TO THE EXTENT REQUIRED BY WRITTEN CONTRACT.

CERTIFICATE HOLDER

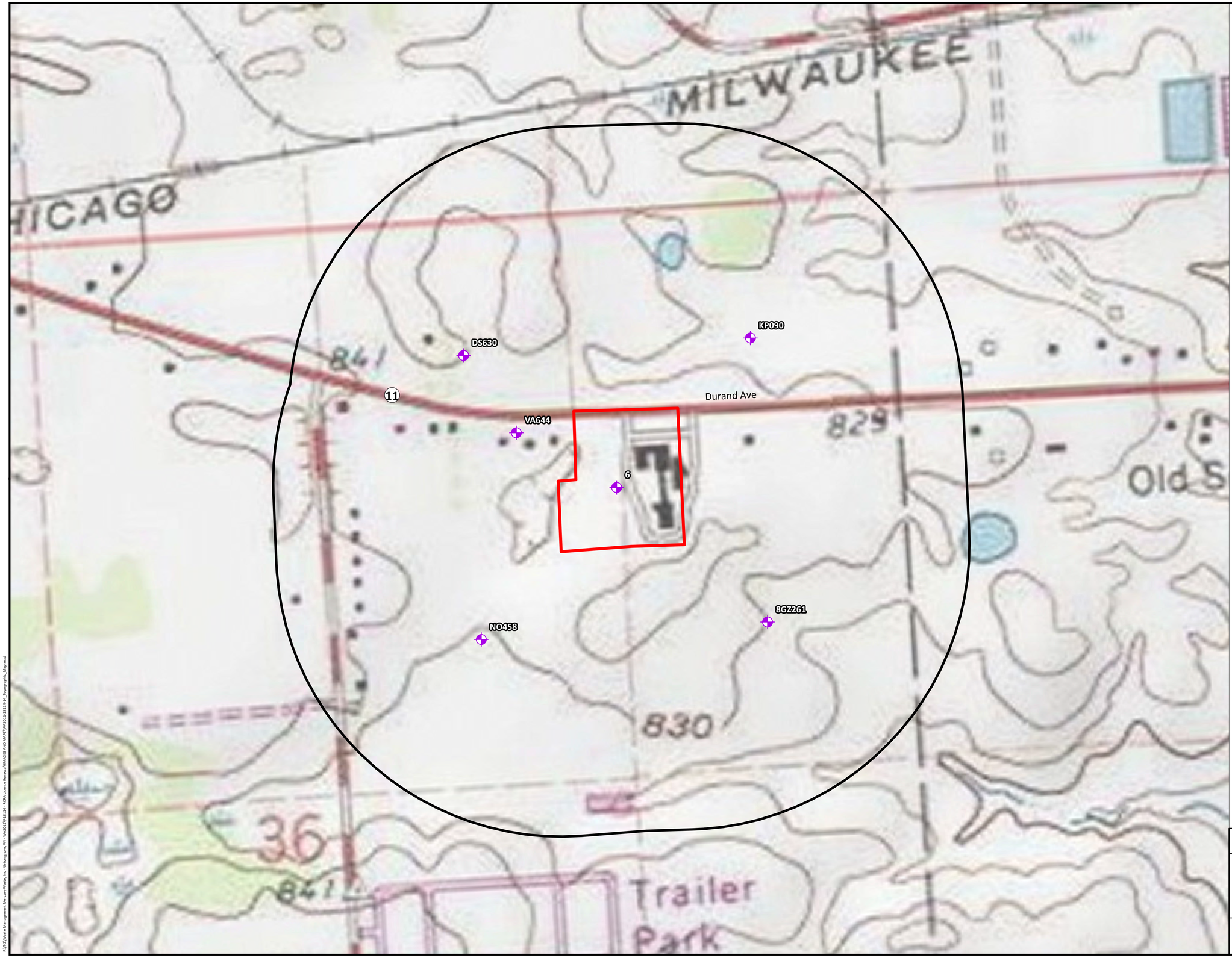
17369339
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
101 S WEBSTER ST
MADISON WI 53707

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Appendix 10 Topographic Map and Wind Rose



N

S

0 200

Feet

Racine County

Legend

- Domestic Water Well
- Facility Boundary
- 1/4-Mile Buffer

USGS 24K Series Topo Map, Union Grove, WI

WM Waste, Inc.
Union Grove, Wisconsin

Topographic Map

Racine County, WI

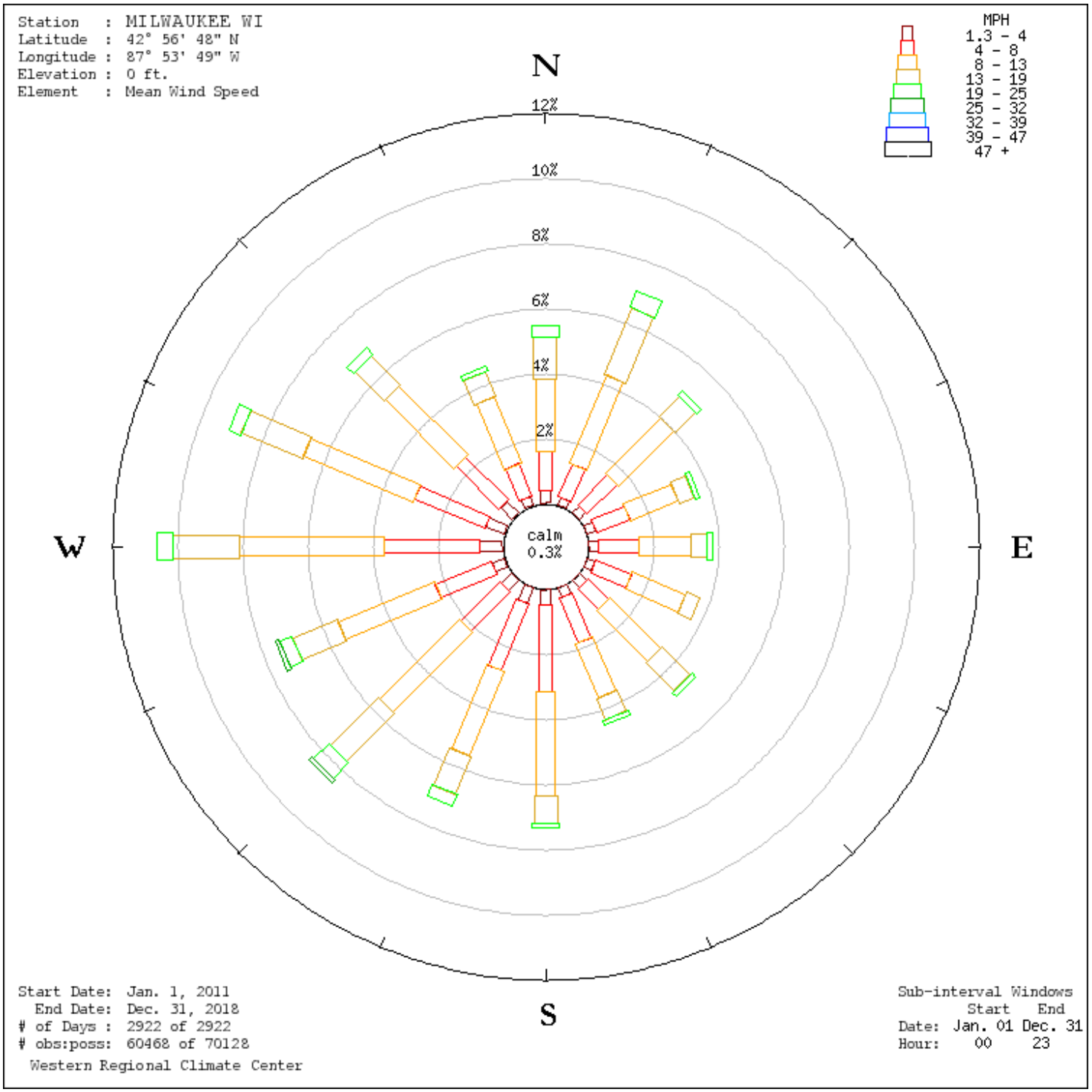
CK Associates Environmental Consultants

Drawn:	CAL	Checked:	BR
Date:	11/19/2020	Approved:	RK
Dwg. No.:	WA5011-18114-14	**Figure 10-1**	

12/21/2021 11:22:57 AM

P:\1-2\Waste Management Mercury Waste, Inc - Union grove, WI - WA5011P18114 - RCRA License Renewal\IMAGES AND MAPS\WA5011-18114-14_Topographic_Map.mxd

MILWAUKEE WI



MILWAUKEE WI - Wind Frequency Table (percentage)

Latitude : 42° 56' 48" N
Longitude : 87° 53' 49" W
Elevation : 0 ft.
Element : Mean Wind Speed

Start Date : Jan. 1, 2011
End Date : Dec. 31, 2018
# of Days : 2922 of 2922
obs : poss : 60468 of 70128

Sub Interval Windows

	Start	End
Date	Jan. 01	Dec. 31

Hour 00 23

(Greater than or equal to initial interval value and Less than ending interval value.)

Range (mph)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
1.3 - 4	0.4	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.5	0.5	0.4	0.4	0.7	0.6	0.5	0.3	6.0
4 - 8	1.2	1.1	1.3	1.1	1.2	1.2	0.9	1.5	2.7	2.2	1.7	1.9	2.9	2.3	1.9	1.1	26.2
8 - 13	2.2	2.9	2.4	1.6	1.6	1.8	2.2	1.8	3.2	2.8	3.5	3.2	4.4	3.7	3.0	2.2	42.4
13 - 19	1.3	2.2	0.9	0.5	0.5	0.4	1.2	0.7	0.9	1.3	2.1	1.5	2.1	2.0	1.3	0.8	19.5
19 - 25	0.4	0.5	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.4	0.7	0.4	0.5	0.4	0.3	0.1	4.7
25 - 32	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.7
32 - 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 - 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47 -	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total(%)	5.5	7.0	5.0	3.7	3.8	3.7	4.8	4.5	7.3	7.2	8.4	7.5	10.7	9.1	6.9	4.5	99.6
Calm (<1.3)																	0.3
Ave Speed	11.0	12.1	10.1	9.7	9.4	9.1	10.8	9.5	8.9	10.0	11.4	10.8	10.2	10.5	10.0	10.2	10.3

MILWAUKEE WI - Hourly Wind Statistics Table

Latitude : 42° 56' 48" N
Longitude : 87° 53' 49" W
Elevation : 0 ft.
Element : Mean Wind Speed

Start Date : Jan. 1, 2011
End Date : Dec. 31, 2018
# of Days : 2922 of 2922
obs : poss : 60468 of 70128

Sub Interval Windows

	Start	End
Date	Jan. 01	Dec. 31
Hour	00	23

Time - Time of Day (L.S.T.)
Speed - Average (Scalar) Speed in MPH
U-Vel - East-West Velocity, Positive to East
V-Vel - North-South Velocity, Positive to North
Res Spd - Vector Average (resultant) Speed in MPH
Res Dir - Vector Average (resultant) Direction
Dir Con - Directional Constancy (Res Spd/Speed)
Num Spd - Number of Wind Speed Observations
Num Dir - Number of Wind Direction Observations

Time	Speed	U-Vel	V-Vel	Res Spd	Res Dir	Dir Con	Num Spd	Num Dir
0	7.8	2.7	0.1	2.7	268	0.348	2745	2308
1	7.8	2.8	-0.1	2.8	271	0.359	2745	2331
2	7.7	2.9	-0.2	2.9	274	0.381	2745	2291
3	7.7	2.8	-0.3	2.9	276	0.373	2744	2308
4	7.7	2.8	-0.3	2.8	276	0.364	2745	2332
5	7.8	2.9	-0.3	2.9	277	0.371	2743	2318
6	8.1	2.7	-0.4	2.8	279	0.341	2745	2390
7	8.8	2.8	-0.3	2.8	275	0.317	2743	2469
8	9.7	2.7	-0.2	2.7	275	0.281	2742	2514
9	10.4	2.7	-0.1	2.7	273	0.264	2742	2536

10	11.1	2.5	-0.0	2.5	271	0.225	2740	2567
11	11.6	2.2	0.2	2.2	264	0.190	2744	2599
12	11.9	1.7	0.4	1.7	257	0.143	2744	2625
13	12.2	1.5	0.6	1.6	249	0.129	2739	2629
14	12.4	1.2	0.7	1.4	238	0.111	2743	2661
15	12.1	0.9	0.7	1.2	232	0.098	2744	2673
16	11.7	1.0	0.6	1.2	238	0.099	2741	2676
17	10.7	1.0	0.5	1.1	243	0.101	2739	2641
18	9.7	1.1	0.4	1.2	248	0.122	2744	2612
19	8.8	1.3	0.4	1.3	251	0.152	2742	2537
20	8.4	1.6	0.4	1.7	255	0.201	2743	2479
21	8.1	2.0	0.5	2.1	256	0.261	2743	2392
22	8.0	2.5	0.4	2.5	261	0.311	2742	2347
23	7.9	2.6	0.2	2.6	265	0.331	2741	2328
ALL	9.5	2.1	0.2	2.1	266	0.224	65828	59563

