



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 128TH AIR REFUELING WING (ANG)**

1 June 2023

MEMORANDUM FOR WISCONSIN DEPARTMENT OF NATURAL RESOURCES

FROM: 128 CES/CEIE
1919 E Grange Ave
Milwaukee WI 53207-6142

SUBJECT: Materials Management Plan Completion – BRRTS # 02-41-582725

1. Pursuant to Wisconsin Administrative Code NR 724, a materials management plan (MMP) closeout documentation is required. This memorandum serves as the material management plan closeout documentation for the site at the 128th Air Refueling Wing will follow during construction related to the renovation of building 522.
2. Site Owner and Operator
Wisconsin Air National Guard
1919 E Grange Avenue
Milwaukee, WI 53207
3. Synopsis of Work – Soils were excavated around building 522 for the purpose of installing new utilities and installation of communication conduits. Soils were placed next to the excavation sites so that they could be utilized in the same location from which they were removed. Areas under impervious surfaces such as concrete and asphalt were backfilled and covered with a compacted subbase material prior to concrete/asphalt placement. Areas under pervious areas were backfilled with the same soils that were removed and were covered with one foot of clean soils, then weed fabric, and round stone. Covering with one foot of clean soil in this area complied with original soil management plan. Updated cover maintenance plan is provided along with maps. Final site work was completed on 16 May 2023.
4. Pervious areas were changed from being grass to round stone. This area still had one foot of clean soil placed over contaminated soils prior to weed fabric and stone being installed. This will reduce the future maintenance of this area by eliminating the need to mow/maintain grass areas around the building. Additionally, being stone it will reduce personnel from walking through these areas thereby further reducing risk to human health from any potential direct contact.
5. Soils that were not able to be reutilized on site per the approved material management plan were disposed at Wayne Disposal, Inc (US EPA ID Number - MID0480906033) located at 49350 N I-94 Service Drive, Belleville, Michigan, 48111. 267 tons of soils were transported to this landfill.

6. There was no further evidence of any contamination found during excavation such as discolored soils or strong scents. This project did not require any further laboratory testing of soils or other monitoring.

7. The final site conditions are protective of human health, safety, and welfare of the environment at the 128th Air Refueling Wing. Impervious areas cover up any remaining contaminated soils which prevents surface water from soaking soils and reduces any contamination to groundwater. Additionally, utilizing stone as compared to grass in pervious areas are protective as describe in section 4 above.

8. If you have any additional questions, please feel free to contact me at 414-944-8414 or brian.schrader.1@us.af.mil at any time.

BRIAN J. SCHRADER, Capt, WI ANG
Environmental Scientist

Attachments:

1. Updated Cover Maintenance Plan
2. 4400-305
3. Landfill Generator Approval Notification



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 128TH AIR REFUELING WING (ANG)**

25 May 2023

MEMORANDUM FOR WISCONSIN DEPARTMENT OF NATURAL RESOURCES

FROM: 128 CES/CEIE
1919 E Grange Ave
Milwaukee WI 53207-6142

SUBJECT: Cover Maintenance Plan – BRRTS # 02-41-582725

1. This document is the Cover Maintenance Plan in accordance with NR 724.13(2), Wis. Adm. Code for the 128th Air Refueling Wing located at 1919 East Grange Avenue, Milwaukee, Wisconsin. The property is located in the NW ¼ Section 34 Township 6N, Range 22 East, Milwaukee County, Wisconsin. The maintenance activities relate to the cover which addresses or occupies the areas over the Perflourinated Compounds (PFAS) contaminated groundwater or soils.

2. **Description of Contamination** – Soil contaminated by PFAS is located at numerous possible release locations (PRLs) across the installation. Soil borings were done and samples taken at ranges from 0-15 feet below grade surface. Groundwater samples were taken from temporary monitoring wells from 0-15 feet below grade surface as part of the Site Inspection and found to be contaminated with PFAS. Results of samples can be found in the FY16 Phase 1 Regional Site Inspections for Perflourinated Compounds report.

