



February 21, 2013

The Dow Chemical Company
Midland, Michigan 48667
USA

CERTIFIED MAIL
7007 2680 0001 3708 8434

Elizabeth Browne, Chief
Office of Waste Management & Radiological Protection
Michigan Department of Environmental Quality
P.O. Box 30241
Lansing, MI 48909

cc: Cheryl Howe, MDEQ, P.O. Box 30241, Lansing, MI 48909
Al Taylor, MDEQ, P.O. Box 30241, Lansing, MI 48909
Trisha Confer, MDEQ - Saginaw Bay District Office, 401 Ketchum St., Bay City, MI 48708

RE: THE DOW CHEMICAL COMPANY – OPERATING LICENSE MAJOR MODIFICATION
REQUEST MID 000 724 724

In accordance with R 299.9519(9) and R 299.9519(10) of the administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of NREPA, 1994 PA 451, as amended, on December 19, 2012, The Dow Chemical Company (Dow) submitted a request for approval of Operating License Major Modification to seek authorization for a treatment and storage Corrective Action Management Unit (CAMU) per R 299.9635. The CAMU authorization will be in addition to the existing authorization for a Staging Pile authorized per Rule 299.9638. Based on a series of collaborative, technical review meetings with Michigan Department of Environmental Quality (MDEQ) staff, Dow has made revisions to the submittals and is providing the attached revised request in accordance with those meeting discussions.

Included in this submittal are the following, and are described below:

1. *Updated operating license application form, EQP 5111 (Rev. 11/2011) for the Michigan Operations Operating License;*
2. *Drawings, operations and closure plan associated with adding the CAMU;*
3. *Update to Operating License Attachment 7; and*
4. *Updated Section II.E Inspection Schedule and Forms.*

The information required by EQP 5111 *Section XIV "Description of Hazardous Waste"*, and *Section XV "Other Required Attachments"*, has not been submitted with this package because there are no changes at this time. Dow is also not submitting a *Michigan Site Identification Form, EQP 5150* because there are no changes at this time.

Elizabeth Browne
Operating License Major Modification Request
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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. (40 CFR 270.11)

If you have any questions regarding this information, please contact Steven Lucas (989) 638-6012.

A handwritten signature in black ink, appearing to read "Rich Wells". The signature is written in a cursive, flowing style.

Rich Wells
Vice President & Site Director, Michigan Operations
1790 Building
Midland MI 48674
Phone: (989) 638-8673

Enclosures
mdc

OPERATING LICENSE APPLICATION FORM FOR**HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES**

Required under authority of Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Failure to submit this information may result in civil or criminal penalties.

Note: Copies of the current DEQ Site Identification Form, EQP 5150, and the EPA Part A Permit Application Form, 8700-23, must be submitted with this application.

I. FACILITY SITE ID NUMBER		MID 000 724 724	
II. FACILITY'S LEGAL OWNER			
A. Name	The Dow Chemical Company		
B. Street or P.O. Box	1790 Building, Washington Street		
C. City/State/ZIP	Midland, MI 48674		
D. Telephone Number (area code included)	989-636-5768		
E. Owner Type	P	F. Ownership Change?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Date <input type="text"/>
III. FACILITY OPERATOR			
A. Name	The Dow Chemical Company		
B. Street or P.O. Box	1790 Building, Washington Street		
C. City/State/ZIP	Midland, MI 48674		
D. Telephone Number (area code included)	989-636-5768		
E. Operator Type	P	F. Operator Change?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Date <input type="text"/>
IV. TITLEHOLDER OF LAND			
A. Name	The Dow Chemical Company		
B. Street or P.O. Box	1790 Building, Washington Street		
C. City/State/ZIP	Midland, MI 48674		
D. Telephone Number (area code included)	989-636-5768		

V. OPERATING LICENSE APPLICATION	
Place an "X" in the appropriate box under either A or B (select only one box)	
A. Operating License Application	
<input type="checkbox"/>	First Application for *Existing Facility Place an "X" here if application is for a facility that has not been previously licensed in Michigan to treat, store, or dispose of hazardous waste, and has interim status pursuant to 40 CFR §270.70.
<input type="checkbox"/>	Renewal Application for *Existing Facility Place an "X" here if renewal application for a facility that was previously licensed in Michigan to treat, store, or dispose hazardous waste, and whose hazardous waste operations have not had any new construction or been altered, enlarged, or expanded.
<input checked="" type="checkbox"/>	Application for Modification of License Place an "X" here if application is for a license modification.
<input type="checkbox"/>	First Application for Research, Development, and Demonstration (RDD) License Place an "X" here if application for a temporary license for RDD.
<input type="checkbox"/>	Renewal Application for RDD License Place an "X" here if application for the renewal of a temporary license for RDD.
B. Operating License Application for New, Altered, Enlarged, or Expanded Facility	
<input type="checkbox"/>	First Application Place an "X" here if application is for a new facility or a facility that wishes to alter, enlarge, or expand its hazardous waste operations.
For existing facilities, provide date operation began.	
Date	01/01/1960
For RDD activities, provide the date RDD began or expected to begin.	
Date	
For new, altered, enlarged, or expanded facilities, provide date expected construction to begin.	
Date	

*Existing Facility means a hazardous waste treatment, storage, or disposal facility (TSDF) that either received all necessary state-issued environmental permits or licenses before January 1, 1980, or for which approval of construction was received from the Air Pollution Control Commission before November 19, 1980, or before promulgation of new federal rules that caused the facility to become subject to regulation as a TSDF. Existing facilities also include TSDFs that were operating before January 1, 1980, under existing authority, or before promulgation of new federal rules that caused the facility to become subject to regulation as a TSDF and that did not require state-issued environmental permits or licenses.

VI. OPERATING LICENSE APPLICATION FEES		
<input type="checkbox"/>	A. Operating License Application Fixed Fee	\$ 500
<input type="checkbox"/>	B. Additional License Application Fee for New, Altered, Enlarged, or Expanded Facility	\$ 25,000
Check Type of Facility		
<input type="checkbox"/>	Land Disposal (\$9,000)	\$
<input type="checkbox"/>	Incineration or Other Treatment (\$7,200)	\$
<input type="checkbox"/>	Storage (\$500)	\$
Total Operating License Fee		\$

Note: Checks shall be made payable to the "State of Michigan" and delivered to DEQ, Office of Financial Management, Revenue Control – Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157, with a copy of payment included with application that is mailed to the DEQ, RMD, P.O. Box 30241, Lansing, Michigan 48909-7741.

VII. EXISTING ENVIRONMENTAL PERMITS (attach copies of each as proof of issuance)	
<input checked="" type="checkbox"/>	A. NPDES (Discharges to Surface Water) Permit Number MI0000868
<input type="checkbox"/>	B. UIC (Underground Injection of Fluids) Permit Number
<input checked="" type="checkbox"/>	C. RCRA (Hazardous Waste) Permit Number MID 000 724 724
<input type="checkbox"/>	D. PSD (Air Emissions From Proposed Sources) Permit Number
<input checked="" type="checkbox"/>	E. Other (Specify below) Permit Number MI-ROP-A4033-2004B (MI Renewable Operating Permit, EG32 Incinerator)

VIII. NATURE OF BUSINESS (Provide a brief description)

The Dow Chemical Company, Michigan Operations comprises manufacturing, research and development, and various administrative support functions related to the manufacture and sale of plastics, agricultural chemicals, organic and inorganic chemicals. Principal raw materials include petrochemical feedstock and other organic and inorganic chemicals essential to normal manufacturing, operations and maintenance of the facility.

IX. MAP

Attach to this application a topographic map of the area extending at least one mile beyond the property boundaries. The map must show the legal boundaries of the facility; the location of each of its existing and proposed intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities, including the location of all processes listed in Items XII and XIII identified by process code; and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area, plus all drinking water wells within a quarter mile of the facility that are identified in the public record or otherwise known to you. (see instructions for specific requirements)
 [Note: only new and modified maps from previous submittals are attached to this Part A application]

X. FACILITY DRAWING

All existing facilities must include a scale drawing of the facility showing the property boundaries of the facility; the areas occupied by treatment, storage, or disposal operations that will be used during interim status; the name of each operation (drum storage area, etc.); areas of past TSD operations; areas of future TSD; and the approximate dimensions of the property boundaries and all TSD areas. Where applicable, use the process codes listed in Items XII and XIII to indicate the location of all TSD. This drawing should fit on an 8.5 by 11 inch sheet of paper.
 [Note: only new and modified maps from previous submittals are attached to this Part A application]

XI. PHOTOGRAPHS

All existing facilities must include photographs that clearly delineate all existing structures; existing storage, treatment, and disposal areas; and sites of future storage, treatment, or disposal areas. Use the process codes and descriptions in Items XII and XIII to indicate the location of all TSD areas. Indicate the date of the photograph on the back of each photograph. Photographs may be in color or black and white, aerial or ground-level.
 [Note: Photograph modifications are not applicable for this Part A application]

XIV. OTHER REQUIRED ATTACHMENTS

A. General Information (each item should be a separate attachment to the application)

- | | | |
|--------------------------------------|---------------------------------------|--|
| 1. General facility description | 6. Preparedness/prevention or waiver* | 11. Closure and Postclosure (C/PC) Plan* |
| 2. Chemical and physical analyses* | 7. Contingency Plan* | 12. C/PC cost estimates* |
| 3. Waste Analysis Plan* | 8. Traffic information | 13. Topographic map |
| 4. Security procedures and equipment | 9. Location information | 14. Liability mechanism |
| 5. Inspection schedules* | 10. Personnel training program* | 15. Financial assurance instrument |

* Use template provided to complete application

B. Supplemental Information (each item, if needed, should be a separate attachment to the application)

- | | |
|---|--|
| 1. Status of compliance with other federal laws | 6. Engineering plans |
| 2. Corrective action information* | 7. Proof of issuance of other permits or licenses |
| 3. Hydrogeological Report* | 8. Capability certification/compliance schedule |
| 4. Environmental Assessment* | 9. Restrictive covenant (landfills only) |
| 5. Environmental monitoring Programs* | 10. Construction certification (new, altered, enlarged, or expanded) |