Return to Wind Rose Options
Return to WRCC Home Page

Appendix 11

Plan of Operations and Approval Letter
License 4381

License Renewal Application for Period October 1, 2021 to September 30, 2022 Solid Waste Storage - General Materials Containerized - Non-small non-partially exempt - License Number: 4381

State of Wisconsin - Department of Natural Resources
Waste and Materials Management Program
Form Number 4400 - 115 (Rev Date: 04/2018)

For Questions Contact:
Jennifer Bowen
Jennifer.Bowen@wisconsin.gov
(608) 800-2917

WM WASTE INC
21211 Durand Ave
Union Grove WI 53182-9711

Facility Identifiers
FID: 252195350
EPA ID: WIR000000356

STEVEN SMOLKO
21211 Durand Ave
Union Grove WI 53182-9711
SSMOLKO@WM.COM
(262) 498-3072

To update the contact information click:
Contact Update Form

FORM DUE UPON RECEIPT

To renew this license, select "Yes". If not renewing, select "No". (●) Yes ( ) No

Waste Types - Review and Update As Needed

Code	Description
W180	CONTAMINATED SOIL
W410	INDUSTRIAL
W485	MERCURY VAPOR LAMPS

Service Areas

If you provide the service for which you are being licensed for the entire state of Wisconsin select "Yes". If you do not provide services statewide, select "No". (●) Yes ( ) No

Renewal Fee

Base Fee: 550.00

Total Renewal Fee:

Certification for Renewal

I hereby certify that the information provided is true and accurate to the best of my knowledge and belief. ☒

Submission Detail

E-mail address: ssmolko@wm.com

WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

WASTE MANAGEMENT®

April 22, 2014

Ken Hein
Waste Management Specialist
Wisconsin Dept. of Natural Resources
2300 N Dr Martin Luther King Jr Dr
Milwaukee, WI 53212

Subject: **WM Mercury Waste Solutions, Inc.**
Modifications to Solid Waste Storage Facility License #4381
Additional Liquid Storage Request

Dear Mr. Hein:

WM Mercury Waste, Inc (WMMWI) is a mercury reclamation facility located in Union Grove, Wisconsin, and is a hazardous waste facility (EPA ID WIR000000356) licensed pursuant to NR 664 for the treatment and storage of hazardous waste prior to recycling. Pursuant to that license, the WDNR has approved of a Feasibility and Plan of Operations Report for this facility for the storage of hazardous wastes through August 2012. Recycling operations (retort oven operations) at the WMMWI facility are exempt from Resource Conservation and Recovery Act (RCRA) licensing pursuant to NR the recycling exemption found in NR 661.06 (3) (b).

Most of the wastes processed by WMMWI are classified as hazardous waste. Typical wastes processed at the WMMWI facility include mercury-containing devices, mercury-contaminated equipment and soil, and aqueous mercury wastes. A small fraction of incoming wastes, however, are classified as solid waste (non-hazardous waste) for various regulatory reasons such as testing below the hazardous waste regulatory limits or because the wastes have been reclassified per some regulatory authority to be managed as solid wastes (e.g. characteristic by-product being reclaimed (NR 661.02 (3) c), characteristic sludge being reclaimed (NR 661.02 (3) c), etc.).

Under WDNR Solid Waste Administrative Code, NR 502.04 and .07, applicants must provide specific information to WDNR for review for authorization to operate a solid waste storage facility. That information was provided in our previous application modification submittal that was approved on April 2, 2013 (see Attachment 1 for March 22, 2013 modification).

This letter requests modifications to our existing Solid Waste Storage Facility License. Table 1 lists the solid waste storage areas approved with the April 2, 2013, authorization.

Table 1
Storage Areas Approved on April 2, 2013

Area Designation	Licensed for Hazardous Waste Storage	Container Types	Liquid Wastes	Indoor Outdoors	Area Capacity
S-1	Y	Containers	Y	Indoors	520 55-gallon drum equivalents
S-7	Y	Containers Roll-Offs	N	Indoors	20 cubic yard box equivalents
S-8	Y	Roll-Offs	N	Indoors	120 cubic yard equivalents
S-12, 13, and 14	Y	Roll-Offs	N	Indoors (shed roof)	340 cubic yard equivalents
Receiving Dock	N	Containers	N	Indoors	120 55-gallon drum equivalents
South Building	N	Containers	N	Indoors	400 55-gallon drum equivalents

WMMWI is requesting authorization to store liquid solid wastes in two additional previously approved storage areas. Table 2 below reflects the storage authorization modification request. WMMWI is proposing to store liquids in either Storage area S-8 or the South Building. WDNR administrative code (NR 502.05(8)(m)) requires that an applicant describe how liquids will be contained.

> *NR 502.05(8)(m) A discussion of design features and logic including the equipment capacity or size. Information shall be included to justify the size and configuration of the receiving area; methods of handling wastes containing free liquids resulting from operations such as floor drains, sewers and water treatment facilities; sizing of storm water drainage control structures; design life of any building and facility equipment; and methods of screening the facility from the surrounding area.*

Table 2
Proposed Modification for Storage Areas

Area Designation	Licensed for Hazardous Waste Storage	Container Types	Liquid Wastes	Indoor Outdoors	Area Capacity
S-1	Y	Containers	Y	Indoors	520 55-gallon drum equivalents
S-7	Y	Containers Roll-Offs	N	Indoors	20 cubic yard box equivalents
S-8	Y	Roll-Offs	Y	Indoors	120 cubic yard equivalents
S-12, 13, and 14	Y	Roll-Offs	N	Indoors (shed roof)	340 cubic yard equivalents
Receiving Dock	N	Containers	N	Indoors	120 55-gallon drum equivalents
South Building	N	Containers	Y	Indoors	400 55-gallon drum equivalents

WMMWI will provide secondary containment for any stored solid waste liquid containers. Portable berms will be used when solid wastes require on-site storage. Portable berms provide a durable and protective means of containing liquids. WMMWI is committed to providing the same containment volume as is required under the hazardous waste regulations for solid wastes. A minimum of 10 percent of the total volume stored and greater than the largest single container stored will be maintained. A specification sheet and drawing of an example portable berm are provided for your review in Attachment 2.

At some point in the future, WMMWI may decide to install permanent meeting the same secondary containment specification identified above.

WMMWI appreciates your assistance on this issue. Please contact me at (262-878-2599) with questions or comments regarding the modification request.

Sincerely,

Joseph P. Carruth
Environmental Manager
WM Mercury Waste, Inc.

Electronic CC

Mike Ellenbecker, WDNR
Pat Baskfield, Senior Manager Operations, WMMWI
Greg Holtzen, Operations Manager, WMMWI

Attachment 1

March 22, 2013 Solid Waste Storage Modification Request

WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, Wisconsin 53182-9711
800.741.3343 or 262.878.2599
262.878.2699 Fax

WASTE MANAGEMENT®

March 22, 2013

Ken Hein
Waste Management Specialist
Wisconsin Dept. of Natural Resources
2300 N Dr Martin Luther King Jr Dr
Milwaukee, WI 53212

Subject: **WM Mercury Waste Solutions, Inc.**
Modifications to Solid Waste Storage Facility License #4381

Dear Mr. Hein:

WM Mercury Waste, Inc (WMMWI) is a mercury reclamation facility located in Union Grove, Wisconsin, and is a hazardous waste facility (EPA ID WIR000000356) licensed pursuant to NR 664 for the treatment and storage of hazardous waste prior to recycling. Pursuant to that license, the WDNR has approved of a Feasibility and Plan of Operations Report for this facility for the storage of hazardous wastes through August 2012. Recycling operations (retort oven operations) at the WMMWI facility are exempt from Resource Conservation and Recovery Act (RCRA) licensing pursuant to NR the recycling exemption found in NR 661.06 (3) (b).

Most of the wastes processed by WMMWI are classified as hazardous waste. Typical wastes processed at the WMMWI facility include mercury-containing devices, mercury-contaminated equipment and soil, and aqueous mercury wastes. A small fraction of incoming wastes, however, are classified as solid waste (non-hazardous waste) for various regulatory reasons such as testing below the hazardous waste regulatory limits or because the wastes have been reclassified per some regulatory authority to be managed as solid wastes (e.g. characteristic by-product being reclaimed (NR 661.02 (3) c), characteristic sludge being reclaimed (NR 661.02 (3) c), etc.).

WMMWI submitted an initial Solid Waste License Processing Exemption application in January 2010 that has been modified several times since original issuance. WDNR last approved the exemption on April 25, 2012. This exemption applies to solid waste recycled on-site and shipped off-site for further processing.

This letter requests revisions to our existing Solid Waste Storage Facility License issued on March 11, 2005. As a hazardous waste facility, WMMWI currently has authorization to bulk hazardous wastes and ship them off-site for downstream processing. Under WDNR Solid Waste Administrative Code, NR 502.04 and .07, applicants must provide specific information to

WDNR for review for authorization to operate a solid waste storage facility. WMMWI is providing the documents listed below in support of this request for adding solid waste storage capacity.

1. This cover letter with a description of the proposed solid waste storage facility design and operation;
2. Pertinent attachments;
    A. 2005 Solid Waste Storage Authorization (Attachment 1);
    B. Regional Map (Attachment 2);
    C. Site Storm Water Flow (Attachment 3);
    D. Site Plan with Proposed Solid Waste Storage Areas identified (Attachment 4);

WMMW requests to maintain its current solid waste storage authorization for the storage of PCB and non-PCB ballasts. The ballast are currently stored in the East building. The current 2005 authorization does not require that WMMWI store the ballast in a specific area, but does limit the amount stored on site.

Description of Proposed Facility
WMMWI proposes to expand its Solid Waste Storage Facility to receive, store, and bulk containerized solid waste into roll-offs, tanker trucks, and container trucks for off-site disposal. The functional areas associated with the proposed expanded operation are shown on the site plan provided as Attachment 4. These functional areas are also listed in Table 1, below.

Area Designation	Licensed for Hazardous Waste Storage	Container Types	Liquid Wastes	Indoor Outdoors	Area Capacity
S-1	Y	Containers	Y	Indoors	520 55-gallon drum equivalents
S-7	Y	Containers Roll-Offs	N	Indoors	20 cubic yard box equivalents
S-8	Y	Roll-Offs	N	Indoors	120 cubic yard equivalents
S-12, 13, and 14	Y	Roll-Offs	N	Indoors (shed roof)	340 cubic yard equivalents
Receiving Dock	N	Containers	N	Indoors	120 55-gallon drum equivalents
South Building	N	Containers	N	Indoors	400 55-gallon drum equivalents

Containers received from off-site will be off-loaded at the main dock and stored in one of the authorized solid waste storage areas to await transfer for into a roll-off box, tanker truck, or maintained in the container that is was received in for off-site transfer.

Six areas have been designated for storage for solid wastes. Table 1 provides information on each of these areas. Only Licensed Storage Area S-1 will be used for liquid solid wastes. Licensed Storage Area S-1 is designed with secondary containment and is licensed for liquid hazardous wastes.

The transfer for solid wastes to a roll-off would take place in the recently constructed area designated under the WMMWI Hazardous Waste License as Storage Area S-8. S-8 is a storage area authorized in the WMMWI Hazardous Waste Storage License to store hazardous waste roll-offs. The area is totally enclosed and measures approximately 40 feet by 80 feet. Three overhead doors allow for roll-offs to be easily placed into and removed from the building. Additionally, S-8 is under negative pressure and is served by a new ventilation system to assure complete containment of any types of emissions from the materials managed in this area.

Once the containerized waste is transferred into a roll-off, the roll-off would be moved out of S-8 into one of the roll-off sheds (S-12, S-13, and S-14) located just south of the West Building. These roll-off sheds are also authorized by the WMMWI Hazardous Waste Storage License for roll-off storage. Per the hazardous waste requirements, these areas have sealed concrete and trenching to provide for secondary containment and a roof. When a roll-off is filled, it will be transported off-site with a licensed hauler to a recycling or disposal facility.

The transfer of liquid wastes to a tanker truck would take place in the main dock area or in Licensed Storage Area S-8. Containerized liquid wastes would be pumped from containers into tanker trucks.

WMMWI appreciates your assistance on this issue. Please contact me at (262-878-2599) with questions or comments regarding the modification request.

Sincerely,

Joseph P. Carruth
Environmental Manager
WM Mercury Waste, Inc.