3. **Description of Cover to be Maintained** – Soil from construction activities will fall into two types of cover to be maintained. See attached map for cover locations.

- Contaminated soils will be placed under an impervious surface. Impervious surface would either be asphalt pavement system consisting typically of four inches of asphalt with a twelve inch compacted gravel base or a eight inch concrete pavement with a nine inch compacted gravel base.
- Contaminated soils will be placed back in the original excavation. Contaminated soils will be covered by minimum of one foot of clean soils, weed barrier, and covered with stone..

4. **Cover Purpose** – The cover over the contaminated soil serves as a barrier to prevent direct human contact with residual soil contamination that might otherwise pose a threat to human health. Additionally, the cover minimizes future soil to groundwater contamination for PFAS. Based on the current use of the property, industrial, the barrier should function as intended unless disturbed.

5. **Annual Inspection** – The cover overlying the contaminated soil and as depicted in the attached map will be inspected once a year, normally in the spring after all the snow and ice is gone, for deterioration, cracks, and other potential problems that can cause exposure to underlying soils. The inspections will be performed by the property owner or their designated representative. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age and other factors. Any area where soils have become or are likely to be come exposed will be documented. Inspections will be documented on Form 4400-305 and will include pictures showing current state each year.

6. **Maintenance Activities** – If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching, filling, resurfacing, or construction operations. In the event that necessary maintenance activities expose the underlying soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment (PPE). The owner must sample any soil that is excavated from the site prior to disposal to

ascertain if contamination remains. The soil must be treated, stored, and disposed of by the owner in accordance with applicable local, state, and federal law.

In the event the cover overluing the contaminated soil is removed, or replaced, the replacement cover must be equal to cover that was removed. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by the DNR or it successor.

The property owner, in order to maintain the integrity of the cover, will maintain a copy of this maintenance plan in the Civil Engineer Squadron, Environmental Section and make it available to all interested parties for viewing.

7. Prohibition of Activities and Notification of DNR Prior to Actions Affecting a Cover – The following activities are prohibited on any portion of the property where a covier is required as shown on the attached map, unless written approval has been obtained from the Wisconsin Department of Natural Resources; 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; 6) construction or placement of a building or other structure; or 7) changing the use or occupacncy of the property to residential exposure setting, such as a residence, school, day care, senior center, hospital, or similar residential exposure setting.

If removal, replacement, or other changes to a cover are considered, the property owner will contact the DNR at least 45 days before taking such action, to determine further action may be necessary to protect human health, safety, welfare, or the environment, in accordance with s. NR 727.07, Wis. Adm. Code.

8. Amendment or Withdrawl of Maintenance Plan – This maintenance plan can be amended or withdrawn by the property owner and it successors with the written approval of Wisconsin Department of Natural Resources.

9. Contact Information –

Site Owner and Operator– Wisconsin Air National Guard
1919 East Grange Avenue
Milwaukee, WI 53207
414-944-8414

10. If you have any additional questions, please feel free to contact me at 414-944-8414 or brian.schrader.1@us.af.mil at any time. Thank you in advance for your review of this plan.

BRIAN J. SCHRADER, Capt, WI ANG
Environmental Scientist

Attachment:

1. Updated B522 Cover Map



Legend

-  Asphalt
-  Concrete
-  Stone

**Building 522
Soils Cover Plan**



0 12.5 25 50 75 100 Feet

Directions: In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

Activity (Site) Name B522 Renovation Material Management Plan	BRRTS No. 02-41-582725
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Inspections are required to be conducted (see closure approval letter):

annually
 semi-annually
 other – specify _____

When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):