* Use template provided to complete application

C. Facility Specific Information (each item, if needed, should be a separate attachment to the application)

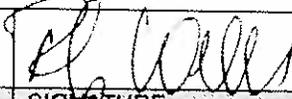
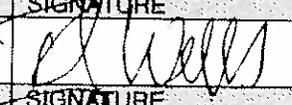
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|--------------------------------------|--|
| 1. Containers* | 8. Land treatment |
| 2. Tanks* | 9. Miscellaneous units |
| 3. Incineration or thermal treatment | 10. Underground mines or caves |
| 4. Treatment | 11. Drip pads |
| 5. Surface impoundments | 12. Boilers and industrial furnaces |
| 6. Waste piles | 13. Air emissions from process vents, equipment leaks, tanks, containers, and surface impoundments** |
| 7. Landfills | |

* Use template provided to complete application

** Use templates C.11-AA, C.11-BB, and C.11-CC provided to complete application

XV. 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/or imprisonment for knowing violations.

<i>Rich Wells, Vice President & Site Director Michigan Operations</i>		2/21/13
OWNER NAME (type or print)	SIGNATURE	DATE SIGNED
<i>Rich Wells, Vice President & Site Director Michigan Operations</i>		2/21/13
OPERATOR NAME (type or print)	SIGNATURE	DATE SIGNED
<i>Rich Wells, Vice President & Site Director Michigan Operations</i>		2/21/13
TITLEHOLDER OF LAND NAME (type or print)	SIGNATURE	DATE SIGNED

Corrective Action Management Unit (CAMU)

In accordance with R 299.9635, The Dow Chemical Company (Dow) is requesting approval under Operating Permit Condition IX.C.5 for the post-closure use of the former Diversion Basin hazardous waste management unit for operation of a storage and treatment Corrective Action Management Unit (CAMU). The CAMU is proposed in addition to the Staging Pile that was previously approved by the MDEQ in accordance with License Part XI.U, “*Designation of Staging Pile*” and Attachment 30, “*Staging Pile Designation with Design Information*”, added September 30, 2009.

CAMU DESIGNATION with DESIGN

The CAMU will be operated in the same area that was previously designated for the approved Staging Pile. The CAMU will consist of three constructed containment areas within the Diversion Basin footprint. Dow proposes to manage these as one unit, with one capacity limit and set of performance standards, as described below.

The material expected to be generated onsite for temporary management in the CAMU is consistent with the applicable definitions in R299.9102¹ (“corrective action management unit-eligible waste”) and 40 CFR 260.10² (“remediation waste”).

The following provides a discussion of the applicable regulations and how Dow’s Michigan Operations CAMU will meet those requirements.

The Michigan regulations at R299.9635(11) set out the information needs regarding wastes to be managed in the CAMU:

- (a) The origin of the waste and how it was subsequently managed, including a description of the timing and circumstances surrounding the disposal or release.*

The waste to be stored in the CAMU will consist of contaminated media that may be classified as either characteristically hazardous waste or listed hazardous waste.

CAMU-eligible, listed hazardous waste would likely be classified through the “contained-in” policy and generated as a result of Revetment Groundwater Interception System (RGIS) upgrade or other maintenance activities or other potential corrective actions conducted at the Michigan Operations site.

¹ **R 299.9102 Definitions** (u) “Corrective action management unit-eligible waste” or “CAMU-eligible waste” means all wastes and hazardous wastes and all media, including groundwater, surface water, soils, sediments, and debris, that are managed for implementing cleanup. As-generated wastes from ongoing industrial operations at a site are not CAMU-eligible.

Notwithstanding this subrule and where appropriate, as-generated non-hazardous waste may be placed in a corrective action management unit if the waste is being used to facilitate treatment or the performance of the corrective action management unit. Wastes that would otherwise meet the definition of a CAMU-eligible waste are not CAMU-eligible wastes if either of the following apply:

- (i) If the wastes are hazardous wastes found during a cleanup in intact or substantially intact containers, tanks, or other non-land-based units found above ground, unless the wastes are first placed in the tanks, containers or non-land-based units as part of the cleanup, or the containers or tanks are excavated during the course of the cleanup.
- (ii) If the director, or the director's designee, uses the authority in R 299.9635 to prohibit the wastes from management in a corrective action management unit.

² **40 CFR 260.10 Remediation waste** means all solid and hazardous wastes, and all media (including ground water, surface water, soils, and sediments) and debris, that are managed for implementing cleanup.

(b) Whether the waste was listed or identified as hazardous at the time of disposal or release.

Groundwater that is recovered from the RGIS is generally classified as a listed waste, carrying EPA code F039 for multisource leachate (liquids that have percolated through land disposed wastes)³. However, environmental media (soil, sediment, etc.) generated as a result of RGIS upgrade or other maintenance activities or other corrective actions may also be considered F039 via the “contained-in” policy⁴ depending on the concentrations of constituents of concern. Contaminated media from other corrective actions at Michigan Operations may also be placed in the CAMU, and will be characterized appropriately. These media may carry other EPA waste codes in addition to or in place of the F039 designation. In addition, rainfall onto any CAMU eligible waste in the CAMU is also considered environmental media and will be evaluated under the “contained-in” policy prior to management and final disposition.

(c) Whether the disposal or release of the waste occurred before or after the land disposal requirements of 40 C.F.R. part 268 were in effect for the waste listing or characteristic.

The Dow Michigan Operations facility has been in operation for over 100 years and activities at the facility pre-date most RCRA regulations, including the LDRs.

³ F039 Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subpart D of this part. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.)

⁴ The contained-in policy was first articulated in a November 13, 1986 EPA memorandum, “RCRA Regulatory Status of Contaminated Groundwater.” It has been updated many times in Federal Register preambles, EPA memos and correspondence, see, e.g., 53 FR 31138, 31142, 31148 (Aug. 17, 1988), 57 FR 21450, 21453 (May 20, 1992), and detailed discussion in HWIR-Media proposal preamble, 61 FR 18795 (April 29, 1996).

CAMU DESIGN AND OPERATION

The Michigan regulations at R299.9635(12)(a) and (b) are applicable and require that the *areal configuration and applicable design, operation, treatment, and closure requirements* be included in the license and application.

Dow will locate the CAMU within the current Staging Pile area (the former Geotube Containment Facility) that was engineered and constructed over the top of the closed Diversion Basin. An overall plan view of the various CAMU areas is depicted on Drawings B2-903A-994072 – Overall CAMU Plan View. Use of this closed and capped hazardous waste management area provides Dow with a sustainable alternative to developing another area of the plant.

As was determined at the time of the Staging Pile approval, the location and construction of the Geotube Containment Facility provides an ideal site for the CAMU. Two liners currently exist underneath the site, including an 80 mil HDPE geomembrane (GMB) under the topmost asphalt surface in Containment Unit #1 and Containment Unit #2, or exposed in Containment Unit #3 of the Geotube Containment Facility, and a 3-foot thick compacted clay liner which acts as the cap of the Diversion Basin as shown on drawing B2-903A-994072. The new 80 mil HDPE GMB liner for the CAMU will make it a triple-lined facility, not including the surficial asphalt layers.

The proposed CAMU liner system is currently envisioned to include the following elements:

Typical Cross Section Under CAMU Eligible Waste for Containment Unit #1 and Containment Unit #2 Areas – starting at the existing asphalt and moving upwards (shown in drawings B2-904A-994072 and B2-905A-994072):

- A 80 mil HDPE GMB;
- A 6 oz/yd² geotextile (GTX);
- A 12-inch thick layer of sand; and
- CAMU eligible waste will be placed on top of the sand layer.

Typical Cross Section Under Earthen Dike for Containment Unit #1 – starting at the existing asphalt and moving upwards (shown in drawing B2-904A-994072):

- A 80 mil HDPE GMB;
- A 6 oz/yd² GTX ;
- Earthen Fill material to construct the earthen dikes (sand, silt, clay and/or stone); and
- A 60 mil HDPE GMB will cover the dikes and be welded to the floor 80 mil HDPE.

A new or existing concrete sump is shown at the low end of the CAMU as needed for leachate collection. Leachate from the CAMU eligible waste materials will flow through the sand layer on the floor and then through a 6A natural stone filter berm and finally into the sump. Pump(s) and an HDPE force main can be installed to transfer all leachate to the Plant sewers for treatment in the on-site waste water treatment plant (WWTP).

Consistent with licensed tank and container dike discharges to Dow's onsite WWTP, leachate will be sampled and analyzed for TOC prior to discharge to the WWTP. Leachate having

concentrations of TOC less than 650 mg/L will be directly discharged to the WWTP. Should the 650 mg/L threshold be exceeded, the liquids will be appropriately treated prior to discharge to the WWTP or incinerated.

The CAMU will be operated such that no releases occur from the unit, either through run-off/run-on or air dispersion of particulates. For example, waste constituents cannot leach out of the soil into the subsurface due to the presence of the engineered cap/liners of the existing containment facility. Run-off/run-on will be prevented by the earthen dikes and other storm water management practices that are routine at the facility. Air dispersion via particulates will be prevented by a variety of methods, depending on the quantity of CAMU-eligible waste materials present in the unit, including, but not limited to, surface tarps or other geomembrane-type temporary covers, daily cover, wetting or other appropriate methods.

Because levels of volatile organic compounds (VOCs) are expected to be low for the vast majority of soils or sediment-like material designated for potential management in the CAMU, ambient air monitoring is not proposed as a routine operating practice. However, should a corrective action or other maintenance project generate soils with elevated levels of VOCs, ambient air monitoring will be addressed in a site- or project-specific work plan submitted to the MDEQ in advance of project implementation. It is expected that ambient air monitoring will be primarily directed at the immediate activities generating the soil. Additional ambient air monitoring around the CAMU will be evaluated on a case-by-case basis in consultation with the MDEQ.

Truck and heavy equipment access to the CAMU will be provided by ramps at the high end of the facility. Trucks hauling waste soils will be tarped and have sealed tailgates. The trucks will enter the CAMU, deposit their load and then be decontaminated with brooms and shovels prior to exiting the facility.

The soils will be stockpiled with low ground pressure bulldozers and/or hydraulic excavators and will be placed on 1 vertical to 2 horizontal slopes or flatter if needed for stability.

Other technologies may be used as the preferred dewatering method for a particular project; sediment-like or slurried material will be pumped into material handling equipment (Geotubes or other) and the liquid fraction from the dewatering operation will be collected, characterized and disposed through the WWTP as proposed. Contaminated water may also be pretreated within the CAMU Containment Units prior to discharge to the WWTP.