Electronic CC

Mike Ellenbecker, WDNR
Pat Baskfield, General Manger, WMMWI
John Kendall, Operations Manager, WMMWI

Attachment 1

2005 Solid Waste Storage Authorization

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
Gloria L. McCutcheon, Regional Director

Sturtevant Service Center
9531 Rayne Rd
Sturtevant, Wisconsin 53177
Telephone 262-884-2300
FAX 262-884-2306
TTY Access via relay - 711

March 11, 2005

FID#: 252195350
Lic#: 4381
SW APP

Mr. Joseph Carruth
Mercury Waste Solutions, Inc.
21211 Durand Avenue
Union Grove, WI 53182-9711
(262) 878-2599

SUBJECT: Plan of Operation Approval Modification for a Containerized Solid Waste PCB Ballast and Non-PCB Ballast Storage Facility.
Mercury Waste Solutions, Inc.
License # 4381

Dear Mr. Carruth:

The Department has completed its review of your letter dated December 10, 2004 requesting to modify the March 4, 1999 plan of operation report. The letter requested changing the ballast operation from processing of PCB ballast and storage of PCB and non-PCB ballasts to only the storage of PCB and non-PCB ballasts.

Based on the Department's review, the Department has determined that the plan of operation is consistent with Wisconsin's solid waste regulations. If implemented in accordance with the approved plans and this approval, the plan of operation will be compatible with environmentally acceptable construction, operation, and monitoring of this facility. Therefore, the plan of operation is approved, subject to compliance with chapter NR 157 and chapters NR 500 to 538, Wis. Adm. Code, and the conditions in this approval.

If you have any questions about this approval, please call Mike Ellenbecker at (262) 884-2342.

Sincerely,

Frances M. Koonce

Frances M. Koonce
Waste Management Team Leader
Southeast Region, WDNR

Cc: SER file

PROJECT SUMMARY

Authorized Contact
Mr. Joseph Curruth
Director of Environmental Affairs
Mercury Waste Solutions, Inc.
21211 Durand Avenue
Union Grove, WI 53182-9711
Phone # (262) 878-2599

Licensee and Facility Owner
Mercury Waste Solutions, Inc.

Location of Facility
21211 Durand Avenue
Union Grove, WI 53182-9711

Generators Served
The solid waste storage facility typically receives wastes from the Midwest.

Storage Capacity
PCB Ballast Storage area has a capacity of forty (40) 55-gallon drums.
Non PCB Ballast Storage area has a capacity of forty (40) 55-gallon drums.

Facility Operation
Mercury Waste Solution picks up and receives PCB ballasts and Non-PCB Ballast from their client's facilities. The PCB ballasts and Non-PCB Ballast are then consolidates into larger shipments at the site and then shipped to an EPA-approved processing and incineration facility for destruction.

BEFORE THE
STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

CONDITIONAL PLAN OF OPERATION APPROVAL MODIFICATION SOLID WASTE CONTAINERIZED SOLID WASTE PCB BALLAST AND NON-PCB BALLAST STORAGE FACILITY MERCURY WASTE SOLUTIONS, INC. UNION GROVE, WISCONSIN LICENSE # 4381

FINDINGS OF FACT

The Department finds that:

1) Mercury Waste Solutions, Inc. owns and operates a solid and hazardous waste storage facility located at 21211 Durand Avenue, Union Grove, Wisconsin.

2) On July 23, 1998 Mercury Waste Solutions, Inc. submitted a request for an exemption under s. 289.53, Wisconsin Statutes to store and dismantle PCB and non-PCB ballasts. The request describes how Mercury Waste Solutions, Inc. will accept and handle PCB and non-PCB ballasts.

3) The Department issued to Mercury Waste Solutions, Inc. a conditional exemption approval document dated March 4, 1999 for the storage and dismantling of PCB and non-PCB ballasts.

4) On December 10, 2004, the Department received a loose-leaf report prepared by Joseph Carruth of Mercury Waste Solutions, Inc. dated December 10, 2004. The report request a change from a processing and storage facility of PCB and non-PCB ballasts to only a storage facility of PCB and non-PCB.

5) On March 10, 2005, the Department received a fax prepared by Joseph Carruth of Mercury Waste Solutions, Inc. dated March 10, 2005. The fax stated that there would be no secondary containment for the ballast storage area.

6) Additional documents considered in review of the plan of operation include the following:
   a) A May 28, 1997 letter from Mercury Waste Solutions, Inc. entitled "***Exemption from PCB Storage Facility Requirements***".
   b) A May 11, 1998 Department correspondence entitled "***PCB Storage License Inspection 2/4/98***".
   c) A November 18, 1997 Department letter entitled "***Notice of Incompleteness of a PCB Storage Facility License Exemption Request Mercury Waste Solutions, Inc., (MWS) EPA I.D.# - WIR000000356***".
   d) A November 24, 1997 letter from Mercury Waste Solutions, Inc. entitled "***Responses to the Notice of Incompleteness for PCB Storage Facility License Exemption Request***".
   e) A February 3, 1998 letter from Mercury Waste Solutions, Inc. entitled "***PCB Ballast Storage Area***".
   f) A February 25, 1998 Department approval letter entitled "***Proposed PCB Ballast Accumulation Mercury Waste Solutions, Inc., 21211 Durand Avenue, Union Grove, WI 53182 EPA I.D. # - WIR000000356***".
   g) A July 6, 1998 letter from Mercury Waste Solutions, Inc. entitled "***Exemption Condition Requiring PCB Shipments to be accompanied by WI Manifest***".
   h) A July 23, 1998 letter from Mercury Waste Solutions, Inc. entitled "***Modifications to PCB Storage Exemption***".

i) An August 3, 1998 letter from Mercury Waste Solutions, Inc. entitled "***Additional information on Proposed PCB Processing and Battery Sorting Operations***".
j) A November 11, 1998 Department correspondence entitled "***PCB Storage Modification***".
k) A December 29, 1999 document from Mercury Waste Solutions, Inc. entitled "***Mercury Waste Solutions, Inc. – Protocol #OPS – 001C (Ballast) Ballast Receipt, Storage, & Separation***".

7) The Department is imposing special conditions to protect human health and the environment and ensure that record keeping and reporting is adequate.

8) The conditions set forth below are needed to assure that the handling and storage of PCB and non-PCB ballasts at Mercury Waste Solutions, Inc. is conducted in compliance with chapters NR 500 to 538, Wis. Adm. Code.

CONCLUSIONS OF LAW

1) The Department has authority under s. 289.30, Stats., to modify a plan of operation approval if it would not inhibit compliance with chapters NR 500-538, Wis. Adm. Code.

2) The Department has authority to approve a plan of operation with special conditions if the conditions are needed to ensure compliance with chapters NR 500-538, Wis. Adm. Code.

3) The conditions of approval set forth below are needed to ensure compliance with chapter NR 157 and chapters NR 500-538, Wis. Adm. Code.

4) In accordance with the foregoing, the Department has authority under chapter 289, Stats., to issue the following conditional plan of operation approval modification.

CONDITIONAL PLAN OF OPERATION APPROVAL MODIFICATION

The Department hereby approves the plan modification request dated December 10, 2004 to modify PCB and Non-PCB Ballast handling as identified in the plan of operation report dated July 23, 1998 and approved by the Department on March 4, 1999, subject to compliance with the provisions of chapters NR 500-538, Wis. Adm. Code, and the following conditions:

The Department retains the jurisdiction to either require the submittal of additional information or to modify this approval at any time if, in the Department's opinion, conditions warrant further modifications. Unless specifically noted, the conditions of this approval do not supersede or replace any previous conditions of approval for this facility.

1. Conditions 1 through 17 of the March 4, 1999 approval document entitled "*Proposed PCB Ballast Storage and Processing Mercury Waste Solutions, Inc., 21211 Durand Avenue, Union Grove, WI 53182 EPA I.D. # - WIR000000356*" are hereby rescinded.

2. All ballast shall be stored in containers.

3. Ballast storage and repacking/consolidation shall be conducted inside on a sealed floor.

4. Containers shall be dated with the date that the ballast arrived at the facility. Containers containing multiple shipments of ballast shall use the earliest date that the ballast arrived at the facility.

5. Ballast shall not be stored on-site for more than one year

6. Spills/releases from ballast storage and handling shall be managed in accordance with Mercury Waste Solutions' Inc., hazardous waste contingency plan.

7. PCB ballast storage is limited to no more than forty (40) 55-gallon drums or equivalent.

8. Non-PCB ballast storage is limited to no more than forty (40) 55-gallon drums or equivalent.

9. Mercury Waste Solutions, Inc. shall pay the plan review fee of one thousand six hundred fifty US dollars ($1650.00) to the Department by April 11, 2005.

10. Mercury Waste Solutions, Inc. shall pay the license fee of five hundred fifty US dollars ($550.00) to the Department by April 11, 2005.

NOTIFICATION OF APPEAL RIGHTS

If you believe you have a right to challenge this decision made by the Department, you should know that Wisconsin statutes, administrative codes and case law establish time periods and requirements for reviewing Department decisions.

To seek judicial review of the Department's decision, sections 227.52 and 227.53, Stats., establish criteria for filing a petition for judicial review. Such a petition shall be filed with the appropriate circuit court and shall be served on the Department. The petition shall name the Department of Natural Resources as the respondent.