Riley.Neumann@wisconsin.gov

Inspection Date	Inspector Name	Item	Describe the condition of the item that is being inspected	Recommendations for repair or maintenance	Previous recommendations implemented?	Photographs taken and attached?
05/25/2023	Brian Schrader	<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input checked="" type="checkbox"/> sediment cap <input type="checkbox"/> other:	Impervious Surfaces around building 522	None	<input type="radio"/> Y <input checked="" type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N
05/25/2023	Brian Schrader	<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input checked="" type="checkbox"/> sediment cap <input type="checkbox"/> other:	Pervious Surfaces on South West Corner of building 522	None	<input type="radio"/> Y <input checked="" type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N

{Click to Add/Edit Image}

Date added: 05/25/2023



Title: Southeast Corner Building 522

{Click to Add/Edit Image}

Date added: 05/25/2023



Title: Southwest Corner Building 522

{Click to Add/Edit Image}

Date added: 05/25/2023



Title: West Side Building 522

{Click to Add/Edit Image}

Date added: 05/25/2023



Title: North Side Building 522



GENERATOR APPROVAL NOTIFICATION

Customer: WASTE MANAGEMENT INC

February 3, 2023

JIM ENSIGN
WISCONSIN AIR NATIONAL GUARD
1919 E. GRANGE AVENUE
MILWAUKEE, WI 53207

This Generator Approval Notification acknowledges the acceptability of waste material(s) into the noted US Ecology ("USE") facility(s) identified below and ensures that each facility has the appropriate permit(s) issued by federal and state regulatory agencies to properly transport, treat, and/or dispose of the waste material(s).

The Approval(s) listed below are based upon characterization information supplied to USE by the Customer and the Generator (if other than the Customer). The Customer is ultimately responsible for the accuracy and completeness of all such information, whether provided by the Customer or the Generator. The Customer must notify USE immediately upon knowledge of any changes to this information. The Approval and all wastes which are transported, delivered, or tendered to USE under this Approval shall be subject to the Standard Terms and Conditions associated with the original Waste Profile Form. The Standard Terms and Conditions can be found by navigating to the following link:

<https://www.usecology.com/system/files/2020-10/USE%20Services%20Terms%20and%20Conditions.pdf>.

Generator: WISCONSIN AIR NATIONAL GUARD

EPA ID No.: WID982616369

Waste Common Name: PFAS Contaminated Soil

Waste Code(s):

Comments: NO FREE LIQUIDS

Approval No.: B23-8065-WDI-OTS

Expiration Date: 01/19/2024

USE Facility Name & ID Number: Wayne Disposal, Inc. (MID048090633)



MEMORANDUM

FROM: Brian DePorre, Technical Manager, brian.deporre@usecology.com, 734-699-6215

SUBJECT: Prevention of Leaking Shipments to US Ecology Michigan (MDI/WDI)

DATE: February 8, 2021

Protecting human health and the environment is a top priority at US Ecology. Preventing leaking shipments is necessary to protect human health and the environment, to maintain the trust of the host communities in which US Ecology facilities are located, and to comply with DOT and RCRA regulations.

US Ecology Michigan's host community has expressed concern to US Ecology, USEPA and the Michigan Department of Environment, Great Lakes & Energy (EGLE) about preventing leaking shipments. We take this concern very seriously and ask for your help to ensure shipments do not leak. A list of recommended best management practices for preventing leaking shipments is attached.

Wastes that may have a higher potential to leak in transit are those that started off with a high moisture content and were modified by the addition of water-absorbing reagents (e.g., polymer, clay, lime, Portland cement) and/or dewatered by gravity or by processing in mechanical dewatering equipment (e.g., plate and frame filter press, belt filter press, centrifuge). Examples include dredged river and pond sediments, soil saturated with groundwater or otherwise submerged, and industrial process sludge. Such materials may appear dry at the time they are loaded into shipping containers. However, vibration in transit to the disposal facility may cause significant free liquids to separate and accumulate at potential container leak points.