The CAMU will operate under EPA process codes S99 (“Other Storage”) and T04 (“Other Treatment”) as reflected in the Part A application. Typical capacities for remediation projects using these codes are as follows:

- **S99:** for CUs #1/#2 - 26,500 cubic yard storage capacity and for CU #3 – 1,000,000 gallons
- **T04:** treatment capacity of 2,000,000 gallons/day for dewatering/treatment and 6,500 cubic yards/day for stabilization/solidification/debris.

Examples of treatment that may be conducted in the CAMU include dewatering, addition of appropriate absorbents, stabilization, solidification or treatment of hazardous debris using one or more treatment technologies specified in Table 1 of R268.45. Final treatment for the CAMU-eligible waste can include incineration, or as appropriate, disposal on- or off-site in an authorized

facility. Specific treatment options will be defined in a site- or project- specific work plan submitted to MDEQ in advance of project implementation. In addition, the work plan preparation will include a step to evaluate the applicability of any other environmental permits and ensure these are in place and/or to provide appropriated notifications for discharges or other similar items.

CAMU CLOSURE PLAN

At the conclusion of the CAMU authorization or a decision to permanently cease CAMU use, closure of the CAMU will begin. Closure will begin with removal and disposal of any remaining waste within the CAMU. Next, any additional operational materials will be properly characterized and disposed.

The asphalt or HDPE liner floor of the Containment Facility area(s) on which the CAMU material was located will be decontaminated with a water wash following removal and disposal of all CAMU elements. Decontamination water, if generated, will be properly characterized through TOC analysis and sent to the plant sewer for treatment in the on-site WWTP.

Closure of the CAMU will be completed within 180 days of the initiation of closure activities (see tabulated depiction of the closure schedule below), unless Dow submits an extension request to MDEQ. Dow will provide MDEQ with a “Notice of Completion of Closure” and a brief closure report documenting final disposition of CAMU materials. Upon completion of closure activities, Dow will provide the MDEQ with a license modification request to either:

1. Designate a new CAMU within the facility to facilitate a reliable, effective and protective remedy; or
2. Remove the designation for the CAMU within the facility.

The closure activities outlined above have been designed to satisfy the closure requirements for CAMU located in previously contaminated areas that are contained in 40 CFR 264.554 (j).

Anticipated Closure Schedule for CAMU

Activity	Days
Cease CAMU use	0
Removal/disposal of final waste inventory	30
Removal/disposal of facility components	60
Cleaning of floor and facility demolition	90
Completion of closure and report submittal to the director	180

FEDERAL REGULATORY DISCUSSION

The Michigan regulations at R299.9635(15) discuss specific time limits and performance criteria that must be met for CAMUs which are used for storage or treatment only, in which waste will not remain after closure. These units must operate for a time limit established by the director, that is no longer than necessary to achieve a timely remedy selected for the waste and are subject to the federal requirements for staging piles in 40 CFR §§264.554(d)(1)(i) and (ii), (d)(2), (e), (f), (j), and (k) instead of specific Michigan regulations in R299.9635(10) and (12) (d) – (f). A discussion of those federal regulations and how Dow is complying with them follows.

264.554(d) Performance criteria:

(1)(i) The staging pile must facilitate a reliable, effective and protective remedy;

The nature of the Dow Michigan Operations corrective action program is such that it is a long term, multi-site project with the potential for a large quantity of remediation waste to be generated. The most protective and cost effective way for Dow to manage that waste is to incinerate the material on-site. The nature of the contaminants is such that they are amenable to incineration and the incinerator is managed in such a way (permit-required operating parameters and controls) as to be a reliable and protective treatment technology. However, the through-put of the incinerator and the possible quantities of remediation waste to be generated require that Dow have a designated accumulation area for these materials that is licensed and managed in accordance with the pertinent regulations. The CAMU would satisfy this need and will allow multiple corrective action projects to be conducted simultaneously, thus expediting the corrective action process for the facility as a whole.

(ii) The CAMU must be designed so as to prevent or minimize releases of hazardous wastes and hazardous constituents into the environment, and minimize or adequately control cross-media transfer, as necessary to protect human health and the environment (for example, through the use of liners, covers, run-off/run-on controls, as appropriate); and

The CAMU will be located within the Dow facility, and Dow's 24-hr site security force will control access. The plant is surrounded by an access-prevention fence and natural barriers, and points of entry are guarded to prevent unauthorized access. Routine security patrols of the complex are also conducted. On-site management will reduce risk associated with off-site transport. Additionally, the CAMU's protective, engineered liner will ensure that material is managed in a manner that is protective of human health and the environment.

The design of the unit, as discussed above, will prevent releases to the subsurface and includes the two liners currently existing underneath the site, an 80 mil HDPE geomembrane (GMB) under the topmost asphalt surface of the Containment Facility and a 3-foot thick compacted clay liner which acts as the cap of the Diversion Basin (drawings B2-903A-994072, B2-904A-994072 and B2-905A-994072).

Because of the conservative design and location of the CAMU, Dow believes that the independent, registered professional engineering certification referenced in 40 CFR 264.554 is not necessary to ensure that the CAMU is protective of human health and environment and can be waived by the Director as allowed in the Rule.

(2) In setting the standards and design criteria, the Director must consider the following factors:

(i) Length of time the CAMU will be in operation;

The length of time the CAMU will be operated will ultimately be determined by the schedule of corrective actions at the facility. However, the need for the CAMU will be evaluated at each license renewal period (approximately every 10 years) and the license renewal applications will reflect the request to reauthorize the CAMU as necessary.

(ii) Volumes of wastes you intend to store in the CAMU;

The CAMU as designed will have a maximum capacity of ~ 26,500 cubic yards (CY) of CAMU-eligible waste material (based on the design capacity of the area). CAMU Containment Unit #1 can hold 24,000 CY and CAMU Containment Unit #2 can hold 2,500 CY. The projected total capacity is the maximum that the unit can actually accommodate, not the expected volumes that will be stored at any one time.

CAMU Containment Unit #3 is reserved for CAMU-eligible waste liquids or other contaminated run-off/run-on with a storage volume of 1 million gallons. A cross-section of CAMU Containment Unit #3 is shown on drawing B2-903A-994072.

(iii) Physical and chemical characteristics of the wastes to be stored in the unit;

The CAMU-eligible waste to be stored in the unit will consist of contaminated media and other materials that meet the definition that may be classified as hazardous waste (F039) through the “contained-in” policy as described above if generated from RGIS upgrade or maintenance activities. Contaminated media from other corrective actions at Michigan Operations may also be placed in the CAMU, and will be characterized appropriately prior to final disposition. These media may carry other EPA codes in addition to or in place of the F039 designation.

(iv) Potential for releases from the unit;

As previously discussed the CAMU will be designed and managed to prevent the potential for any releases from the unit.

(v) Hydrogeological and other relevant environmental conditions at the facility that may influence the migration of any potential releases; and

The design for the existing Geotube Containment Facility which will also serve as the CAMU includes an asphalt surface underlain by an 80 mil HDPE liner, under which is a 3-foot thick clay layer (see below for more detailed construction details). The potential for migration of any potential releases is virtually nonexistent.

Additionally, any ignitable/reactive waste placed in the CAMU (if present and not de-characterized) will be managed consistent with 40 CFR 264.17(b) and Attachment 9 of the license as required by statute.

Contact storm water will be characterized appropriately based on the environmental media it has come in contact with (for example F039 media from RGIS activities), and through application of the “contained-in” policy will be managed accordingly.

(vi) Potential for human and environmental exposure to potential releases from the unit;

The CAMU will be located within the Dow facility, and Dow's 24-hr site security force will control access. The plant is surrounded by an access-prevention fence and natural barriers, and points of entry are guarded to prevent unauthorized access. Routine security patrols of the complex are also conducted. On-site management will reduce risk associated with off-site transport. Additionally, the CAMU's protective, engineered liner will ensure that material is managed in a manner that is protective of human health and the environment.

(e) May a staging pile receive ignitable or reactive remediation waste? You must not place ignitable or reactive remediation waste in a staging pile unless:

(1) You have treated, rendered or mixed the remediation waste before you placed it in the staging pile so that:

(i) The remediation waste no longer meets the definition of ignitable or reactive under § 261.21 or § 261.23 of this chapter; and

(ii) You have complied with § 264.17(b); or

(2) You manage the remediation waste to protect it from exposure to any material or condition that may cause it to ignite or react.

It is unlikely, based on the historical waste management practices and known characteristics of potential remediation waste sources at the facility, that any CAMU-eligible waste will be ignitable or reactive. However if this does occur, any ignitable/reactive waste placed in the CAMU (if present and not de-characterized) will be managed consistent with 40 CFR. 264.17(b) and Attachment 9 of the license as required by statute.

(f) How do I handle incompatible remediation wastes in a staging pile? The term "incompatible waste" is defined in § 260.10 of this chapter. You must comply with the following requirements for incompatible wastes in staging piles:

(1) You must not place incompatible remediation wastes in the same staging pile unless you have complied with § 264.17(b);

(2) If remediation waste in a staging pile is incompatible with any waste or material stored nearby in containers, other piles, open tanks or land disposal units (for example, surface impoundments), you must separate the incompatible materials, or protect them from one another by using a dike, berm, wall or other device; and

(3) You must not pile remediation waste on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to comply with § 264.17(b).

It is unlikely, based on the historical waste management practices and known characteristics of potential remediation waste sources at the facility, that incompatible wastes will be generated and thus issues of storage will not occur. However if this does occur, incompatible wastes will be managed using segregation practices.

(j) What is the closure requirement for a staging pile located in a previously contaminated area?

(1) Within 180 days after the operating term of the staging pile expires, you must close a staging pile located in a previously contaminated area of the site by removing or decontaminating all:

(i) Remediation waste;

- (ii) Contaminated containment system components; and*
- (iii) Structures and equipment contaminated with waste and leachate.*
- (2) You must also decontaminate contaminated subsoils in a manner and according to a schedule that the Director determines will protect human health and the environment.*
- (3) The Director must include the above requirements in the permit, closure plan, or order in which the staging pile is designated.*

Waste will not be left in-place at final closure, therefore the closure activities will be limited to cleaning/decontaminating the asphalt surface of the containment basins and verifying that cleaning/decontaminating process through sampling of rinsate water.