Dated: March 11, 2005

DEPARTMENT OF NATURAL RESOURCES
For the Secretary

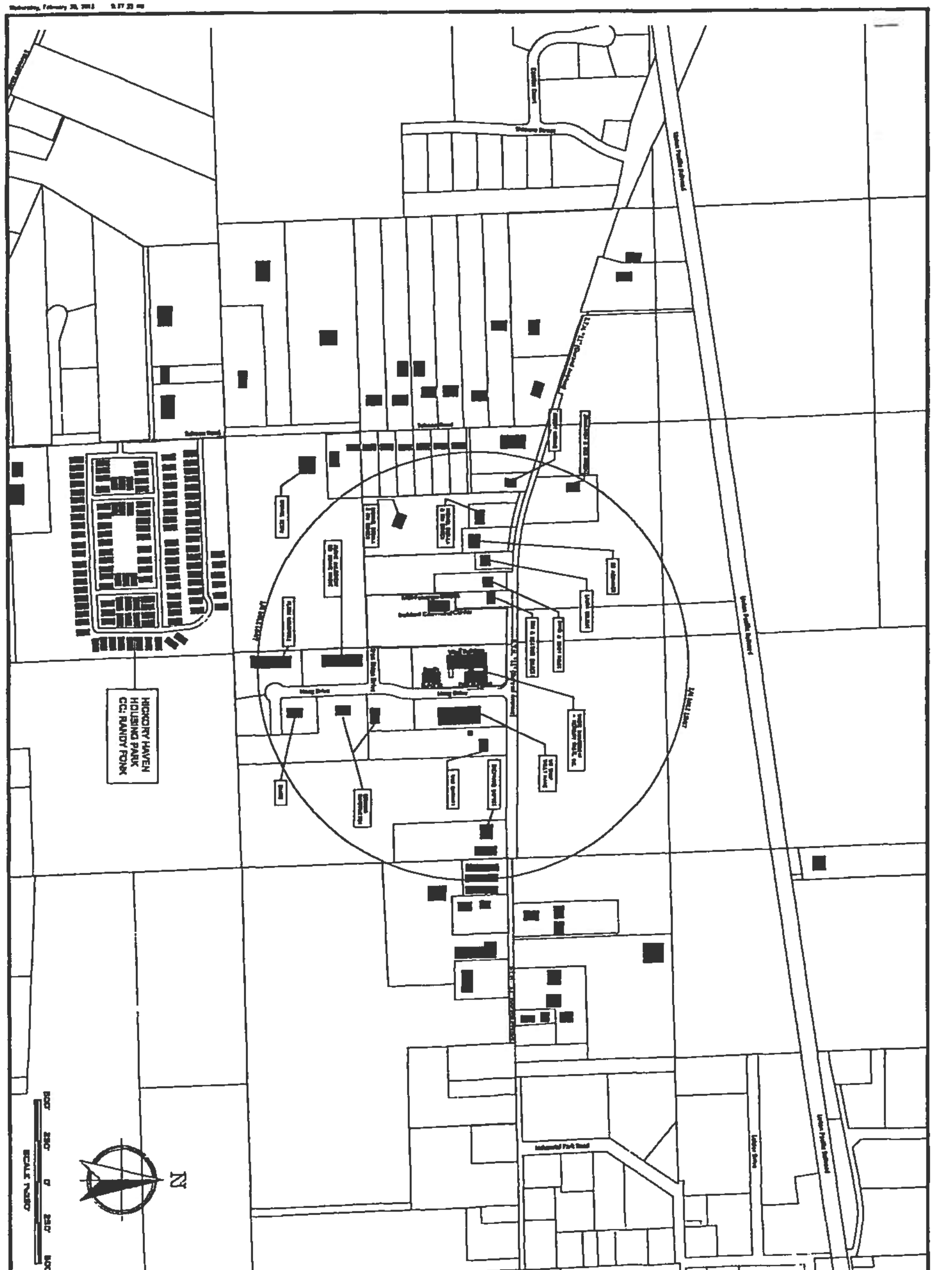
Frances M. Koonce

Frances M. Koonce
Waste Management Team Leader
Southeast Region, WDNR

Michael J. Ellenbecker
Waste Management Specialist

Attachment 2

Regional Map



WASTE MANAGEMENT

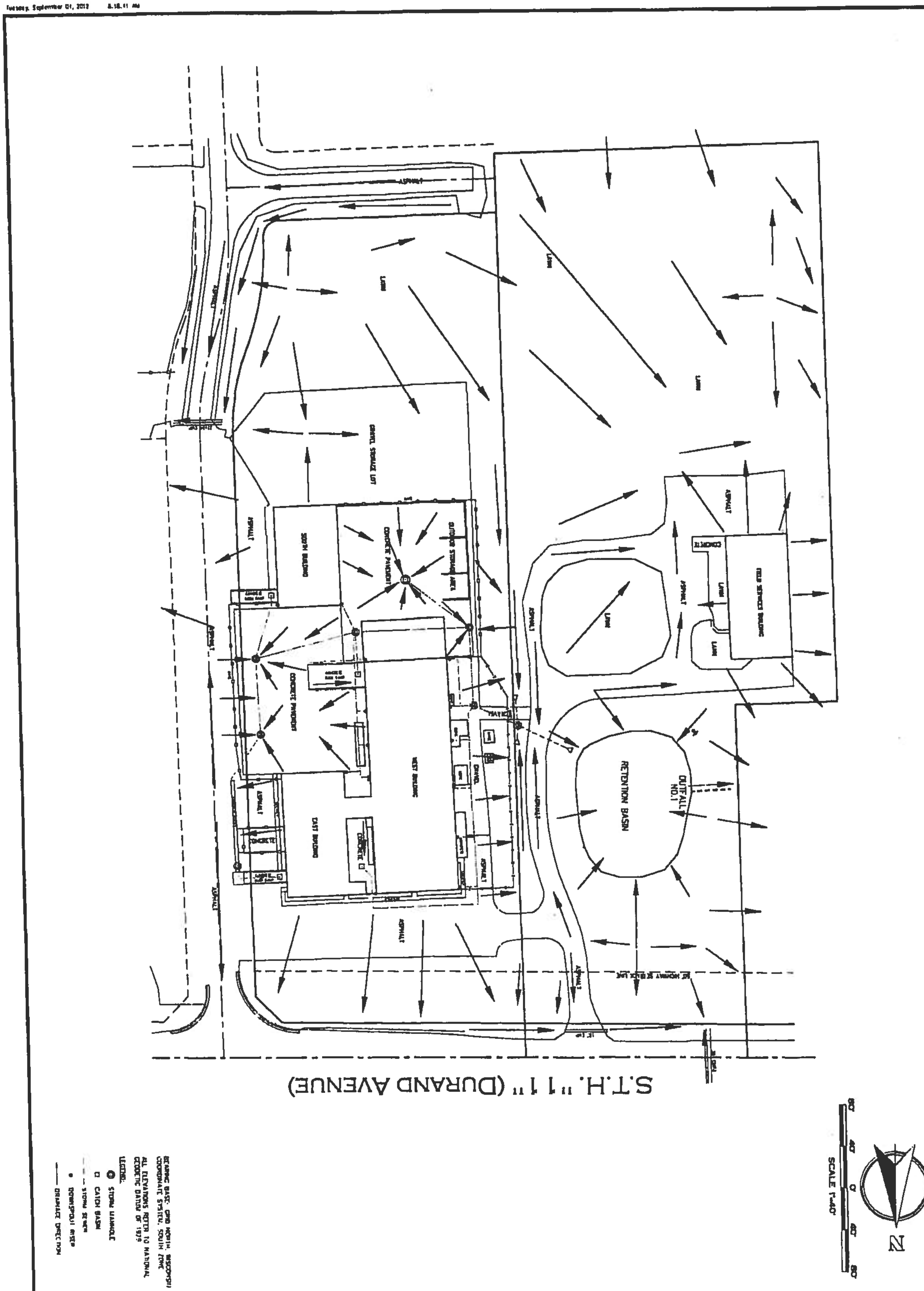
REGIONAL MAP
FOR
WM MERCURY WASTE, INC.
21211 DURAND AVENUE
UNION GROVE, WISCONSIN

Nielsen Madsen & Barber S.C.
Civil Engineers and Land Surveyors
1339 Washington Ave. Racine, WI. 53403
Tele: (262)634-5588 Fax: (262)634-5024
Website www.nmbsc.net

2011.0006.01
SHEET
SWSF-1

Attachment 3

Site Storm Water Flow



SITE PLAN WITH STORM WATER FLOW PATTERN
FOR
WM MERCURY WASTE, INC.
21211 DURAND AVENUE
UNION GROVE, WISCONSIN

WASTE MANAGEMENT

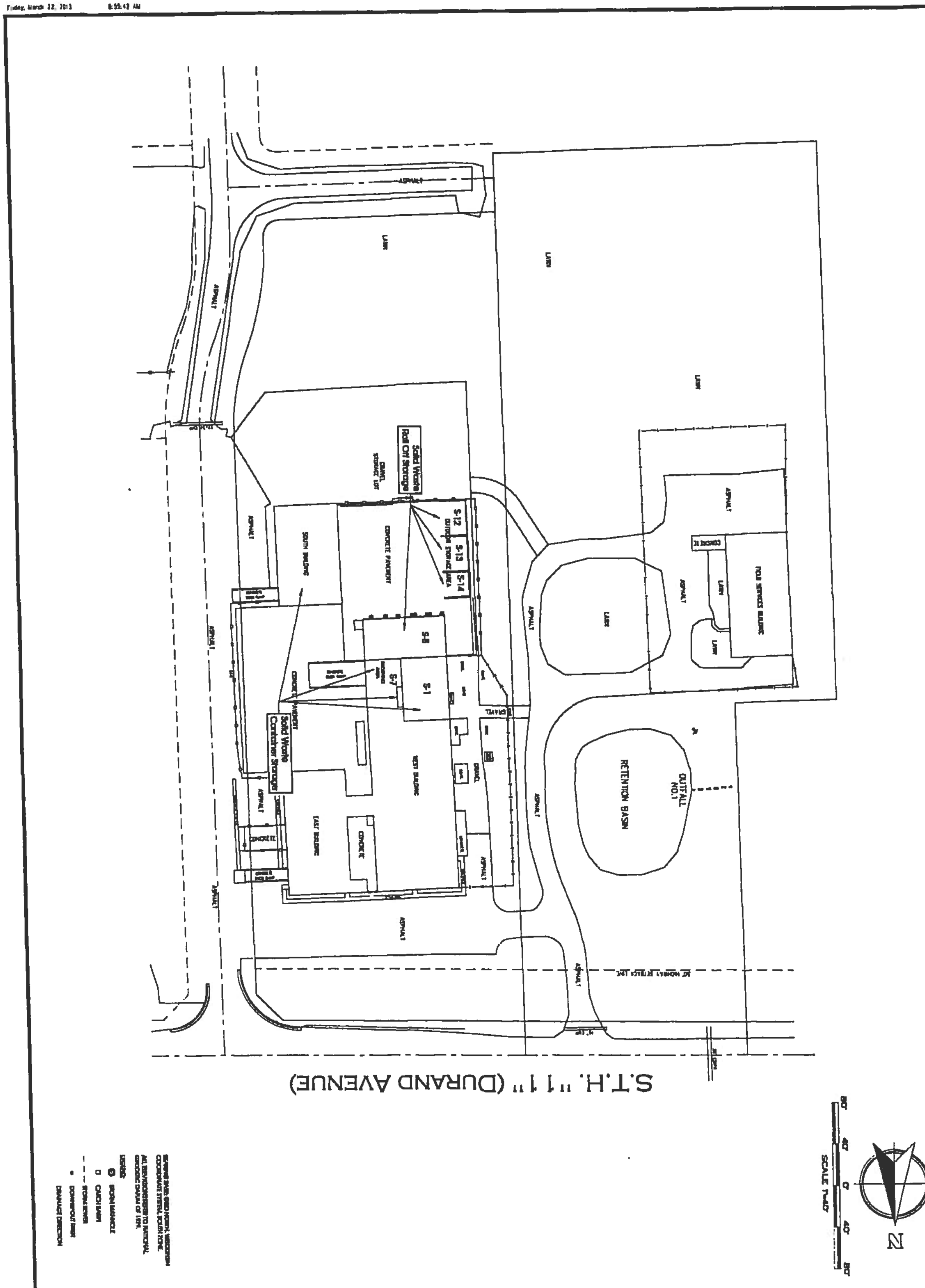
2011.0006.01
SHEET S-3

Nielsen Madsen & Barber S.C.
Civil Engineers and Land Surveyors
1339 Washington Ave. Racine, WI. 53403
Tele: (262)634-5588 Fax: (262)634-5024
Website www.nmbsc.net

Attachment 4

Site Plan

Friday, March 22, 2013 8:55:42 AM



TRANSFER FACILITY OPERATION LOCATIONS
FOR
WM MERCURY WASTE, INC.
21211 DURAND AVENUE
UNION GROVE, WISCONSIN

WASTE MANAGEMENT

Nielsen Madsen & Barber S.C.
Civil Engineers and Land Surveyors
1339 Washington Ave. Racine, WI. 53403
Tele: (262)634-5588 Fax: (262)634-5024
Website www.nmbsc.net

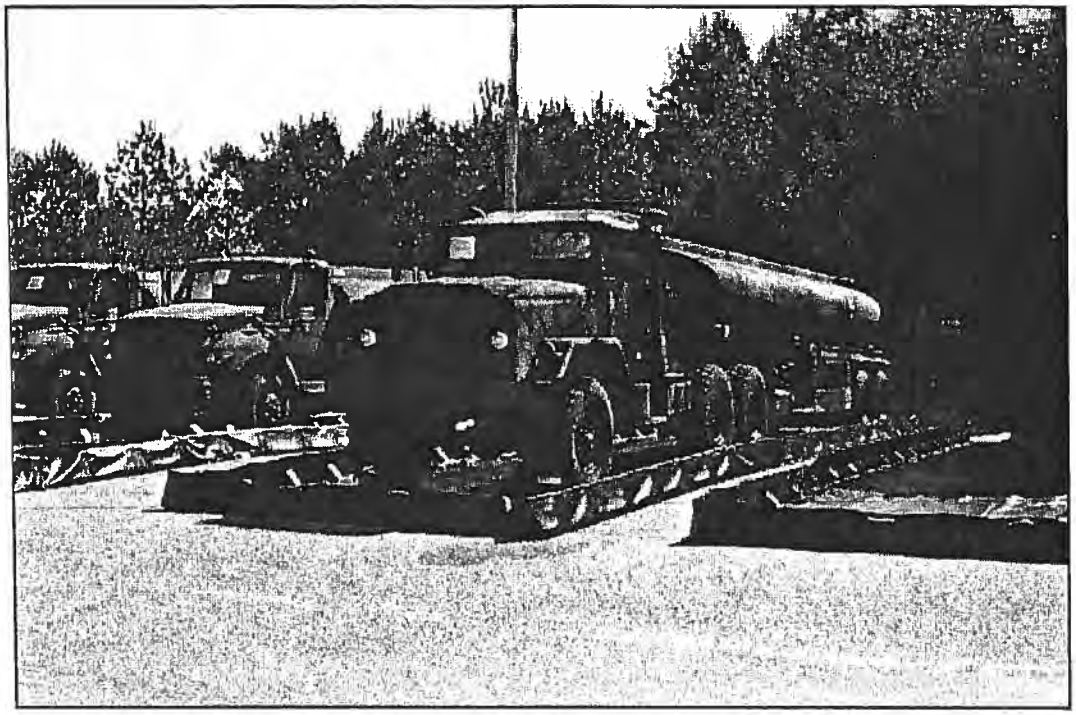
2011.0006.01
SHEET
SWSF-2

Attachment 2

Example Portable Berm Info

BermPac

Portable Spill Berms



Portable secondary containment berms

- One piece pop-up berm is ready to use
- Bracketed berm easily sets up in minutes
- Manufactured with UV and chemically resistant membranes
- Durable and light-weight
- Portable, reusable, and repairable
- Prompt manufacturing lead time
- Custom designs engineered to meet your specific needs

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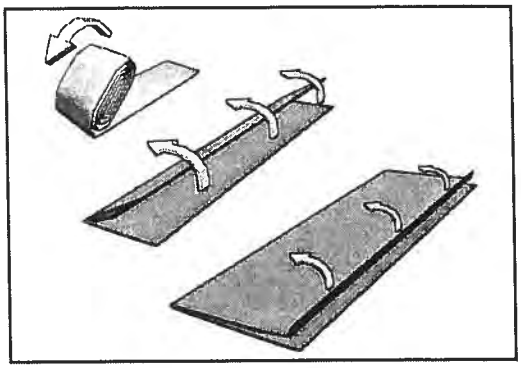
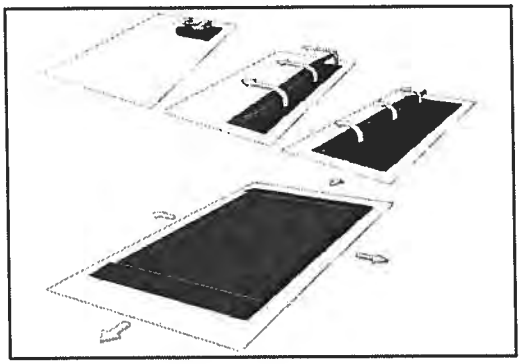
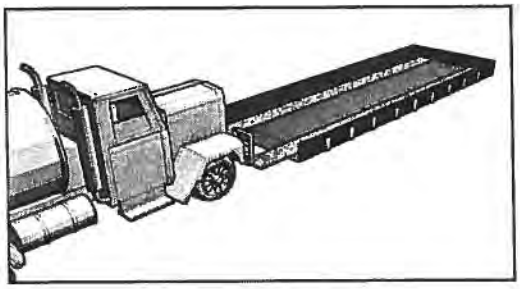
Berm Installation



1. Unpack all components and locate the ground cover. The ground cover is the thick cloth type material. Unfold the ground cover and position it in the desired location.