Generators: Your signature as generator and/or offeror certifies hazardous material has been properly packaged to prevent residue on the outside of the package as well as to prevent leakage during transportation. Failure to comply could result in DOT fines beginning at \$7,500 per occurrence. Further, EGLE may randomly inspect shipments arriving at USEM and may take action on any leaking containers.

Transporters: DOT regulations prohibit transporters from accepting hazardous material that is not packaged to prevent residue on the outside of the package and to prevent leakage during transportation. Failure to comply could result in DOT fines beginning at \$7,500 per occurrence; render the driver, vehicle and/or cargo out of service until the conditions are corrected; impact your Compliance Safety and Accountability score, identifying you as a high-risk motor carrier.

Your cooperation is essential to maintaining your DOT and RCRA compliance while also maintaining the trust and confidence of our regulators and host community.

Questions may be directed to your Customer Service representative at 800-592-5489 or to Brian DePorre, USEM Technical Manager, 734-699-6215, brian.deporre@usecology.com.

Thank you for supporting this important effort and helping us protect human health and the environment.

Attachment: Best Management Practices to Prevent Leaking Shipments

BEST MANAGEMENT PRACTICES TO PREVENT LEAKING SHIPMENTS

Generator

1. Don't create soil stockpiles in low areas that get flooded when it rains.
2. Cover soil stockpiles to prevent rainwater infiltration.
3. If it rains and soil absorbs excess moisture that may reasonably be expected to separate in transit, take steps to reduce moisture content before shipping. Examples: allow time to air dry; mix to aerate and accelerate drying; add inert absorbent*.
4. Wastes that have been chemically, gravity or mechanically dewatered may still contain high moisture content and be susceptible to releasing liquids when subjected to vibration in transit, even if the waste looks dry prior to shipment. A paint shaker test may be a good predictor of whether liquid separation will occur. A representative sample of the waste may be placed in a sample container that is placed on a paint shaker and shaken for 30 minutes. If no liquid separation has occurred after 30 minutes of shaking, it may be unlikely that separation will occur in transit. US Ecology is available to assist.
5. Designate someone to be responsible to visually inspect each shipping container at the job site just before loading to confirm no free liquids, no holes in tarps or container walls/floor and effective tailgate seal. Telling transporters that they should provide equipment that satisfies these requirements is a good start. But inspections should occur at the job site just before loading to ensure these criteria are satisfied.
6. Reinforce the Transporter Best Management Practices listed below.

*Addition of drying agents may not be allowed by regulations for certain waste types (e.g., PCB oils). When drying agents are allowed, USEM's landfill permit requires drying agents be inert (not biodegradable). Examples of inert drying agents include floor dry or lime-based reagents such as cement kiln dust. Polymers are not recommended. If drying agents are used, they must be identified in the waste profile and a safety data sheet included. If you need assistance with drying agent recommendations and dosages, US Ecology will be happy to help.

Generator and Transporter

1. Do not load waste into shipping containers during heavy rain or snow.
2. Keep empty shipping containers covered to keep out rain and snow.
3. If rainwater enters empty shipping containers, do not load waste on top of standing water in shipping containers; remove and appropriately manage the water and then load the dry shipping container.
4. Use an enhanced liner.

Transporter

1. Use tailgate seal enhancements such as special gaskets, marine grease, "Plug N 'Dike", cement kiln dust, bentonite clay or other inert absorbents added between the waste and the tailgate.
2. Confirm tailgate binders are tightened securely. Do not loosen tailgate binders in transit. Once at USEM, do not loosen binders anywhere on site until in position to offload and only when directed to do so by USEM personnel.
3. Ensure integrity of shipping container before loading; no holes in metal walls or floor.
4. Ensure integrity of shipping container tarp (if applicable) to keep out rain; must fully cover the container, be sealed on all sides, and not have holes through the tarp.
5. Use shipping container tarp bows to better shed rain/snow.
6. Secure shipping container tarps. Bungees should not be the sole means of securing tarps because bungees may stretch in strong wind and let rainwater enter the shipment.