- (k) What is the closure requirement for a staging pile located in an uncontaminated area?*
- (1) Within 180 days after the operating term of the staging pile expires, you must close a staging pile located in an uncontaminated area of the site according to §§ 264.258(a) and 264.111; or according to §§ 265.258(a) and 265.111 of this chapter.*
- (2) The Director must include the above requirement in the permit, closure plan, or order in which the staging pile is designated.*

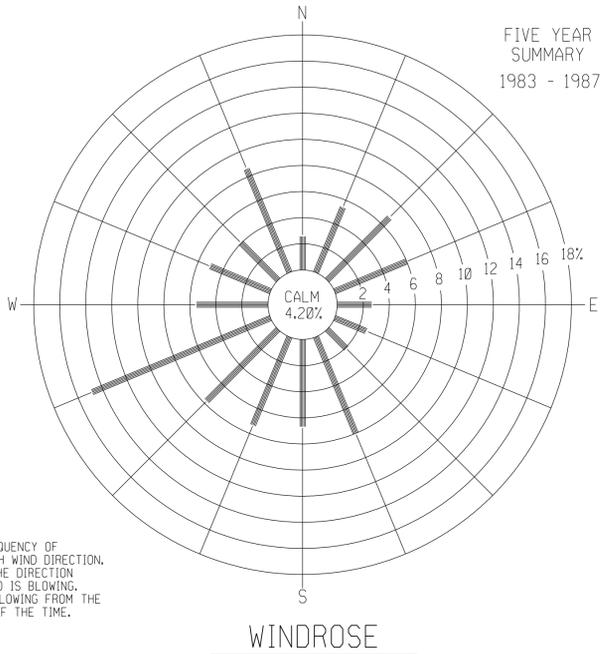
Not applicable to the Dow Michigan Operations CAMU.

DWG. B2-004
 DWG. B2-014

DWG. B2-003
 DWG. B2-013

DWG. B2-005
 DWG. B2-015

DWG. B2-002
 DWG. B2-012



FIVE YEAR
 SUMMARY
 1983 - 1987

NOTE:
 DIAGRAM OF THE FREQUENCY OF
 OCCURRENCE FOR EACH WIND DIRECTION.
 WIND DIRECTION IS THE DIRECTION
 FROM WHICH THE WIND IS BLOWING.
 EXAMPLE - WIND IS BLOWING FROM THE
 NORTH 2.6 PERCENT OF THE TIME.

Wind Speed Classes (Knots)

Class 1	1-3
Class 2	4-6
Class 3	7-10
Class 4	11-16
Class 5	17-21
Class 6	> 21

SUMMARY TABLE
 WINDROSE DATA
 Tri-City Airport
 Period: 1983-1987
 Season - Five Year Summary
 Wind-speed Classes

Direction	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	TOTAL
.0	.00171	.00986	.00933	.00424	.00053	.00000	.02567
22.5	.00285	.01689	.02019	.01197	.00185	.00030	.05406
45.0	.00241	.01734	.02492	.01859	.00375	.00059	.06760
67.5	.00312	.01848	.02414	.01217	.00185	.00018	.05994
90.0	.00150	.01148	.00945	.00358	.00032	.00007	.02639
112.5	.00142	.01159	.00943	.00338	.00030	.00002	.02613
135.0	.00124	.00776	.00844	.00319	.00010	.00002	.02074
157.5	.00306	.02165	.03464	.01835	.00208	.00013	.07990
180.0	.00205	.01862	.02774	.01577	.00241	.00016	.06675
202.5	.00150	.01858	.02784	.02036	.00436	.00059	.07323
225.0	.00183	.01702	.02751	.02325	.00687	.00107	.07756
247.5	.00399	.03089	.05433	.04648	.01054	.00226	.14850
270.0	.00162	.01339	.02127	.01499	.00315	.00053	.05495
292.5	.00150	.01333	.01942	.01333	.00228	.00036	.05022
315.0	.00169	.01212	.01448	.01032	.00169	.00016	.04046
337.5	.00454	.03270	.02987	.01666	.00190	.00023	.08589
TOTAL	.03605	.27169	.36299	.23663	.04395	.00669	.95800

TOTAL PERCENT CALMS = 4.20%

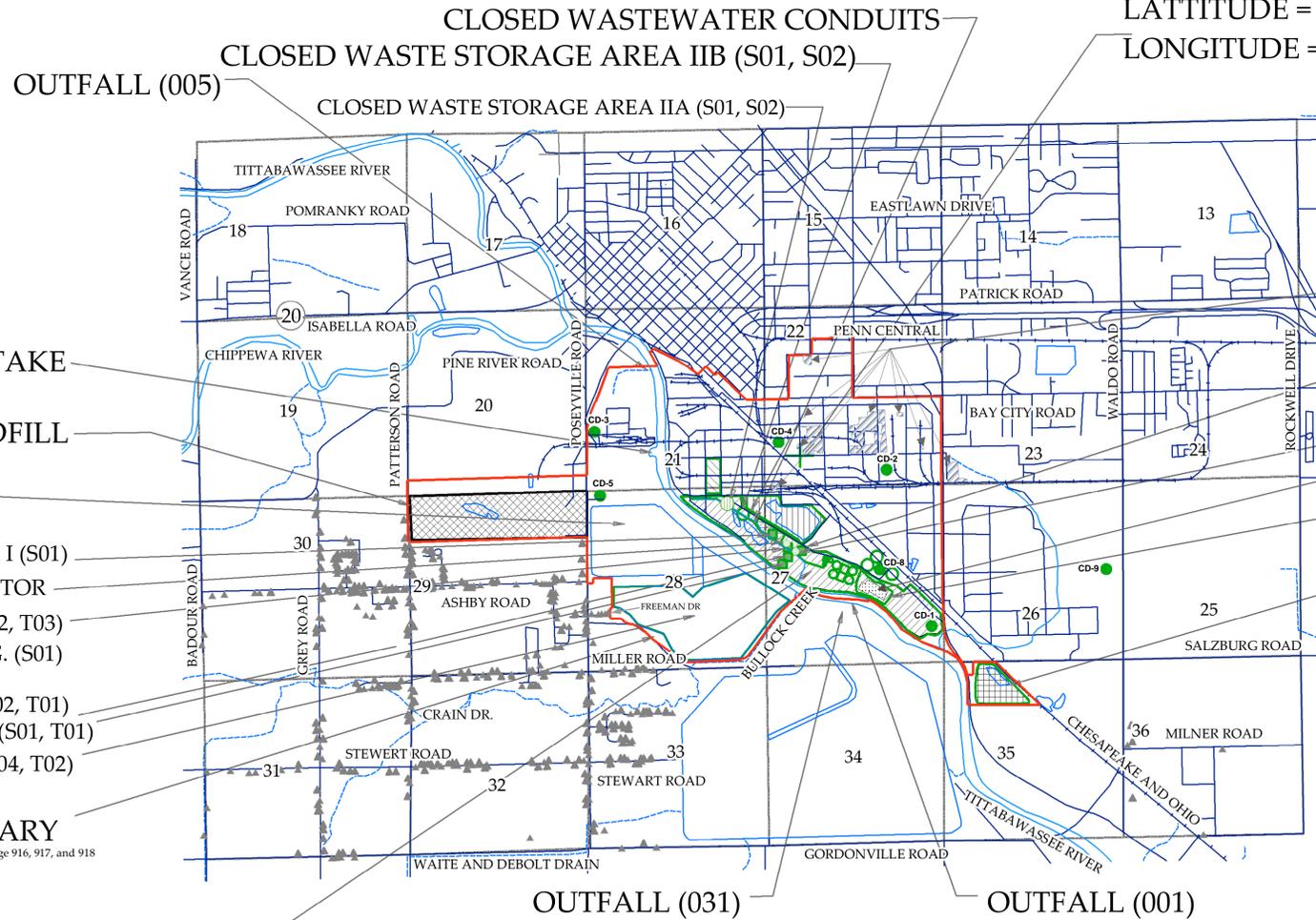
LEGEND

- DRAWING MATCH LINE
- - - FACILITY FENCE LINE
- FACILITY BOUNDARY LINE
- NON-DOW ASSET - PROPERTY OWNED BY DOW

REV. MARK	REVISION	BY	CHK	APP	DATE	REV. MARK	REVISION	BY	CHK	APP	DATE	DESIGNED	DATE	STATUS	PLANT NO.	THE DOW CHEMICAL COMPANY	
A	ADDED REFERENCE TO DWGS B2-012 THRU B2-015	LEG			4/96							R.M.DENNIS	01/93			MICHIGAN OPERATIONS	MIDLAND, MICHIGAN
B	CORRECTED N.E. CORNER OF FACILITY BOUNDARY LINE	LEG	KC	TSK	1/02							R.M.DENNIS	01/93	P.E. SEAL		EVS	1261 BLDG.
C	UPDATED FACILITY BOUNDARY LINE PER 2006 DATA	LEG	KC		8/06							J.BATAL	01/93			DOW CHEMICAL Co. PLANT LOCATION MAP	
D	NOTED NON-DOW ASSETS & UPDATED FACILITY FENCE LINE	LEG	JJA	KC	5/5/10							J.BATAL	01/93			OPERATING LICENSE - FULL SITE TOPO	
E	CAMU LOCATION ADDITION	TMN	MDC	SL	12/19/12							J.J. ALLEN	02/94			EPA FACILITY ID NUMBER MID000724724	
												PROJECT NUMBER	SCALE	REV.			
												927122	1"=800'	E	2	PLN	



LATTITUDE = 43°-36'-11"
LONGITUDE = 84°-13'-23"



RIVER INTAKE
POSEYVILLE LANDFILL
#6 BRINE POND
WASTE STORAGE AREA I (S01)
CLOSED 703 INCINERATOR
INCINERATOR COMPLEX (S02, T03)
& 830 BLDG. (S01)
1163 BLDG. (S01, S02, T01)
33 BLDG. (S01, T01)
TERTIARY POND (S04, T02)
FACILITY BOUNDARY

NOTE: Facility Boundary Description Presented in Liber 1356, page 916, 917, and 918

NON-DOW ASSETS
(PROPERTY OWNED BY THE DOW CHEMICAL COMPANY)

29 BLDG.
(REMOVED FROM LICENSE NOV 2011)
CLOSED 830 INCINERATOR
STAGING PILE / CORRECTIVE ACTION MANAGEMENT UNIT
DIVERSION BASIN
SLUDGE DEWATERING FACILITY

CLOSED HAZARDOUS WASTE MANAGEMENT UNITS

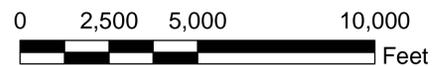
- SLUDGE DEWATERING FACILITY
- DIVERSION BASIN
- WASTEWATER CONDUITS
- 703 INCINERATOR
- 830 INCINERATOR
- WASTE STORAGE AREA IIA

CLOSED WASTE MANAGEMENT UNITS

- 1925 LANDFILL
- POSEYVILLE LANDFILL
- LEL I
- LEL II
- LEL III

▲ INDICATES DRINKING WATER WELLS AS OF 2003
● INDICATES CLOSED DISPOSAL WELLS
▨ NON-DOW ASSETS
(PROPERTY OWNED BY THE DOW CHEMICAL COMPANY)

THE DOW CHEMICAL CO.
MIDLAND MI. - FACILITY #MID 000724724



DRAWING B2-010-927122
RCRA PART A FACILITY MAP
PART 111 OPERATING LICENSE RE-APPLICATION
FACILITY ID NUMBER MID000724724
(Revised December 2012)

SECTION II. E

INSPECTION SCHEDULE*

Revised December 2012

*This revision combines the former *Section E, Inspection Schedule for Incinerator Related Storage Areas* and *Section II.E (other RCRA Permitted Storage Areas)*

Inspection Schedule

The purpose of this section is to detail the required inspections associated with the permitted units.