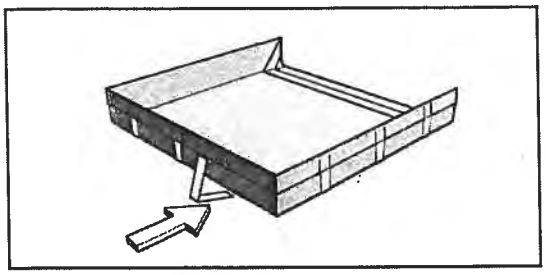


2. Next, locate the spill berm. Unfold the spill berm and center it on top of the ground cover.



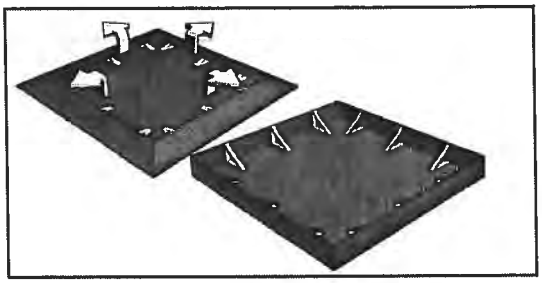
3. If the optional track guard is used, position it on top of the erected berm.

Bracketed Berm

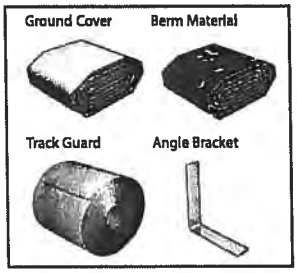


For the bracketed berm, locate the aluminum angle brackets. Insert the angle brackets into the perimeter pockets on three sides of the spill berm. Use the unsupported end for equipment entry. After equipment is in place, insert the angle brackets on the fourth side to complete the installation.

Pop Up Berm



For the InstaBerm, pull all four sidewalls of the spill berm outward so that they are standing upright. Straighten the top angles of the wall supports inside the berm. The walls will move further outward as the berm is filled.



APPLICATIONS

- Roll-off Containers
- Tanker Trucks
- Frac Tanks
- Decon Wash Pads
- Emergency Response
- Drum Storage
- Portable Pumps

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BermPac™

Specifications	40 mil Polyethylene	36 mil Polypropylene	Reinforced Geomembrane	18 oz Vinyl
Weight	11.2 oz/yd^2 (379.7 g/m^2)	25 oz/yd^2 (847.6 g/m^2)	30 oz/yd^2 (1.01 kg/m^2)	18 oz/yd^2 (610.3 g/m^2)
Thickness	40 mil avg (1.01 mm)	36 mil (0.91 mm)	36 mil (0.91 mm)	19.5 mil (0.49 mm)
Puncture Strength	56 lbs (249 N)	300 lbs (1,330 N)	220 lbs (978 N)	430 lbs (1,912 N)
Low Working Temp	-106.6° F (-77° C)	-40° F (-40° C)	-25° F (bend) (-31° C)	-40° F (-40° C)
High Working Temp	160° F (71° C)	170° F (76° C)	180° F (82° C)	158° F (70° C)

Ground Cover and Trackguard

Specifications	8 oz Non-Woven Polypropylene	12 oz Non-Woven Polypropylene	Track Guard	Rubber Matting
Weight	8 oz/yd^2 (271 g/m^2)	12 oz/yd^2 (406.9 g/m^2)	77 oz/yd^2 (2.61 kg/m^2)	77 oz/yd^2 (2.61 kg/m^2)
Thickness	90 mil (2.2 mm)	105 mil (2.6 mm)	106 mil (2.6 mm)	95 mil (2.4 mm)
Puncture Strength	500 lbs (2,224 N)	800 lbs (3,558 N)	N/A	N/A
UV Resistance	70% @ 500 hours	70 % @ 500 hours	N/A	N/A

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
2300 N. Dr. Martin Luther King, Jr. Drive
Milwaukee WI 53212-3128

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

May 2, 2014

FID #: 252195350
Racine County
SW / APP

Mr. Joseph Carruth
WM Mercury Waste, Inc.
21211 Durand Avenue
Union Grove, WI 53182-9711

SUBJECT: Simple plan modification for Additional Solid Waste Storage Locations, Containerized Solid Waste Storage Facility, WM Mercury Waste, Inc., License # 4381

Dear Mr. Carruth:

We have completed review of your request attached to an email dated April 21, 2014 and a follow-up email dated May 2, 2014 showing the storage locations on Attachment 4 of the request. The request identified additional locations to store solid waste under this storage facility license. Based on this review, the requested modification is consistent with Wisconsin's solid waste regulations.

Your request identified two additional indoor locations (Area S-8 and the South Building). There was no increase in the capacity of these two areas and spill containment measures will be provided is liquid solid wastes are stored within these areas.

This letter constitutes authorization to proceed with implementation of your request and should be maintained with previous plan modification approvals dated March 11, 2005 and April 2, 2013.

> Condition #1 of the April 2, 2013 approval is modified to limit storage under this approval to areas S-1, S-8 and South Building.

The Department has authority to modify a plan of operation approval if the modifications would not inhibit compliance with chs. NR 500 to 520, Wis. Adm. Code. This request is acceptable to the Department because it does not affect any essential aspects of landfill design, construction, operation, or closure, nor does it conflict with any specific conditions of approval or specific prohibitions in chs. NR 500 to 520, Wis. Adm. Code or ch. 289, Wis. Stats.

NOTICE OF APPEAL RIGHTS: If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

For judicial review of decisions pursuant to sections 227.52 and 227.53, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate

circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

There is no plan review fee required for review of this request. If you have any questions, please contact Ken Hein at (414) 263-8714 or by e-mail at kenneth.hein@wisconsin.gov.

Sincerely,

Franklin C. Schultz
Waste and Materials Management Program
Southeast Region

cc. SER File

Appendix 12
EJ Screen Report

EJSCREEN Report (Version 2020)

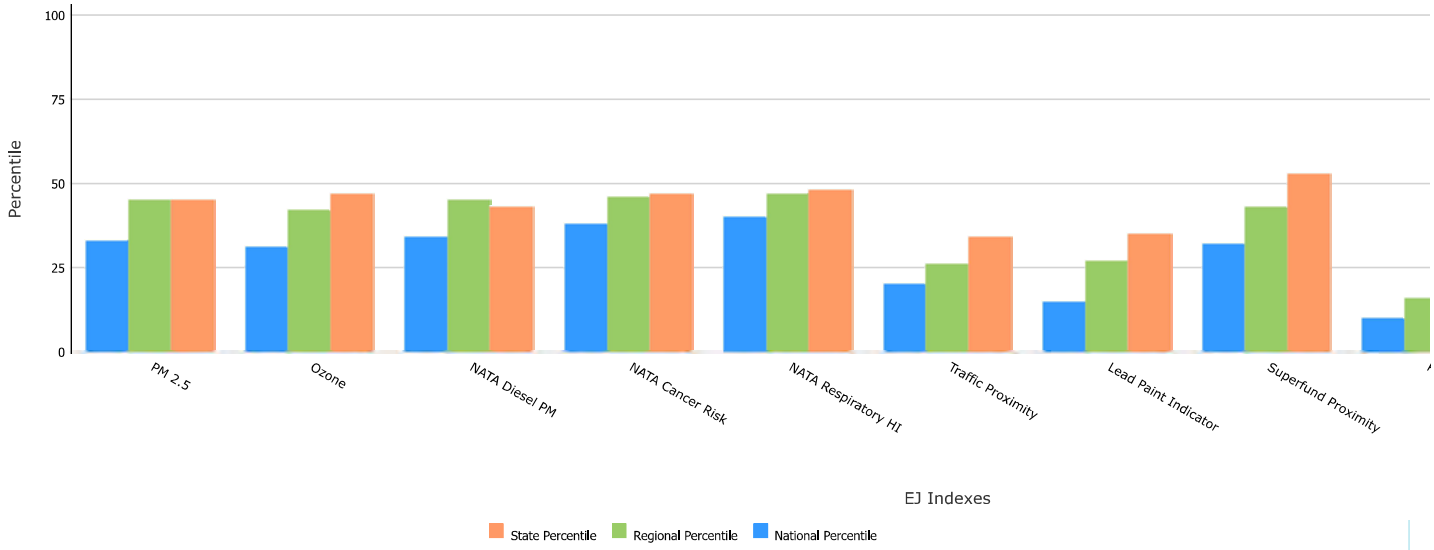
3 mile Ring Centered at
WISCONSIN, EPA Region 5
Approximate Population: 8,096
Input Area (sq. miles): 28.27

EJ Indexes

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
EJ Index for Particulate Matter (PM 2.5)	45	45	33
EJ Index for Ozone	47	42	31
EJ Index for NATA* Diesel PM	43	45	34
EJ Index for NATA* Air Toxics Cancer Risk	47	46	38
EJ Index for NATA* Respiratory Hazard Index	48	47	40
EJ Index for Traffic Proximity and Volume	34	26	20
EJ Index for Lead Paint Indicator	35	27	15
EJ Index for Superfund Proximity	53	43	32
EJ Index for RMP Proximity	22	16	10
EJ Index for Hazardous Waste Proximity	32	35	25
EJ Index for Wastewater Discharge Indicator	44	46	32

EJ Indexes Chart

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US



Map

Environmental Indicators

Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	2

Selected Variables	Value	State		EPA Region		USA	
		Avg.	%tile	Avg.	%tile	Avg.	%tile
Particulate Matter (PM 2.5 in µg/m^3)	7.78	6.92	93	8.4	25	8.55	26
Ozone (ppb)	45	41.6	93	43.8	62	42.9	70
NATA* Diesel PM (µg/m^3)	0.273	0.301	50	0.446	<50th	0.478	<50th
NATA* Air Toxics Cancer Risk (risk per MM)	22	21	61	26	<50th	32	<50th
NATA* Respiratory Hazard Index	0.26	0.27	52	0.34	<50th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	220	600	49	530	55	750	50
Lead Paint Indicator (% pre-1960s housing)	0.33	0.36	54	0.38	52	0.28	65
Superfund Proximity (site count/km distance)	0.047	0.12	30	0.13	40	0.13	40
RMP Proximity (facility count/km distance)	1	0.89	69	0.83	73	0.74	76
Hazardous Waste Proximity (facility count/km distance)	1.1	1.5	59	2.4	47	5	52
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	4.3E-06	1.9	41	2.4	33	9.4	42

*The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

Demographic Indicators

Selected Variables	Value	State		EPA Region		USA	
		Avg.	%tile	Avg.	%tile	Avg.	%tile
Demographic Index	20%	23%	58	28%	47	36%	31
People of Color Population	11%	18%	53	25%	41	39%	23
Low Income Population	26%	28%	53	30%	49	33%	45
Linguistically Isolated Population	0%	2%	61	2%	59	4%	45
Population with Less Than High School Education	9%	8%	67	10%	58	13%	49
Population under Age 5	5%	6%	42	6%	41	6%	40
Population over Age 64	18%	16%	63	16%	64	15%	67

Appendix 13 RCRA Feasibility Assessment (RFA) Report - 2001

RCRA FACILITY ASSESSMENT
MERCURY WASTE SOLUTIONS, INC.

Union Grove, Wisconsin
EPA ID#: WIR000000356
FID#: 252195350

INTRODUCTION

As part of the Resource Conservation and Recovery Act (RCRA), the U.S. Environmental Protection Agency (EPA) or the state of Wisconsin Department of Natural Resources (WDNR) is required to conduct a RCRA Facility Assessment (RFA) at facilities requesting to obtain a RCRA operating permit. The goal of the RCRA Corrective Action process is to identify and correct any releases to the environment at facilities, which manage hazardous waste. An RFA is the first step in the overall corrective action process, and is intended to identify known or potential releases to the environment, and recommend whether additional investigations are necessary. Therefore, this RFA for Mercury Waste Solutions, Inc. (MWSI) examines the waste streams at the plant, identifies Solid Waste Management Units (SWMUs), documents releases which have occurred at the facility, identifies Areas of Concern (AOCs), evaluates all relevant data, and makes recommendations for future actions.

MWSI began operations at the Union Grove site in spring of 1994. On May 15, 2000, WDNR approved a Feasibility and Plan of Operation Report (FPOR) for hazardous waste container storage and tank treatment and storage at MWSI. Hazardous waste operating licenses were issued to MWSI on July 7, 2000, and August 31, 2000. The RFA should have been completed before the initial operating license was issued.

The RFA was prepared in accordance with the U.S. EPA RFA guidance and WDNR Waste Management Program Corrective Action guidance.

A sampling visit to the site was not conducted as part of this RFA. A limited number of soil samples have been collected at this facility to address releases from 2 fires, an explosion, a spill and continuing operations at the facility. On August 14, 2001, MWSI submitted a Hazardous Waste Facility Investigations Task 1 Report. Based upon this and additional information in WDNR's files on MWSI, WDNR has sufficient information available to reach a conclusion on whether MWSI will now be required to conduct the next phase of the Corrective Action process, the RCRA Facility Investigation (RFI).

FACILITY OVERVIEW

Location, Land Use, and Environmental Setting

Location

MWSI is located on an approximately 3-acre site, in the Town of Dover, Racine County, described a part of the NE 1/4 of Section 36, Township 3 North, Range 20 East. The mailing address is 21211 Durand Avenue, Union Grove, Wisconsin 53182. MWSI is on the south side of State Highway 11, approximately 1 1/4 miles west of U.S. Highway 45.

Surrounding Land Use

MWSI is located in a rural industrial park setting west of the Union Grove business district. The property is bounded by agricultural and undeveloped land to the south, industrial properties to the east and west, and Highway 11 and agricultural and undeveloped land to the north. The land to the south is now being developed as an industrial park. (Figure A) The facility is in an area zoned for manufacturing.

Surface Water

No surface water is located within a mile of the facility. The facility property contains no wetlands. The area has been determined to be outside of the 500-year flood plain. (Figure B) The closest domestic waster supply well is approximately 1/3 of a mile to the east. A public water supply well is located approximately 2/3 of a mile to the east.

Geology/Hydrogeology

The property is characterized by a relatively flat topography, sloping gently from south to north. The soil is described as a grained fill consisting of 12% sand, 44% silt and 44% clay. Surficial materials in the area are of the Oak Creek formation.

Facility Manufacturing Processes and Waste Management Operations

MWSI operates a facility for recycling/recovery of metallic mercury from various mercury-contaminated waste streams. Elemental mercury is retorted from the waste and purified for commercial distribution. MWSI began operating at the Union Grove facility in 1994.

The recovery of mercury takes place in one of 4 stationary mercury retort furnaces, a continuous-feed retort furnace, and in a fluorescent bulb crushing/separation unit. These units are regulated under a legitimate recovery or reclamation recycling exemption, s. NR 625.06, Wis. Adm. Code. The retort furnaces are also covered by an exemption from the federal Boiler Industrial Furnace regulations, 40CFR § 266 Subpart H. In order to operate these process units efficiently, and in an environmentally safe manner, MWSI needs to be able to store the mercury-contaminated

waste on-site. Since some of the mercury-contaminated waste is a hazardous waste, MWSI needed to obtain a hazardous waste storage operating license in order to store the mercury-contaminated hazardous waste on-site for longer than 24 hours or longer than the same day on which the waste was received.

On July 6, 2000, WDNR issued a hazardous waste container storage license to MWSI. The container storage license was for 560 fifty-five gallon containers of hazardous waste (a total of 30,800 gallons) in the *Proposed Drum Storage Area* in the arrangement listed in *Appendix 4, Figure 2*, of the FPOR, at a limit of 2 drums high. The container storage license also included a total storage of 136 55-gallon drum equivalents (a total of 7,480 gallons) in the *Oven Batch Storage Area* in the arrangement listed in *Appendix 4, Figure 3*, of the FPOR. This accounted for total container storage of 38,280 gallons, in the hazardous waste container storage license.

On August 30, 2000, WDNR revised the MWSI license to also include two 500-gallon treatment tanks (*Process Tank #1* and *#2*) and one 3,000-gallon storage tank (*Storage Tank #2*); and the *Roll-Off Container Storage Area* which allows for a total storage of one 20 cubic yard roll-off, or 20 one cubic yard boxes (a total of 6,600 gallons). MWSI uses the treatment tanks to make a mercury-contaminated wastewater more amenable for recycling, and the storage tank for storing the treated wastewater.

MWSI also receives special/universal wastes and solid wastes, which are contaminated with mercury. MWSI further refines the mercury that they recover. In another building at the MWSI facility, MWSI handles and processes PCB-contaminated wastes and ballasts.

Hazardous Waste Regulatory History

02/27/94	MWSI notifies WDNR of their intent to begin operations in Union Grove.
11/11/95	WDNR agrees with MWSI's interpretation that the lamp processing operation and the mercury retort furnace qualify for legitimate recovery and recycling exemption.
05/31/96	MWSI submitted a hazardous waste notification form identifying MWSI as a large quantity generator.
06/11/96	WDNR issued to MWSI a notice of noncompliance/return to compliance letter based on an April 23, 1996, site inspection and a June 5, 1996 submittal from MWSI.
06/27/96	WDNR acknowledged that MWSI has authority to operate a continuous feed and a batch retort furnace under a legitimate recovery and reclamation recycling exemption.
05/24/97	MWSI submitted a Part A application.
09/18/97	WDNR visited the MWSI site.
10/17/97	WDNR performed a large quantity generator inspection at MWSI.
09/22/98	MWSI resubmitted the feasibility and plan of operation report (FPOR) for container and tank storage at a level above the small storage limit.
04/03/98	WDNR issued to MWSI a conditional approval of a variance request for on-site storage of hazardous waste.

07/30/98	Blockage in the condenser tanks caused a loss of vacuum in a retort furnace forcing smoke out of an air intake valve on the furnace and excessive smoke exiting the building.
08/30/98	Plugging of the collection system again caused excessive smoke to be released out of the building.
10/14/98	Lithium batteries were placed into a retort furnace causing an explosion and release of contaminated mercury vapor.
10/29/98	WDNR staff along with an OSHA representative visited MWSI to take samples, but had to leave because of high mercury levels inside of the plant.
02/10/99	WDNR issued a Notice of Violation to MWSI, regarding MWSI's operations during the fall of 1998.
03/11/99	A spilled container was discovered in an off-site carrier truck located in the southeast loading dock at MWSI.
03/30/99	WDNR and US EPA performed an inspection at MWSI and observed several areas of violation and mercury and phosphor powder on the floor.
05/14/99	During an inspection, WDNR collected soil samples at MWSI.
05/25/99	WDNR issued to MWSI a variance extension determination, allowing continued storage until June 30, 2000.
07/28/99	WDNR issued a notice of violation to MWSI based on observations during the May 14, 1999, site inspection and several follow-up visits.
09/16/99	WDNR held an enforcement conference with MWSI regarding the July 28, 1999, notice of violation.
09/17/99	WDNR sent a letter to MWSI identifying MWSI as a possible responsible party, who may have discharged mercury to the environment, based on soil sample results obtained from an on-site investigation.
10/05/99	MWSI sent a letter responding to WDNR's letter identifying MWSI as a potential responsible party.
10/07/99	WDNR visited MWSI to observe potential sources and points of contamination.
10/13/99	WDNR collected soil samples at MWSI.
11/22/99	MWSI sent a letter showing test results from samples collected on August 17, 1999, by MWSI. MWSI also sent a letter, which included stack sampling and mercury dispersion modeling results.
01/24/00	MWSI sent a letter to WDNR containing sampling results from an off-site area west of the drainage ditch.
02/09/00	MWSI submitted a revised Part A application and a FPOR for a small container storage facility.
03/07/00	WDNR requests additional information and investigations for determining MWSI status as a responsible party.
03/15/00	WDNR issued to MWSI a notice of completeness, a preliminary determination to conditionally approve the FPOR, and a draft environmental analysis and decision on the need for an environmental impact statement.
04/17/00	MWSI sent a response to WDNR regarding the March 7, 2000, WDNR request for information.
05/15/00	WDNR issued a Feasibility and Plan of Operation Report Determination.

05/24/00	WDNR sent a letter to MWSI saying that MWSI was no longer identified as a potential responsible party.
05/24/00	WDNR approved the closure plan and activities that MWSI had performed in response to requirements in the Stipulation and Agreement.
06/06/00	The Racine County Circuit Court issued a Stipulation and Order of Judgment in regard to the case involving the State of Wisconsin and MWSI.
06/15/00	WDNR performed a large quantity generator and construction inspection at MWSI.
07/06/00	WDNR issued a hazardous waste operating license to MWSI for container storage.
07/26/00	U.S. EPA Region issued a federal RCRA permit to cover the federal portion of the MWSI hazardous waste license.
08/31/00	WDNR revised the MWSI hazardous waste operating license to include tank storage and treatment and additional container storage.
12/22/00	WDNR issued to MWSI a temporary authorization determination regarding inclusion of corrective action in their license.
06/01/01	WDNR issued a notice of violation to MWSI, based on a January 20, 2001, incident regarding the operation of a retort oven. An enforcement conference was held on June 20, 2001. WDNR sent a letter to MWSI summarizing the enforcement conference.
06/18/01	WDNR reissued the temporary authorization determination regarding inclusion of corrective action in their license.
08/02/01	MWSI submitted a Hazardous Waste Facility Investigations Task 1 Report.

This list is not a complete list of contacts between MWSI and WDNR.

Documented Releases

During past inspections of the facility, WDNR has had concerns about the operations at the facility. These concerns included; general maintenance, controlling dust and debris, maintaining cleanliness, keeping containers covered except for filling, controlling emissions during bulking and processing, security, organization of containers, levels of mercury inside the plant, workers safety at the plant, leaving overhead doors open, fugitive emissions, and powder exiting the lamp crusher.

Potential sources of air emissions at MWSI include four stationary mercury retort furnaces, a continuous-feed retort furnace, a bulb crusher, and fugitive emissions from material handling. Mercury is collected in condensers downstream of the mercury retort furnaces. The control equipment downstream from the condensers consists of a steel wool demister, a carbon bed adsorber, and a wet scrubber. The WDNR Air Management Program requested MWSI to perform a set of comprehensive stack tests in June of 2000. The mercury emissions from the stack test showed an emission rate that was less than 7% of the de minimus level in the hazardous air regulations. De minimus level is the level that triggers follow up action to identify whether the emissions need to be controlled or not. All of the pollutants other than VOC's were relatively low. The VOC emissions were above the emission level of 5.7 pounds/hour, indicating MWSI should have obtained a construction permit. The ovens will now have to meet

an emission limit for VOC's. WDNR Air Management has requested MWSI to submit a new permit application as a major source. The permit review will determine the need for additional control equipment.

In the front courtyard the ovens stack exits the building. On cold days the oven air emission discharge would settle on the ground in the courtyard. MWSI is aware of this and routinely has sampled and removed soil from the courtyard for retorting. MWSI has changed the stack so that it now vents vertically at 25 feet.

The WDNR is concerned that air emissions of mercury have impacted the site. Air emissions of mercury may also have settled on the roof and been deposited on the property through roof drains after precipitation events. To address mercury deposition on the roof and the ground, MWSI periodically removes soil beneath downspouts and then runs the soil through a retort furnace. MWSI explains that they take out a set amount of soil, takes confirmation samples, or documents their actions. MWSI doesn't necessarily test the soil.

In the late summer and early fall of 1998, three incidents (two fires and one explosion) occurred at MWSI as a result of the operation of the mercury-retort furnaces.

On the evening of July 30, 1998, blockage in the condenser tanks caused a loss of vacuum in one of the retort ovens. Pressure buildup in the retort oven forced smoke out of the exhaust stack and through an air intake valve on the door. MWSI personnel and the local fire department responded to a call about the excessive smoke coming out of the building. MWSI personnel hooked the exhaust up to another collection system.

Early in the morning of August 30, 1998, loss of vacuum in the retort furnace, because of plugging in the collection system, caused smoke to be released from the air intake valve. MWSI personnel and the local fire department responded to a call about the smoke coming out of the roof vents. MWSI engaged an emergency bypass to vent to an alternate collection system.

On October 14, 1998, MWSI placed lithium batteries into the retort furnace as part of a batch of mercury contaminated waste. Lithium batteries explode when exposed to excessive heat. The lithium batteries in the retort furnace exploded, which blew the door of the oven open and caused a release of mercury contaminated vapor into the work area of the facility and outside of the facility.