General

Inspections for the hazardous waste facility units are conducted according to the inspection schedules contained in this section. Inspections are documented in the operating record, and retained for a period of three years.

Inspection records adhere to the same general format. Inspection records are formatted to include the following information:

1. Name of inspector
2. Date and time of inspection
3. Notation of observations made during inspection
4. Nature and date of any repairs or actions performed pursuant to the inspection

Inspectors are to coordinate any required actions identified as necessary based on their inspection. The nature and timeframe of each action performed is dependent on the type of deficiency identified through the inspection. Examples of typical actions may include replacement of missing or damaged signs and labels, repacking the contents of a deteriorated container, or arranging for maintenance personnel to address malfunctions of instrumentation or mechanical equipment. If a problem lies beyond the means of an inspector to address, they are instructed to promptly notify supervision of the nature of the deficiency. These combined efforts will ensure there are no environmental or human health hazards. Where a hazard is imminent or has already occurred, remedial action is taken immediately.

See Section II.K, Personnel Training, for additional information with regard to training. The frequency and duration of the training to be required is documented in the training plan. The plan makes general reference to inspections, but training packages at the facility include more detailed information.

General inspection schedules are shown on the following pages. Additional items may be inspected during these audits. For example, the ramp to WSA I would be inspected during the RCRA check of that area, and a faulty pallet would be observed during the 830 Building Pack Room inspection.

Waste Storage Area I (WSA I), 1143 Building

WSA I is inspected on a daily basis. Inspectors examine the items listed in the table below.

Item Inspected	Observation
Secondary containment, diking external to 1143 Building	<ul style="list-style-type: none"> • No cracks, deterioration, spalling, which would compromise integrity, has occurred • Seams, cracks are properly caulked
Secondary containment, 1143 Building	<ul style="list-style-type: none"> • No cracks, deterioration, spalling, which would compromise integrity, has occurred • Seams, cracks are properly caulked
Condition of stored containers	<ul style="list-style-type: none"> • All containers are properly labeled and labels are visible • All containers are closed • 24 inches of aisle space between rows • Material is not present on outside of containers • Containers show no signs of leakage or deterioration
Stored container inventory	<ul style="list-style-type: none"> • Determine container quantity
Loading/unloading areas	<ul style="list-style-type: none"> • No spillage/trackout of material
Facility labeling	<ul style="list-style-type: none"> • Danger signs posted at access points
Accumulated precipitation	<ul style="list-style-type: none"> • Presence of accumulated precipitation/solids in secondary containment and sumps • Sump grates are in place • Pumpout piping is adequate and available • Properly remove any accumulated precipitation within 96 hours

Staging Pile

A Staging Pile has been authorized for operation within the area of the closed diversion basin. The staging pile will be inspected weekly from the time the initial remediation soils are placed in the staging pile until closure has started and the remediation soils have been removed from the facility.

Item Inspected	Observation
Containment structure perimeter	<ul style="list-style-type: none"> • Perimeter diking intact
	<ul style="list-style-type: none"> • No soil spillage outside of containment/dike
	<ul style="list-style-type: none"> • No liquid leakage outside of containment/dike
Facility entrance	<ul style="list-style-type: none"> • No spillage/trackout of material
Facility Labeling	<ul style="list-style-type: none"> • Hazardous Waste signs in place
Leachate collection Sump and piping	<ul style="list-style-type: none"> • Leachate level below top of sump
	<ul style="list-style-type: none"> • Pump is operational
	<ul style="list-style-type: none"> • No leakage from piping or ancillary equipment
Stormwater, pump, and piping	<ul style="list-style-type: none"> • No standing water on liner with pump not operating
	<ul style="list-style-type: none"> • Pump is operational
	<ul style="list-style-type: none"> • No leakage from piping or ancillary equipment
Tarp	<ul style="list-style-type: none"> • Tarp is free of damage
	<ul style="list-style-type: none"> • Soils are covered when operations not being performed in area (material is not being loaded or unloaded)
Dust emissions	<ul style="list-style-type: none"> • Dust emissions are not evident from the stored soils

1163 Building

1163 Building is inspected each day. Inspectors examine the items listed in the table below. In addition to a daily inspection, thickness testing of the interior metal shell of 1163 is performed every two years.

Item Inspected	Observation
Leak detection system	<ul style="list-style-type: none"> • Level switch is powered and returning signal • Leak detection system alarm is not active • Level switch is in place in the field and free from any physical damage
Secondary containment; accessible, external concrete portion surrounding building	<ul style="list-style-type: none"> • No cracks, deterioration, or spalling, which would compromise integrity, has occurred • Seams, cracks are properly caulked • No evidence of release from secondary containment around facility perimeter
Facility entrance	<ul style="list-style-type: none"> • No spillage/track-out of material
Facility labeling	<ul style="list-style-type: none"> • Danger signs in place • NFPA symbol in place • Hazardous Waste sign in place
Waste inventory	<ul style="list-style-type: none"> • Different waste types marshaled within 1163 are properly segregated • Total quantity of wastes within 1163 are within acceptable limits (i.e. below the "red line" painted around building interior)
Interior tank shell	<ul style="list-style-type: none"> • No holes or cracks are evident in metal shell • No severe corrosion is evident in metal shell • Wall and ceiling panels free from damage

33 Building

33 Building is inspected each day. Inspectors examine the items listed in the table below.

Item Inspected	Observation
Leak detection system	<ul style="list-style-type: none"> • No leaks through interior shell.
Secondary containment; accessible, external concrete portion surrounding building	<ul style="list-style-type: none"> • No cracks, deterioration, spalling which would compromise integrity has occurred • Seams, cracks are properly caulked • No evidence of release from secondary containment around facility perimeter
Facility entrance	<ul style="list-style-type: none"> • No spillage/track-out of material • Door closed unless truck entering, exiting, loading or unloading.
Facility labeling	<ul style="list-style-type: none"> • Danger signs in place • NFPA symbol in place • Hazardous Waste sign in place
Waste inventory	<ul style="list-style-type: none"> • Different waste types marshaled within 33 are properly segregated • Total quantity of wastes within 33 is within acceptable limits.
Interior tank shell	<ul style="list-style-type: none"> • No holes or cracks in metal shell • No severe corrosion is in metal shell • Wall and ceiling panels free from damage
Conveyor	<ul style="list-style-type: none"> • No leaks from conveyor up to 33 Building

32 Incinerator and ancillary equipment

32 Incinerator and ancillary equipment is inspected on a daily basis. Inspectors examine the items listed in the table below.

The 32 Incinerator and ancillary equipment is monitored and controlled by a process control computer. The computer has been and will continue to be utilized to ensure that the facility operates in a safe manner, and that all regulatory and license conditions are met on a continuous basis. Operations personnel maintain surveillance of the process control computer.

32 Incinerator is subject to the monitoring requirements of the Hazardous Waste Combustion MACT 40 CFR 63 Subpart EEE and Permit to Install 212-00A.

The Automatic Waste Feed Cutoff (AWFCO) system and associated alarms will be tested monthly as required in 63.1206(c)(3)(vii) of the HWC MACT.

32 Incinerator and Ancillary Equipment

Daily Item Inspected	Observation
Front Face	<ul style="list-style-type: none"> • No leaks of liquid or vapor from piping or liquid injection points • No leaks or spills in area • No uncovered, containers are present
Kiln Seals	<ul style="list-style-type: none"> • No fugitive emissions from the kiln seals
WWTP Solids Hopper and Conveyor	<ul style="list-style-type: none"> • No leaks, breaks, spills in area
Rotary Kiln	<ul style="list-style-type: none"> • No leaks, breaks, spills in area
Secondary Combustion Chamber	<ul style="list-style-type: none"> • No leaks of liquid or vapor from piping or liquid injection points • No leaks or spills in area • No uncovered, unlabeled containers are present
Front Seal Area	<ul style="list-style-type: none"> • No uncovered, unlabeled containers of hazardous waste are present. • No leaks or spills of material in area • No material on outside of container
Ash Handling Area	<ul style="list-style-type: none"> • No leaks or spills in area
Quench	<ul style="list-style-type: none"> • No leaks or spills in area
Condensing Tower	<ul style="list-style-type: none"> • No leaks or spills in area
Venturi	<ul style="list-style-type: none"> • No leaks or spills in area
Demister	<ul style="list-style-type: none"> • No leaks or spills in area
Primary I.D. Fan	<ul style="list-style-type: none"> • No leaks or spills in area
I.W.S.'s	<ul style="list-style-type: none"> • No leaks or spills in area
Secondary I.D. Fan	<ul style="list-style-type: none"> • No leaks or spills in area
Stack	<ul style="list-style-type: none"> • No leaks or spills in area • Stack drain installed and not leaking
Caustic Tank	<ul style="list-style-type: none"> • No leaks or spills in area
Bulk Solids Hopper	<ul style="list-style-type: none"> • No leaks or spills from the hopper • No track-out • Door Closed unless truck entering, exiting or unloading
Bulk Solids Conveyor	<ul style="list-style-type: none"> • No leaks or spills in area

32 Incinerator and Ancillary Equipment, cont.

Daily Item Inspected	Observation
32 Building Unloading Spots. 703 Building Unloading Spots 2, 3, 4, 15 and 16. 703 Building Storage Spots 5E, 6E, 7E, and 8E 830 Building Unloading Spots 13 and 14.	<ul style="list-style-type: none"> • No leaks of liquid or vapor from piping or equipment • No evidence of spilled material • No uncovered, unlabeled containers are present • No precipitation or material accumulated in secondary containment • Secondary containment free of cracks, gaps, or deterioration that will compromise integrity. Seams or cracks are caulked. • Material is not present on outside of containers • Containers show no signs of leakage or deterioration • No evidence of spills, leaks, or damaged vegetation outside Railcar Spur containment • Railcar Spur monitor gun is accessible
Emergency Vent	<ul style="list-style-type: none"> • No fugitive emissions from the emergency vent

32 Incinerator Pack Room

32 Incinerator Pack Room is inspected on a daily basis. Inspectors examine the items listed in the table below.

Receipts of fiber packs and drums to the containerized waste receiving area are generally made between 8 a.m. and 5 p.m. At other times, semi-trailers, flat beds, or other trucks that are pre-loaded, may be unloaded. Operators inspect each container to assure that it is properly labeled, closed, free of external contamination, and in good condition. Generators are notified when containers do not meet these criteria, and the problem must be corrected by the generator prior to incineration of the container.