In response to those incidents, MWSI has revised, instituted and implemented standard operating procedures at the facility. Also, the WDNR requested and MWSI performed some soil sampling around the property. The WDNR sent out a potential responsible party letter to MWSI requesting MWSI to further investigate site contamination.

Other discharges that could occur are accidental spills within the buildings or in the loading dock areas. Any discharges that occur within the building or in the loading dock areas should be

contained on an impervious concrete surface. The loading dock areas are sloped to facilitate drainage and collection of spills and precipitation.

On March 11, 1999, MWSI reported an on-site spill by an off-site carrier. Some metallic mercury had spilled from the trailer onto the cement floor of the loading dock area. This spill may also have contaminated the paved driveway, the south storm drain area, the south drainage pipe, the west drainage ditch, and the west drainage culvert.

During a March 14, 1999, inspection of the facility, WDNR took soil samples at the facility. The results of the soil samples showed that the soils were impacted by mercury.

During a March 30, 1999, inspection of the facility, WDNR found mercury and phosphor powder on the floor of the facility.

SOLID WASTE MANAGEMENT UNITS (SWMUs)

List of SWMUs (Figure C)

- Mercury Retort Furnaces
- Lamp Crushing Unit
- Courtyard (between the East and West Buildings on the north end)
- Southeast Loading Dock
- Downspouts
- South Storm Drain Area
- South Drainage Pipe
- North Drainage Pipe
- West Drainage Ditch

Mercury Retort Furnaces

Location: The Mercury Retort Furnaces have always been located in the West Building.

Unit Description: MWSI has four stationary retort furnaces and one continuous feed furnace.

History of Use and Operation: MWSI started operating the continuous feed and the first stationary retort furnace sometime in late 1996 – early 1997. The fourth stationary retort furnace began operation in summer of 2001. MWSI has made refinements to the mercury retort units and their associated emission control equipment over the years.

Potential Migration Pathway/Release Controls: Emissions from the Mercury Retort Furnaces are vented through control equipment out a stack. There have been some breakdowns in the operation of the Mercury Retort Furnaces over the years, which have caused fugitive emissions of mercury.

History of Releases: As previously mentioned and discussed in the "*Documented Releases*" section of this report, breakdowns in the operation of the retort furnaces occurred on July 30, 1998; August 30, 1998; and October 14, 1998. These breakdowns resulted in uncontrolled mercury emissions. MWSI has performed emission stack testing in February 1998, June 2000, and November 2000, to determine the quantity and quality of air emissions from the facility. WDNR Air Management section has determined that for the mercury emissions, MWSI is not required to obtain a permit. WDNR Air Management section has determined that for the VOC emissions, MWSI is required to obtain a permit. Even though MWSI is not required to obtain a permit for their mercury emissions, MWSI takes measures to remediate mercury contamination in the soils around their property.

Conclusions/Remarks: The Mercury Retort Furnaces are a continuing source of mercury emissions, even if they are under the WDNR Air Management permit requirements for mercury.

Lamp Crushing Unit

Location: The Lamp Crushing Unit is presently located in the East Building. The original Lamp Crushing unit was located in the West Building.

Unit Description: The Lamp Crushing Unit receives bulbs on to a conveyor into the crushing unit. Mercury-contaminated dust, metal parts and glass are then separated.

History of Use and Operation: The Lamp Crushing Unit was originally located in the West Building. That unit was removed from the site for a period of time and then at a later date another Lamp Crushing Unit was brought on site. The new unit has always operated in the East Building.

Potential Migration Pathway/Release Controls: The Lamp Crushing Unit has been a source of mercury dust. The original unit in the East Building was located in an isolated sealed off room. The present unit is located along with other equipment in the East Building. MWSI has been reminded numerous times about dust emissions around the unit. MWSI recently added additional controls to the unit to prevent emissions of mercury dust. MWSI has previously been cited about keeping the overhead doors in the East Building closed. With the overhead doors open, the wind would blow the mercury dust around and outside of the building. Discharge of powder has occurred in the building and through a vent to the outside.

History of Releases: Releases have occurred over time because of the dust created by the operation of the unit, and the overhead doors having been kept open, which allowed the mercury contaminated dust to be released from the building. OSHA has observed problems with workers, who were working in the area around the unit.

Conclusions/Remarks: MWSI has taken actions to improve housekeeping activities and engineered new controls to prevent emissions. MWSI must remain vigilant in controlling emissions from the Lamp Crushing Unit.

Courtyard

Location: The Courtyard is between the East and West Buildings near the north end.

Unit Description: The Courtyard is an approximately 30 by 30 foot unpaved gravel area. The area is enclosed on 4 sides except for a 10-foot wide pathway on the north side. The west side is the 20-foot high West Building, the east side is the 20-foot high East Building, and to the south is a 15-foot high passageway between the East Building and West Buildings. The passageway was added around 1996. About 10 feet up on the wall of the West Building was a stack horizontally venting emissions from the West Building retort furnaces and the bulb crusher. Under certain conditions, the emissions from the stack would settle into the Courtyard.

History of Use and Operation: The stack from the West Building was initially used when the facility was just using bulb crushing. The facility has now expanded operations to include 4 retort furnaces and a continuous feed furnace, which has resulted in an increase in throughput. The stack was designed to vent emissions horizontally out over the courtyard. The stack has been redesigned and now vents upward at 25 feet. MWSI routinely removes and retorts the gravel from this area and replaces it with new gravel.

Types of Waste Managed: MWSI business is the recycling of mercury contaminated wastes.

Potential Migration Pathway/Release Controls: Even though MWSI has periodically cleaned out the soil and gravel in the Courtyard, contamination may remain in the area. Some of the Downspouts off the buildings exit into the Courtyard.

Even though air emissions appear to meet the mercury emission requirements of the WDNR Air Management Program, continued emissions over a long period of time can produce potentially significant levels. Because of high VOC emissions, WDNR Air Management has requested MWSI to submit a new permit application as a major source. The permit review will determine the need for additional control equipment.

History of Releases: MWSI operated the original system so that any emissions not captured by control devices would fall out into the courtyard. Knowing this, MWSI has periodically removed and treated gravel and soil from the Courtyard.

A sample taken by WDNR on October 29, 1998, showed a level of mercury of 7.9 MG/KG. A sample taken by WDNR on May 14, 1999, showed a level of mercury of 11.2 MG/KG. Samples taken by MWSI on October 13, 1999, showed a levels of mercury of 13.7 ppm and 1 ppm.

Conclusions/Remarks: MWSI should perform further soil investigation in the Courtyard and institute operations and practices, which will prevent further deposition of mercury into the Courtyard. MWSI should document any soil removal and take confirmation samples of the soils.

Southeast Loading Dock

Location: The Southeast Loading Dock is located on the south end of the east side of the West Building.

Unit Description: The Southeast Loading Dock is the main loading dock for moving mercury waste in and out of the facility.

History of Use and Operation: The Southeast Loading Dock was constructed in 1997. Precipitation collected in the sump in the South Loading Dock is pumped to the South Storm Drain Area.

Potential Migration Pathway/Release Controls: The sump in the Southeast Loading Dock collects precipitation from the Outside Southeast Storage Area. Precipitation collected in the sump would be discharged to the South Storm Drain (which previously discharged through the South Drainage Pipe to the West Drainage Ditch). In 1999, MWSI removed soil from around the South Storm Drain and landscaped the area around the drain to create a basin. The discharge pipe from the South Storm Drain to the West Drainage Ditch was plugged to prevent further discharge. There is no impermeable layer around the basin. Precipitation into the basin is expected to evaporate or soak into the soil.

History of Releases: In March 1999, a spill occurred in the Southeast Loading Dock. The release from the Southeast Loading Dock sump to the South Storm Drain Area could have migrated to the West Drainage Ditch. Continuing stack and fugitive emissions deposited on the Southeast Loading Dock and Southeast Outside Storage Area would have been transported by precipitation and collected into the Southeast Loading Dock sump.

Conclusions/Remarks: The Southeast Loading Dock sump remains a potential area for contaminant accumulation.

Downspouts

Location: Downspouts are located on both the east and west sides of East Building and the West Building.

Unit Description: Water that is collected on the roofs of the East and West Buildings is collected through the Downspouts and deposited onto the soils near the Downspout exits.

History of Use and Operation: MWSI removes the soil/gravel near the Downspout exits as part of routine scheduled maintenance (approximately 3 to 4 times per year). MWSI retorts the

contaminated soil/gravel that is collected. The Downspouts along the north end of the east side of the West Building are no longer connected to the North Drainage Pipe.

Types of Waste Managed: MWSI business is the recycling of mercury contaminated wastes.

Potential Migration Pathway/Release Controls: Emissions that settle on the roof would be transported by precipitation through the Downspouts and settle on the soil beneath the Downspout exits.

History of Releases: Below the Downspout on the north end of the west side of the West Building, a sample taken by MWSI on October 13, 1999, showed a level of mercury at 670 ppm and 100 ppm on a retest. A split sample taken by WDNR on October 13, 1999, showed a level of mercury at 34 ppm.

Conclusions/Remarks: The Downspouts act as transports for emissions that settle on the roof. When MWSI removes soil below the Downspouts, MWSI should document the action and take confirmation samples.

South Storm Drain Area

Location: The South Storm Drain Area is south of the West Building.

Unit Description: The South Storm Drain drains the Southeast Outside Storage Area and the Southeast Loading Dock. (Figure D)

History of Use and Operation: The Southeast Outside Storage Area was recently paved. The South Storm Drain drained through the South Drainage Pipe to the West Drainage Ditch and West Drainage Culvert. After the March 11, 1999, spill, and the subsequent sampling, MWSI blocked the connection from the South Storm Drain to the South Drainage Pipe, and created a permeable basin around the South Storm Drain.

Types of Waste Managed: MWSI business is the recycling of mercury contaminated wastes.

Potential Migration Pathway/Release Controls: Any emissions that settle in this area would be transported by precipitation through the South Storm Drain.

History of Releases: A soil sample near the South Storm Drain taken by MWSI on August 6, 1998, showed a level of mercury at 1.2 ppm. MWSI acknowledged a spill on March 11, 1999, by an off-site carrier in the area of the Southeast Loading Dock. An unknown quantity of metallic mercury had been released from a metric ton cylinder during transport. Some metallic mercury had spilled from the trailer onto the cement floor of the loading dock. MWSI and their contractors took actions to contain and clean up the spill. MWSI believed that some of the mercury from this spill was released and deposited through the South Storm Drain to the West Drainage Ditch. A sample taken near the South Drainage Pipe outfall in the West Drainage

Ditch, on May 14, 1999, by WDNR showed a level of mercury at 344 MG/KG. MWSI performed sampling around the area of the South Storm Drain on March 13, 1999, in response to the March 11, 1999, incident, after the remediation activities were completed. Sample results showed no detect or very small quantities of mercury. MWSI and WDNR took split samples on October 13, 1999. MWSI had a result of 0.098 ppm of mercury and the WDNR had a result of 1.2 ppm of mercury. (Figure E)

Conclusions/Remarks: The South Storm Drain Area would appear to continue to act as an area where emissions collected on the Southeast Outside Storage Area and the Southeast Loading Dock would be deposited. Plugging the connection between the South Storm Drain and the West Drainage Culvert prevents future releases from the South Storm Drain out of the South Storm Drain Area.

South Drainage Pipe

Location: The South Drainage Pipe exits along the west property boundary west of the gravel access road along the west side of the West Building, near the south end of the West Building. Of the two drainage pipes that discharge to the West Drainage Ditch, this is the south one.

Unit Description: The South Drainage Pipe empties precipitation from the Southeast Outside Storage Area and Southeast Loading Dock, through the South Storm Drain to the South Drainage Pipe and out to the West Drainage Ditch. The pipe runs underground to the northwest from the South Storm Drain under the West Building and the west access road to the West Drainage Ditch.

History of Use and Operation: The South Drainage Pipe was a conduit for contamination from the Southeast Outside Storage Area, the Southeast Loading Dock, and the South Storm Drain. The connection from the South Storm Drain to the West Drainage Ditch has been blocked. The South Drainage Pipe is no longer visible in the West Drainage Ditch because of fill placed in the West Drainage Ditch.

Types of Waste Managed: MWSI business is the recycling of mercury contaminated wastes.

Potential Migration Pathway/Release Controls: Emissions that settled in the Southeast Outside Storage Area, the Southeast Loading Dock, and the South Storm Drain would be transported by precipitation through the South Drainage Pipe. These emissions would settle or be transported further by the precipitation.

History of Releases: A sample taken near the South Drainage Pipe outfall in the West Drainage Ditch on May 14, 1999, by WDNR showed a level of mercury at 344 MG/KG. Samples taken following remediation efforts in the area near the end of the South Drainage Pipe on October 13, 1999, by MWSI, showed levels of mercury below 0.2 ppm.

Conclusions/Remarks: The South Drainage Pipe acted as a transport for contamination from the Southeast Outside Storage Area, the Southeast Loading Dock, and the South Storm Drain into the West Drainage Ditch. Information is needed to verify how the connection through he South Drainage Pipe was blocked.

North Drainage Pipe

Location: The North Drainage Pipe exits along the west property boundary west of the gravel access road along the west side of the West Building, near the south end of the West Building. Of the two drainage pipes that discharge into the West Drainage Ditch, this is the north one.

Unit Description: The North Drainage Pipe empties precipitation from the Downspouts along the north end of the east side of the West Building. The drainage pipe runs to the southwest under the West Building and the access road along the west side of the West Building. Precipitation from the North Drainage Pipe exits into the West Drainage Ditch and then into the West Drainage Culvert.

History of Use and Operation: MWSI removes the soil/gravel below the buildings Downspouts as part of routine scheduled maintenance (approximately 3 to 4 times per year). MWSI retorts the contaminated soil/gravel that is collected. The Downspouts along the north end of the east side of the West Building are no longer connected to the North Drainage Pipe. Precipitation exits from the Downspouts onto the Courtyard and Southeast Outside Storage Area. The North Drainage Pipe is no longer visible in the West Drainage Ditch because of fill placed in the West Drainage Ditch.

Types of Waste Managed: MWSI business is the recycling of mercury contaminated wastes.

Potential Migration Pathway/Release Controls: Emissions that settle on the roof would be transported by precipitation through the North Drainage Pipe. These emissions would settle or be transported further by the precipitation.

History of Releases: A soil sample taken by WDNR at the end of the pipe on May 14, 1999, showed a level of mercury at 74.7 MG/KG. Samples taken following remediation efforts by MWSI on October 13, 1999, showed a levels of mercury below 0.2 ppm.

onclusions/Remarks: The pipe has acted as a transport for emissions that settle on the roof. ormation is needed to verify how the connection through the North Drainage Pipe was ted.

rainage Ditch

The West Drainage Ditch is located along the west side of the access road along the the West Building.

Unit Description: The West Drainage Ditch had collected precipitation from the North and South Drainage Pipes.

History of Use and Operation: Both the North Drainage Pipe and the South Drainage Pipe, which empty into the West Drainage Ditch, are now blocked. This blockage should prevent future releases from the Courtyard, Southwest Outside Storage Area, Southeast Loading Dock, and the South Storm Drain into the West Drainage Ditch. The North Drainage Pipe and the South Drainage Pipe are no longer visible in the West Drainage Ditch because of fill placed in the West Drainage Ditch.

Potential Migration Pathway/Release Controls: The West Drainage Ditch no longer collects precipitation through the North Drainage Pipe and South Drainage Pipe. Previously collected emissions might have caused contamination of the ditch. Drainage off the west side of the West Building may still travel to and through the West Drainage Ditch. The West Drainage Ditch feeds into the West Drainage Culvert which continues to the west to another business property, broadens and then continues west (south of some homes), and eventually discharges to a wetland.

Types of Waste Managed: MWSI business is the recycling of mercury contaminated wastes.

History of Releases: The March 11, 1999, spill in loading dock and continuing operations (mercury deposition on the roof that has been transported by precipitation events) may have impacted the drainage ditch with mercury deposition.

On May 14, 1999, WDNR took a sample showing a level of mercury at 344 MG/KG. MWSI performed sampling on March 13 and 15, 1999 in and around the ditch following remediation. Sample results showed no detect or very small quantities of mercury. MWSI took samples on November 13, 1999, and January 13, 2000. Sample results showed levels of mercury below 0.2 ppm of mercury.

Conclusions/Remarks: The West Drainage Ditch would appear to continue to act as transport for emissions that settle on the west side of the MWSI property.

AREAS OF CONCERN (AOCs)

WDNR identifies 3 specific AOCs; the West Drainage Culvert, the Southeast Outside Storage Area, and the Northeast Loading Dock.

West Drainage Culvert

The West Drainage Culvert is located west of MWSI facility on the adjoining property. The West Drainage Culvert collects precipitation from the West Drainage Ditch. Both the North Drainage Pipe and the South Drainage Pipe, which empty into the West Drainage Ditch, are now

blocked. This blockage should prevent future releases from the Courtyard, Southwest Outside Storage Area, Southeast Loading Dock, and the South Storm Drain into the West Drainage Ditch. The West Drainage Culvert continues to the west (south of some homes), and eventually discharges to a wetland. The settling and transportation by precipitation of mercury emissions from continuing operations at MWSI may have impacted the West Drainage Culvert. On July 13, 1999, MWSI took a sample showing a level of mercury of less that 0.1 ppm. The West Drainage Culvert would appear to continue to act as transport for emissions that settle on west side of the MWSI property.

Southeast Outside Storage Area

The Southeast Outside Storage Area is an area bounded by the west wall of the West Building, the north wall of the East Building and fencing to the north and to the east. Overhead doors from the north side of the East Building and the west side of the West Building open to this area. The area has been used for lugger box storage, treated mercury waste storage, and various solid waste storage. This area was originally unpaved, but is now paved with asphalt. Releases from the operations in the buildings and potentially releases from material that has been stored or transported through the Southeast Outside Storage Area could have deposited contamination in this area. In the process of cleaning up the March 1999 spill in the Southeast Loading Dock mercury was deposited in this area. Material moving in and out of the buildings during normal operations might also cause contamination and cause contamination to be transported.

Northeast Loading Dock

The Northeast Loading Dock is located off the northern end of the east side of the East Building. The Northeast Loading Dock was the main loading dock for waste materials coming into and leaving MWSI, until a loading dock was built on the expanded portion of the West Building. MWSI continues to use the Northeast Loading Dock, even with the addition of the Southeast Loading Dock. The East Building houses the bulb-crushing unit. The retort furnaces are all in the West Building. Most of the traffic in and out of the Northeast Loading Dock would be bulbs. MWSI used to keep the overhead door at the Northeast Loading Dock open, which created an exit for mercury dust/particulate from the building. There have been no reported spills in the Northeast Loading Dock.

SUMMARY

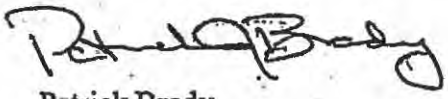
MWSI has had a history of documented releases at the Union Grove facility. MWSI has taken actions to prevent further contamination and to remediate contamination. However even with those actions, there are continuing releases of mercury from the facility that need additional controls to prevent deposition of mercury, and areas of potential contamination that need further investigation.

The operation of the facility should not have an environmentally significant impact, if the facility is properly managed. Mercury is considered a priority pollutant because of its potential effects on human health and the environment. The operation of the retort furnaces, bulb processing, and mercury refining have potential for air emissions if not properly operated. There is a possibility that spills from containers or tanks or from the transfer of materials could spill and adversely affect the environment.

RECOMMENDATIONS

Based upon the releases documented at this facility and ongoing concerns about the continued deposition of mercury contamination, WDNR recommends that MWSI be required to undertake RCRA Corrective Action.

Report Prepared by:



10/17/01

Patrick Brady
Waste Management Engineer
Southeast Region

Date

Attached Figures:

Figure A – Flood map from Appendix 26 of the MWSI FPOR
Figure B – Zoning map form Appendix 2 of the MWSI FPOR
Figure C – Site layout showing SWMUs and AOCs
Figure D – Site layout showing drainage from 1/22/00MWSI letter
Figure E – Sampling plan from 11/22/99 MWSI letter

PURSUANT TO SECTION 289.31, WISCONSIN STATUTES, NOTICE OF A PELIMINARY MODIFICATION DETERMINATION FOR MERCURY WASTE SOLUTIONS, INC., (MWSI) WAS SENT TO THE FOLLOWING:

AFFECTED MUNICIPALITIES AND LIBRARIES

County Clerk, Racine County
730 Wisconsin Avenue
Racine, WI 53403

Clerk, Town of Dover
4110 S. Beaumont Avenue
Kansasville, WI 53139

Senator Russ Feingold
Milwaukee Office
517 East Wisconsin Ave., Room 408
Milwaukee, WI 53202-4504

Paul Ryan, US Representative
First District
Racine Constituent Service Center
304 6th Street
Racine, WI 53403

Clerk, Village of Union Grove
1015 State Street
Union Grove, WI 53182

Clerk, Town of Yorkville
720 Main Street
Union Grove, WI 53182

Senator Herb Kohl
Milwaukee Office
310 West Wisconsin Avenue,
Suite 950
Milwaukee, WI 53203

Graham Public Library
1215 Main St.
Union Grove, WI 53182

INTERESTED PARTIES

Mr. Donald J. Wodek
MWSI
21211 Durand Avenue
Union Grove, WI 53182

State Historical Society of WI
Historical Preservation Division
Richard W. Dexter
816 State Street
Madison, WI 53707

Greenpeace USA
1436 U Street NW
Washington DC 20009

Citizens for a Better Environment
152 West Wisconsin Avenue
Milwaukee, WI 53203

Southeast Wisconsin
Regional Planning Commission
916 North East Avenue
Waukesha, WI 53186

Sierra Club/John Muir Chapter
222 S. Hamilton Street, Suite #1
Madison, WI 53703-3201

Patti W. Cronin, Executive Secretary
Waste Facility Siting Board
132 East Wilson Street
Madison, WI 53703

Denise Reape
U.S. EPA Region 5
DRE-9J
77 West Jackson
Chicago, IL 60604

U.S. Fish and Wildlife Service
4511 Helgesen Drive
Madison, WI 53718-6747

Phil Abert
DOD Permit Information Center
123 West Washington
Madison, WI 53707

Harriet Croke
U.S. EPA Region 5,DW-8J
77 West Jackson
Chicago, IL 60604

c: Bureau - WA/3 (D. Kollash)
Pete Flaherty - LS/5
SER Casefile

The following radio announcement is to be broadcast on the Racine station, WRJN, during morning and evening drive time on Friday, October 17, 2001.

RADIO ANNOUNCEMENT

The Wisconsin DNR intends to issue a modification determination to include requirements to institute Resource Conservation and Recovery Act Corrective Action in the hazardous waste operating license for Mercury Waste Solutions, Inc., 21211 Durand Avenue, Union Grove.

You have the opportunity to review the administrative record, provide written comments and request a public hearing.

Documents regarding the modification can be reviewed at the DNR offices located 9531 Rayne Road, Sturtevant, or at 101 South Webster Street, Madison, or the Graham Public Library at 1215 Main Street, Union Grove.

Written comments regarding the modification can be submitted to Patrick Brady, P.O. Box 12436, Milwaukee, 53212

Written comments must be submitted by December 3, 2001.

For more information contact Patrick Brady at 414/263-8594.

2.5.2 Areas of Concern

Based on past process operations and documented releases and/or spills, MWSI has identified two Areas of Concern (AOCs) at the MWSI facility, which encompass five separate incidents. The first AOC includes the retort room; specifically the Stationary Mercury Retort Ovens (SWMU 1). Four incidents (#1, #2, #3, and #5) have been documented in this AOC.

The second AOC is the South Loading Dock (SWMU 11) where all waste materials are loaded and unloaded. One incident (#4) has occurred in this AOC. Incidents and AOCs are discussed below:

Incident #1 in AOC #1

a. Unit Description

Refer to the August 3, 1998, letter from MWSI to WDNR for more information (**Appendix G**).

On Thursday evening, July 30, 1998, MWSI received a call stating there appeared to be excessive smoke coming out of the exhaust stack at the facility. MWSI responded immediately to the plant and assessed the situation. MWSI had emergency and personnel protective equipment necessary to respond to an emergency situation on-site. As such, the Kansasville Fire Department and MWSI agreed that MWSI staff should enter the facility and assess the situation.

Upon entering the facility, MWSI staff confirmed a partially blocked vacuum on retort oven #3 due to a partially plugged condenser tank. This condition caused an increase in pressure in the oven and forced smoke out of the exhaust stack and out through an air intake valve on the retort oven. Mercury readings were taken with a Jerome Mercury Vapor Analyzer around the facility during the malfunction and no readings of concern were obtained. Exhaust stack smoke passed through carbon filters/canisters prior to discharge from the facility.

The County Haz Mat Team from Racine arrived and asked MWSI what happened and what it was doing to address the situation. By that time MSWI staff had hooked up a hose to divert exhaust and pressure from retort oven #3 to another collection system and cooled the oven from approximately 1300 degrees to less than 640 degrees using liquid nitrogen. Both the Haz Mat team and the Fire Department were satisfied with the how the situation was handled and turned the facility back over to MWSI for normal operations when the oven temperature dropped to 500 degrees a short time later.

MWSI staff took mercury readings outside of the facility the following morning. Again, no mercury readings of concern were observed. MWSI took readings inside the facility and found mercury level readings necessitated the use of personal protective equipment (PPE). MWSI personnel in PPE inspected the retort oven #3 and confirmed that no damage had been done to