Item Inspected	Observation
Secondary containment (containment pit external to 32 Pack Room)	<ul style="list-style-type: none"> • No cracks, deterioration, spalling which would compromise integrity has occurred • Seams, cracks are properly caulked
Condition of stored containers	<ul style="list-style-type: none"> • All containers are properly labeled and labels are visible • All containers are closed • 24 inches of aisle space between rows • Material is not present on outside of containers • Containers show no signs of leakage or deterioration • 30 gal containers no more than 3-high; 55 gal. containers, no more than 2-high.
Loading/unloading areas	<ul style="list-style-type: none"> • No spillage/trackout of material
Facility labeling	<ul style="list-style-type: none"> • Danger signs posted at access points

Tank Farm

The Tank Farm is inspected daily. Inspectors examine the items listed in the table below. In addition the tank overfill protection system is inspected and tested monthly.

Item Inspected	Observation
Tank level	<ul style="list-style-type: none"> • Log the level or weight in each tank to assure monitoring instrumentation is functional and a high level condition is not present
Leak detection	<ul style="list-style-type: none"> • No leaks or spills in area
Diesel Tank	<ul style="list-style-type: none"> • No leaks or spills in area
Facility labeling	<ul style="list-style-type: none"> • NFPA symbols in place • Hazardous Waste signs in place
Tank shells and ancillary equipment	<ul style="list-style-type: none"> • No leaks, deterioration, or severe corrosion
Secondary containment	<ul style="list-style-type: none"> • No cracks, deterioration, spalling which would compromise integrity has occurred • Seams, cracks are properly caulked
Accumulated precipitation	<ul style="list-style-type: none"> • Check for presence of accumulated precipitation in secondary containment

830 Container Storage

830 Container Storage is inspected on a weekly basis. Inspectors examine the items listed in the table below.

Receipts of fiber packs and drums to the containerized waste receiving area are generally made between 8 a.m. and 5 p.m. At other times, semi-trailers, flat beds, or other trucks that are pre-loaded, may be unloaded. Operators inspect each container to assure that it is properly labeled, closed, free of external contamination, and in good condition. Generators are notified when containers do not meet these criteria, and the problem must be corrected by the generator prior to incineration of the container.

Item Inspected	Observation
Secondary containment	<ul style="list-style-type: none"> • No cracks, deterioration, spalling which would compromise integrity has occurred • Seams, cracks are properly caulked
Condition of stored containers	<ul style="list-style-type: none"> • All containers are properly labeled and labels are visible • All containers are closed • 24 inches of aisle space between rows • Material is not present on outside of containers • Containers show no signs of leakage or deterioration • 30 gal containers no more than 3-high, 55 gal containers no more than 2-high.
Loading/unloading areas	<ul style="list-style-type: none"> • No spillage/trackout of material
Facility labeling	<ul style="list-style-type: none"> • Danger signs posted at access points
Empty Tote Storage Area	<ul style="list-style-type: none"> • All containers are empty • All containers are closed • All containers are properly labeled • Containers are oriented so labels are available for inspection • Containers show no signs of leakage or deterioration

Tertiary Pond System (T-Pond)

The T-Pond system is inspected weekly and after a significant storm event has occurred. Inspectors examine the items listed in the table below.

In order to establish consistent guidelines for the frequency of post-storm inspections, a significant storm event has been defined as two or more inches of rainfall in a twenty-four hour period. This value corresponds to the estimated maximum annual twenty-four hour rainfall event for the Midland Area (2.0 inches). Thus, an inspection following two or more inches of rainfall in a twenty-four hour period will assess the ability of the unit to accommodate a maximum annual storm.

Item Inspected	Observation
Level transmitter reading	<ul style="list-style-type: none"> • Log the T-Pond level to assure monitoring instrumentation is functional.
Discharge flow reading	<ul style="list-style-type: none"> • Log the T-Pond discharge flow to assure monitoring instrumentation is functional.
System level	<ul style="list-style-type: none"> • Check that sufficient freeboard (2 feet) is present (visual), • That instruments are in place in the field and are free from any physical damage, and • that no unexplained level drop has occurred.
System dikes	<ul style="list-style-type: none"> • Assure no cracks, deterioration, or wash-out of the dikes are present
Access road	<ul style="list-style-type: none"> • Assess general condition.
Solids build-up	<ul style="list-style-type: none"> • Determine whether solids are evident on the pond surface.
Odor	<ul style="list-style-type: none"> • Assess whether any above background odors are present
Facility labeling	<ul style="list-style-type: none"> • Assure that Danger Signs are posted at access points.

Revetment Groundwater Interception System (RGIS)

RGIS is inspected at various frequencies. The inspection frequencies and items inspected are listed in the SAP, Attachment 24, Table 2, of the Dow Michigan Operations Hazardous Waste Management Facility Operating License.

Corrective Action Management Unit (CAMU)

A CAMU has been authorized for operation within the area of the closed diversion basin. The CAMU will be inspected weekly from the time the initial CAMU-eligible wastes are placed in the unit until closure has started and the wastes have been removed from the facility, and after significant rain storms/snow storms when waste materials are placed in or removed from the CAMU.

Item Inspected	Observation
Containment structure perimeter	<ul style="list-style-type: none"> • Perimeter diking intact
	<ul style="list-style-type: none"> • No waste spillage outside of containment/dike
	<ul style="list-style-type: none"> • No liquid leakage outside of containment/dike
Facility entrance	<ul style="list-style-type: none"> • No spillage/trackout of material
Facility Labeling	<ul style="list-style-type: none"> • Hazardous Waste signs in place
Leachate collection Sump and piping	<ul style="list-style-type: none"> • Leachate level below top of sump
	<ul style="list-style-type: none"> • Pump is operational
	<ul style="list-style-type: none"> • No leakage from piping or ancillary equipment
Storm water, pump, and piping	<ul style="list-style-type: none"> • No standing water on liner with pump not operating
	<ul style="list-style-type: none"> • Pump is operational
	<ul style="list-style-type: none"> • No leakage from piping or ancillary equipment
Cover (if present)	<ul style="list-style-type: none"> • Cover is intact and free of damage
	<ul style="list-style-type: none"> • CAMU-eligible wastes are covered when operations are not being performed in area (e.g. material is not being loaded or unloaded)
Dust emissions	<ul style="list-style-type: none"> • Dust emissions are not evident from the stored materials

Safety Equipment

Hazardous waste facility unit safety equipment is inspected according to the frequencies listed in the table below. The table also describes the conditions inspectors examine for each type of equipment.

Equipment Inspected	Inspection Frequency	Observation
Two-way Radio	Daily	Charged and Operational
Siren / Telephone Alert System	Weekly	<ul style="list-style-type: none"> • Telephones and siren switches operational • Alert sirens audible • Perimeter flashing lights operational
Safety Showers / Eyewashes	Weekly	<ul style="list-style-type: none"> • Clearly labeled and readily accessible • Acceptable water temperature • Adequate water flow • Alarm systems functional • In a clean, usable condition
Fire Extinguishers	Monthly	<ul style="list-style-type: none"> • In place and readily accessible. • Location designated by a visible, legible sign. • Seal intact, not broken. • Maintained in the last twelve months. • If applicable, adequately charged per pressure gauge. • Free of damage and corrosion.
SCBA	Monthly	<ul style="list-style-type: none"> • In place and readily accessible. • Location is easily identified. • Hydrostatic test date is current, depending on type of cylinder. • Regulator functional flow test is current. • Cylinder is >90% full. • Free of damage.
Sprinkler System	Annually	<ul style="list-style-type: none"> • Main Drain Test and alarm testing • The quick opening device in dry pipe sprinkler systems testing • Inspection and testing of sprinkler systems shall be carried out and documented in GEMTS

Daily WSA I (1143 Bldg.) RCRA Inspection Log

Name: _____

Check “✓” if ok or “0” indicates action required

Date: _____

Time: _____

Item Inspected	Observation	Check if ok	Comments
Secondary containment, diking external to 1143 Bldg	<ul style="list-style-type: none"> • No cracks, deterioration, or spalling, which would compromise integrity, has occurred 		
	<ul style="list-style-type: none"> • Seams, cracks are properly caulked 		
Secondary containment, 1143 Bldg	<ul style="list-style-type: none"> • No cracks, deterioration, or spalling, which would compromise integrity, has occurred 		
	<ul style="list-style-type: none"> • Seams, cracks are properly caulked 		
Condition of stored containers	<ul style="list-style-type: none"> • All containers are properly labeled and labels are visible 		
	<ul style="list-style-type: none"> • 30 gal containers no more than 3 high, 55 gal containers no more than 2 high. 		
	<ul style="list-style-type: none"> • All containers are closed 		
	<ul style="list-style-type: none"> • 24 inches of aisle space between rows 		
	<ul style="list-style-type: none"> • Material is not present on outside of containers 		
	<ul style="list-style-type: none"> • Containers show no signs of leakage or deterioration 		
	<ul style="list-style-type: none"> • 10 ft. space maintained from containers to storage area perimeter 		
Stored container inventory	<ul style="list-style-type: none"> • Determine container quantity < 443,685 gallons 		
Loading/unloading areas	<ul style="list-style-type: none"> • No spillage/trackout of material 		
Facility labeling	<ul style="list-style-type: none"> • Danger signs posted at access points 		
Accumulated precipitation	<ul style="list-style-type: none"> • No accumulated precipitation/solids in secondary containment and sumps 		
	<ul style="list-style-type: none"> • Sump grates are in place 		
	<ul style="list-style-type: none"> • Pumpout piping is adequate and available 		
	<ul style="list-style-type: none"> • Properly remove any accumulated precipitation 		

Staging Pile Weekly Inspection Log

Name: _____

Check “✓” if ok or “0” indicates action required

Date: _____

Time: _____

Active Operation (Y/N): _____

Daily Item Inspected	Observation	Check if ok	Comments
Containment structure perimeter	• Perimeter diking intact		
	• No soil spillage outside of containment/dike		
	• No liquid leakage outside of containment/dike		
Facility entrance	• No spillage/track-out of material		
Facility Labeling	• Hazardous Waste signs in place		
Leachate collection sump and piping	• Leachate level below top of sump		
	• Pump is operational		
	• No leakage from piping or ancillary equipment		
Stormwater, pump, and piping	• No standing water on liner with pump not operating		
	• Pump is operational		
	• No leakage from piping or ancillary equipment		
Tarp	• Tarp is free of damage		
	• Soils are covered when operations not being performed in area (material is not being loaded or unloaded)		
Dust emissions	• Dust emissions are not evident from the stored soils		

1163 Bldg. RCRA Inspection Checklist

Name: _____

Date: _____

Time: _____

Item Inspected	Observation	Check if ok	Comments
Leak detection system	<ul style="list-style-type: none"> • Level switch is powered and returning signal 		
	<ul style="list-style-type: none"> • Leak detection system alarm is not active 		
	<ul style="list-style-type: none"> • Level switch is in place in the field and free from any physical damage 		
Secondary containment; accessible, external concrete portion surrounding building	<ul style="list-style-type: none"> • No cracks, deterioration, spalling, which would compromise integrity, has occurred 		
	<ul style="list-style-type: none"> • Seams, cracks are properly caulked 		
	<ul style="list-style-type: none"> • No evidence of release from secondary containment around facility perimeter 		
Facility entrance	<ul style="list-style-type: none"> • No spillage/track-out of material 		
	<ul style="list-style-type: none"> • Door closed unless truck entering, exiting, loading, or unloading 		
Facility labeling	<ul style="list-style-type: none"> • Danger signs in place 		
	<ul style="list-style-type: none"> • NFPA symbol in place 		
	<ul style="list-style-type: none"> • Hazardous Waste sign in place 		
Waste inventory	<ul style="list-style-type: none"> • Different waste types marshaled within 1163 are properly segregated 		
	<ul style="list-style-type: none"> • Total quantity of wastes within 1163 are within acceptable limits (below red line on wall) 		
Interior tank shell	<ul style="list-style-type: none"> • No holes or cracks are evident in metal shell 		
	<ul style="list-style-type: none"> • No severe corrosion is evident in metal shell 		
	<ul style="list-style-type: none"> • Wall and ceiling panels free from damage 		

Check “✓” if ok or “0” indicates action required

Daily 33 Building RCRA Inspection Log

Name: _____

Date: _____

Time: _____

Item Inspected	Observation	Check if ok	Comments
Leak detection system	<ul style="list-style-type: none"> • No leaks through interior shell 		
Secondary containment; accessible, external concrete portion surrounding building	<ul style="list-style-type: none"> • No cracks, deterioration, or corrosion which would compromise integrity has occurred 		
	<ul style="list-style-type: none"> • Seams, cracks are properly caulked 		
	<ul style="list-style-type: none"> • No release from secondary containment around facility perimeter 		
Facility entrance	<ul style="list-style-type: none"> • No spillage/track-out of material 		
	<ul style="list-style-type: none"> • Door closed unless truck entering, exiting, loading or unloading 		
Facility labeling	<ul style="list-style-type: none"> • Danger signs in place 		
	<ul style="list-style-type: none"> • NFPA symbol in place 		
	<ul style="list-style-type: none"> • Hazardous Waste sign in place 		
Waste inventory	<ul style="list-style-type: none"> • Different waste types marshaled within 33 are properly segregated 		
	<ul style="list-style-type: none"> • Total quantity of wastes within 33 are within acceptable limits 		
Interior tank shell	<ul style="list-style-type: none"> • No holes or cracks are evident in metal shell 		
	<ul style="list-style-type: none"> • No severe corrosion is evident in metal shell 		
	<ul style="list-style-type: none"> • Wall and ceiling panels free from damage 		
Conveyor	<ul style="list-style-type: none"> • No leaks from conveyor up to 33 building 		

Check "✓" if ok or "0" indicates action required

32 Incinerator and Ancillary Equipment RCRA Inspection Log

Name: _____ Date: _____ Time: _____

Check "✓" if ok or "0" indicates action required

Daily Item Inspected	Observation	Check if ok	Comments
Front Face	• No leaks of liquid or vapor from piping or liquid injection points		
	• No leaks or spills of material in the area		
	• No uncovered, unlabeled containers are present		
Kiln Seals	• No fugitive emissions from the kiln seals		
WWTP Solids Hopper and Conveyor	• No leaks, breaks, spills in area		
Rotary Kiln	• No leaks or spills in area		
Afterburner Area	• No leaks of liquid or vapor from piping or liquid injection points		
	• No leaks, breaks, spills in area		
	• No uncovered, unlabeled containers are present		
Front Seal Area	• Front seal container is properly labeled		
	• Front seal container is closed or empty if not in use		
	• No leaks or spills of material in area		
	• No material on outside of container		
<ul style="list-style-type: none"> • Ash Handling Area • Condensing Tower • Primary I.D. Fan • Secondary I.D. Fan 	<ul style="list-style-type: none"> • Quench • Demister • Caustic Tank • Bulk Solids Conveyor 	<ul style="list-style-type: none"> • Venturi, • I.W.S.s, • Stack 	<ul style="list-style-type: none"> • No leaks or spills in areas
Stack	• Stack drain installed and not leaking		
Bulk Solids Hopper	• No leaks or spills from the hopper		
	• No track-out		
	• Door closed unless truck entering, exiting, or unloading		
32 Building Unloading Spots 703 Building Unloading Spots 2, 3, 4, 15 and 16. 703 Building Storage Spots 5E, 6E, 7E, and 8E 830 Building Unloading Spots 13 and 14.	• No leaks of liquid or vapor from piping or equipment		
	• No leaks or spills in area		
	• No uncovered, unlabeled containers are present		
	• No precipitation or material accumulated in secondary containment		
	• Secondary containment free of cracks, gaps, or deterioration that will compromise integrity. Seams or cracks are caulked.		
	• Material is not present on outside of containers		
	• Containers show no signs of leakage or deterioration		
	• No spills, leaks, or damaged vegetation outside Railcar Spur containment		
• Railcar Spur monitor gun is accessible			
32 Emergency Vent	• No fugitive emissions from the emergency vent		

Daily 32 Incinerator Pack Room RCRA Inspection Log

Name: _____

Date: _____

Time: _____

Item Inspected	Observation	Check if ok	Comments
Secondary containment (Containment pit external to 32 Pack Room)	<ul style="list-style-type: none"> No cracks, deterioration, spalling which would compromise integrity has occurred 		
	<ul style="list-style-type: none"> Seams, cracks are properly caulked 		
Condition of stored containers	<ul style="list-style-type: none"> All containers are properly labeled and labels are visible 		
	<ul style="list-style-type: none"> All containers are closed 		
	<ul style="list-style-type: none"> 24 inches of aisle space between rows 		
	<ul style="list-style-type: none"> Material is not present on outside of containers 		
	<ul style="list-style-type: none"> Containers show no signs of leakage or deterioration 		
	<ul style="list-style-type: none"> 30 gal. containers no more than 3 high, 55 gal. Containers no more than 2 high. 		
Loading/unloading areas	<ul style="list-style-type: none"> No spillage/trackout of material 		
Facility labeling	<ul style="list-style-type: none"> Danger signs posted at access points 		

Check “✓” if ok or “0” indicates action required

Daily Tank Farm Inspection Log

Name: _____

Date: _____

Time: _____

Item Inspected	Observation	Check if ok	Comments
Tank level	<ul style="list-style-type: none"> Log the level or weight in each tank below to assure monitoring instrumentation is functional and a high level condition is not present 		
Leak detection	<ul style="list-style-type: none"> No leaks or spills in area. 		
Diesel Tank	<ul style="list-style-type: none"> No leaks or spills in area 		
Facility labeling	<ul style="list-style-type: none"> NFPA symbols in place 		
	<ul style="list-style-type: none"> Hazardous Waste signs in place 		
Tank shells and ancillary equipment	<ul style="list-style-type: none"> No leaks, deterioration, or severe corrosion 		
Secondary containment	<ul style="list-style-type: none"> No cracks, deterioration, spalling which would compromise integrity has occurred 		
	<ul style="list-style-type: none"> Seams, cracks are properly caulked 		
Accumulated precipitation	<ul style="list-style-type: none"> Check for presence of accumulated precipitation in secondary containment 		

	V-301	V-302	V-303	V-401	V-402	V-403	V-404	V-101	V-601	V-701
Weight or Level	Empty- Out of Service	Empty- Out of Service	Empty- Out of Service							

Check “✓” if ok or “0” indicates action required

“Empty- Out of Service” does not require weight or level measurements. These tanks are currently out of service. If the tanks are put back into service, obtain tank certification and resume readings.

Weekly 830 Container Storage RCRA Inspection Log

Name: _____

Date: _____

Time: _____

Item Inspected	Observation	Check if ok	Comments
Secondary containment	• No cracks, deterioration, spalling which would compromise integrity has occurred		
	• Seams, cracks are properly caulked		
Condition of stored containers	• All containers are properly labeled and labels are visible		
	• All containers are closed		
	• 24 inches of aisle space between rows		
	• Material is not present on outside of containers		
	• Containers show no signs of leakage or deterioration		
	• 30 gal. containers no more than 3 high, 55 gal. Containers no more than 2 high.		
Loading/unloading areas	• No spillage/trackout of material		
Facility labeling	• Danger signs posted at access points		
Empty Tote Storage Area	• All containers are empty		
	• All containers are closed		
	• All containers are properly labeled		
	• Containers are oriented so labels are available for inspection		
	• Material is not present on outside of containers		
	• Containers show no signs of leakage or deterioration		

Check “✓” if ok or “0” indicates action required

Tertiary Pond System RCRA Inspection Log

Name: _____ Date: _____ Time: _____

Inspection Type: _____ Weekly _____ Storm

Inspection Item

Status / Comments

- | | |
|-------------------------------------|-------------------------|
| 1. T-Pond level transmitter reading | _____

_____ |
| 2. T – Pond discharge flow reading | _____
_____ |
| 3. T-Pond system level | _____ |
| • 2 feet of freeboard | _____ |
| • Instruments functioning properly | _____ |
| • No unexplained level drop | _____ |
| 4. T-Pond system dikes | _____ |
| • No cracks | _____ |
| • No deterioration | _____ |
| • No wash-out | _____ |
| 5. Signs posted at access points | _____
_____ |

CAMU RCRA Inspection Log

Name: _____

Check “✓” if ok or “0” indicates action required

Date: _____

Time: _____

Daily Item Inspected	Observation	Check if ok	Comments
Containment structure	• Perimeter diking intact		
	• Sufficient freeboard is present		
	• No liquid leakage or soil outside of containment/dike		
Containment structure perimeter	• No track-out of wastes from containment structure		
	• No waste spillage outside of containment structure		
	• No liquid leakage outside of containment structure		
Facility entrance	• No spillage/trackout of material		
Facility labeling	• Danger signs in place		
	• NFPA symbols in place		
	• Hazardous Waste signs in place		
Leachate collection system	• Condition of level(s) of leachate in reservoir(s)		
	• Pump is operational		
Automated surface water sump, pump, and piping	• No standing liquid on liner/wastes with pump not operating		
	• Pump is operational		
	• No leakage from ancillary equipment		
Cover	• Cover intact/free of damage		
	• CAMU-eligible wastes are covered when operations not being performed in area (material is not being loaded or unloaded)		
Dust emissions	• Dust emissions are not evident from the stored waste		

DAILY LIFT STATION/WELL/PIEZOMETER/MANHOLE/CLEANOUT INSPECTION SHEET – RGIS WEST

DATE:			INSPECTOR(S):				
L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE	L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE
Lift Station 15				Cluster TE Piezos			
Cleanout D				5233, 5234, 5235			
Cleanout C				Lift Station 17			
Manhole 3				Manhole 6			
Cleanout B				Cleanout 7			
Manhole 2				Cluster TF Piezos			
Cleanout A				5236, 5238, 5240			
Cleanout 1				Manhole 7			
Manhole 1				Cleanout 8			
Cluster TA Piezos				Cluster TG Piezos			
5218, 5219, 5220				5241, 5242, 5243, 5245			
Cleanout 2				Manhole 8			
Manhole 2				Cleanout 9			
Cleanout 3				Lift Station 18			
Cluster TB Piezos				Cluster TH Piezos			
5221, 5222, 5224				5246, 5247, 5249			
Lift Station 16				Cleanout 10			
Cleanout 4				Manhole 9			
Cluster TC Piezos				Cleanout 11			
5225, 5226, 5228				Manhole 10			
Manhole 3				Cleanout 12			
Cleanout 5				Cluster TI Piezos: 4965,			
Manhole 4				4965A, 5250, 5252, 5257			
Cleanout 5B				Lift Station 20			
Cleanout 6				Cleanout 13			
Cluster TD Piezos				Cluster TJ Piezos			
5229, 5230, 5232				5254, 5255, 4823			
Manhole 5				Manhole 11			

DAILY LIFT STATION/WELL/PIEZOMETER/MANHOLE/CLEANOUT INSPECTION SHEET - WEST

L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE
Cleanout 14			
Manhole 12			
Cluster X Piezos 5267, 5268, 5269			
Cleanout 15			
Manhole 13			
Cluster W Piezos 5263, 5264, 5266			
Cleanout 16			
Manhole 14			
Cluster V Piezos 4012, 5260, 5262			
Cleanout 17			
Manhole 15			
Cluster U Piezos 4013, 5253, 5258, 5259			
Lift Station 10			
Manhole 16			
Cluster BC Piezos 8575,8576,8577			
Manhole 10A			
Manhole 10B			
Manhole 10C			
Cluster BB Piezos 8572, 8573, 8574			
Manhole 11G			
Manhole 11F			
Cluster AY Piezos: 3977, 3978, 6192, 3979, 3980			

L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE
Lift Station 11			
Manhole 11A			
Manhole 11B			
Cluster S Piezos 3986, 3986-A, 3985 3985-A, 6193, 3983			
Manhole 11C			
Manhole 11D			
Cluster R Piezos 4787, 6194, 3975			
Cluster BD Piezos 8579, 8599			
Manhole 11E			
Lift Station 12			
Manhole 12A			
Cluster BE Piezos 8580, 4586			
Manhole 12B			
Manhole 12C			
Cluster BF Piezos 8578, 8598			
Manhole 12D			

DAILY LIFT STATION/WELL/PIEZOMETER/MANHOLE/CLEANOUT INSPECTION SHEET - **RGIS** **WEST**

L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE
Manhole 1			
Manhole 2			
Cleanout A			
Manhole 3			
Cleanout B			
Manhole 4			
Cleanout C			
Manhole 5			
Cleanout D			
Manhole 6			
Manhole 7			
Cleanout E			
Lift Station 14			
Cleanout F			

L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE
Purge Well 3686 (#1)			
Purge Well 4174 (#2)			
Purge Well 3688 (#3)			
Purge Well 3209 (#4)			
Purge Well 3689 (#5)			
Purge Well 3690 (#6)			
Purge Well #7			
Cleanout 35			
Manhole 9A			
Piezometer 8356			
Cleanout 36			
Lift Station 9			
Cleanout 37			
Manhole 9B			
Piezometer 8357			
Manhole L			
Cleanout 39			

Record further explanations or additional information, if necessary, below:

Date: _____ Explanation: _____

Date: _____ Explanation: _____

Date: _____ Explanation: _____

DAILY LIFT STATION/WELL/PIEZOMETER/MANHOLE/CLEANOUT INSPECTION SHEET -RGIS EAST

DATE:			INSPECTOR(S):				
L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE	L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE
Cleanout 1				Manhole 13A			
Cluster O Piezos 4760, 6530, 6531				Cluster AV Piezos 6109, 6110, 6111			
Cleanout 2				Manhole 13B			
Cleanout 3				Cluster AU Piezos 6112, 6113, 6114			
Cleanout 4				Lift Station 4			
Cluster N Piezos 4763, 4764, 4765				Cleanout 13B			
Cleanout 5				Cluster Y Piezos 5509, 5510, 5511			
Lift Station 1				Cleanout 14			
Cleanout 6				Cleanout 14A			
Cleanout 7				Cleanout 14B			
Cluster AS Piezos 6001, 6002, 6003, 6004				Cluster AP Piezos 5991, 5992, 5993			
Lift Station 2				Cleanout 15			
Cluster AZ Piezos 6532, 6533, 6534, 6535				Cluster Z Piezos 5512, 5513, 5514			
Manhole 2A				Cleanout 15A			
Lift Station 3				Cleanout 15B			
Cluster BA Piezos 6536, 6537, 6538				Cleanout 16			
Manhole 3A				Cluster AA Piezos 5515, 5516, 5517			
Cluster AQ Piezos 5995, 5996				Cluster AO Piezos 5987, 5988, 5989, 5990			
Lift Station 13				Piezometers 2790, 2790A			
Cluster AW Piezos 6106, 6107, 6108							

DAILY LIFT STATION/WELL/PIEZOMETER/MANHOLE/CLEANOUT INSPECTION SHEET -RGIS EAST

L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE
Cleanout 16A			
Lift Station 5			
Cluster AN Piezos 5983, 5984, 5985, 5986			
Piezometers 2964, 2965, 4293, 2962, 2963			
Purge Well 5964			
Manhole 5A			
Cluster AM Piezos 5979, 5980, 5981, 5982			
Manhole 5B			
Manhole 5C			
Cluster AL Piezos 5976, 5977, 5978			
Manhole 5D			
Cluster AK Piezos 5973, 5974, 5975			
Manhole 5E			
Manhole 5F			
Manhole 5G			
Cluster AJ Piezos 5970, 5971, 5972			
Lift Station 6			
Manhole 6A			
Cluster AB Piezos 5681, 5682, 5683			
Manhole 6B			
Manhole 6C			
Cluster AC Piezos 5770, 5771, 5772			

L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE
Manhole 6D			
Manhole 6E			
Cluster AD Piezos 5773, 5774, 5775			
Piezo 3081			
Lift Station 7			
Sandbar Lift Station			
Cluster AG Piezos 5950, 5951, 5952			
Manhole 7A			
 Piezo 3082			
Monitoring Well 8			
Manhole 7B			
Cluster AH Piezos 5953, 5954, 5955			
Manhole 7C			
Piezo 3664			
Piezo 3083			
Manhole 7D			
Cluster AI Piezos 5956, 5957, 5958			
Manhole 7E			
Manhole 7F			
Cluster AE Piezos 5831, 5832, 5833			
Manhole 7G			
Manhole 7H			
Manhole 7I			
Cluster AF Piezos 5834, 5835, 5836			
Manhole 7J			

DAILY LIFT STATION/WELL/PIEZOMETER/MANHOLE/CLEANOUT INSPECTION SHEET -RGIS EAST

L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE
Lift Station 8			
Cluster AX Piezos 6196, 6197,6198			
Manhole 8A			
Manhole 8B			

L. STATION/WELL/ PIEZO/MANHOLE/ CLEANOUT	TIME	OBSERVATION	DATE REPAIR COMPLETE
Manhole 8C			
Cluster AT Piezos 6207, 6005, 6006			
Manhole 8D			
Manhole 8E			

Record further explanations or additional information, if necessary, below:

Date: _____ Explanation: _____

INSPECTION ITEMS: Is Each Lift Station Operational (no indications of high level or any problem),

Is each lift station secure? Is each well, piezometer, manhole, cleanout and associated protective casing intact?