



REGION 3

PHILADELPHIA, PA 19103

Report Title: Clean Water Act Compliance Inspection Report
Inspection Date(s): 09/24/2024
Regulatory Program(s): National Pollutant Discharge Elimination System (NPDES)
Type of Activity: Industrial Stormwater
Site/Facility Name: Vulcan Construction Materials – Brooklyn Plant
Permittee(s): Vulcan Construction Materials, LLC
Site/Facility Operator: Vulcan Construction Materials, LLC
Site/Facility Address: 500 Frankfurst Ave.
Baltimore, MD 21226
Latitude: 39.24185 **Longitude:** -76.60173
County/Parish: Anne Arundel County
Permit Number: MDG499718
NAICS Code: 327320 **SIC:** 3273
Unique Project #: ECAD-521

Site/Facility Representative(s): **Point of Contact**

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Unique Project#: ECAD-521

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C. Introduction

On September 24, 2024, an inspection team composed of staff from the U.S. Environmental Protection Agency (“EPA”) Region 3 (hereinafter, “EPA Inspection Team”) conducted an Industrial Stormwater inspection of the Vulcan Construction Materials – Brooklyn Plant (hereinafter, “the Facility”). The purpose of the inspection was to observe compliance with the Clean Water Act (CWA) and to verify compliance with the facility’s National Pollutant Discharge Elimination System (NPDES) Permit No. MDG499718 (hereinafter, the “Permit”) and applicable State and Federal regulations.

A. Inspection Opening Conference

The EPA Inspection Team arrived at the facility at est. 2:13 PM for the inspection. Inspectors met with the following facility representatives:

Table 1: Inspection Attendee List

Name	Affiliation	Telephone	Email
EPA Region 3 Inspectors and Contractors			
Edward Simas	Lead Inspector	(215) 814-2120	simas.edward@epa.gov
Dominic Cotton	Secondary Inspector	(215) 814-2046	cotton.dominic@epa.gov
Amrita Gupta	Inspector	(215) 814-3298	gupta.amrita@epa.gov
Site/Facility Representatives			
Johnny Johnsson	Vulcan Construction Materials	(410) 746-8723	johnssonj@vmcmail.com
James Laskey	Vulcan Construction Materials	(410) 365-7495	laskeyj@vmcmail.com
Teddy More	Vulcan Construction Materials	(410) 354-0661	mooret@vmcmail.com
Jack Murray	Vulcan Construction Materials	(410) 365-7495	murrayjac@vmcmail.com
State or County Representatives			
Andrea Jones	MDE	(443) 934-0018	andrea.jones@maryland.gov

Edward Simas and Dominic Cotton displayed their credentials to James Laskey, Teddy Moore, and Jack Murray at the outset of the inspection, and explained the purpose of the inspection was to observe compliance with its Permit. A copy of the Permit is provided in Attachment 2. The Permit became effective on January 12, 2018 and was administrately extended until April 20, 2022. The EPA Inspection Team informed the facility that any information deemed to be confidential business information (“CBI”) should be identified to EPA representatives during the inspection and it would be handled as CBI according to EPA’s CBI procedures.

B. Weather and Precipitation Conditions

During the inspection, weather was overcast. National Oceanic and Atmospheric Administration (NOAA) National Weather Service precipitation data for the date of the inspection and 5 days prior are provided in the Table 2 below:

Table 2. Precipitation Data

Station Name	Date	Precipitation Amount (inches)¹
LINTHICUM 0.4 ENE, MD US US1MDAA0035	9/19/2024	0.12
LINTHICUM 0.4 ENE MD US US1MDAA0035	9/20/2024	0.00
LINTHICUM 0.4 ENE, MD US US1MDAA0035	9/21/2024	0.00
LINTHICUM 0.4 ENE, MD US US1MDAA0035	9/22/2024	0.91
LINTHICUM 0.4 ENE, MD US US1MDAA0035	9/23/2024	0.00
LINTHICUM 0.4 ENE, MD US US1MDAA0035	9/24/2024	0.15

C. Summary of the Site/Facility

Manufacturing Process

The Vulcan Construction Materials – Brooklyn Plant is 12.4 acres and split into two sections: the Production Yard and Sales Yard. The facility borders the Patapsco River which is part of the Chesapeake Bay watershed. Onsite structures include a concrete plant, office buildings, storage trailers, maintenance garage with fuels Above Ground Storage Tanks (“ASTs”), aggregate material, truck wash area, and recycled concrete stockpiles. The normal operation hours are 6:00 AM – 4:00 PM with 16 personnel and 16 trucks in operation. The facility did mention that the site was previously an Old Central Cement Plant, wet batch plant, but has not been in operation for more than 25 years. There is an additional dry concrete production operation that the facility representative has stated is the Vulcan Sales Yard division. The is a separate division of Vulcan and is not associated with Permit ID No. MDG499718. Photo 43 indicates that this area was permitted in the past, but it was terminated. The EPA Inspection Team did a walk through of this area as well. The EPA Inspection Team did note two photos in Photo slide 55 displaying aggregate material that had the potential to discharge into the Patapsco River. The facility does lease to U.S. Concrete Products located at 200 Frankfurst Ave. Baltimore, MD 21226. The representative stated that it is a long-term lease and have been there for more than 15 years. The concrete production plant operation is separate from the facilities.

Vulcan Construction Materials is a ready-mix concrete facility. Aggregate is stored on-site and outdoors on the western portion of the site. Types of aggregate include fly ash, Havre De Grace stone, Portland cement, sand, and slag cement. The material is mixed and measured to precise measurements then transferred via conveyor belt where it is placed in a storage silo. When a truck is ready to be loaded, the mixture is discharged into a chute directed towards a waiting saddle truck. Once loaded into the truck, water and chemicals to increase concrete density are added, and mixed in until it reaches a desired consistency while in transit. The trucks are loaded throughout the day and the mixture is then delivered

¹ Source: NOAA National Climatic Data Center (<http://www.ncdc.noaa.gov/>).

to the site. The facility representative stated that there is no treatment on-site and there is no discharge to any of the outfalls which lead to the Patapsco River.

Wash water

The drum of each truck is washed before and after a delivery as well as at the end of the workday. There is a designated wash area adjacent from the storage silo on the western side of the production area. North of the station there are two ponds that have been indicated as the concrete washout basin. The first basin is where the trucks discharge water mixed with solids. The first basin extends into a second basin where the solids settle, and the water is skimmed from the surface to be reused to pump back into the trucks. Any solids from the pond are dried and used as crushed recycled concrete. The facility stated that water from the pond is used as dust control and a final wash out for the trucks at the end of each day with an estimated of 500 gallons being used for each use. The facility previously used City water in the plant but due to financial restrictions the facility obtained a permit from the State to have a well for water supply. The well is used for majority of water around the facility including fresh batch water, cleaning water, and makeup water for the ready-mix plant and usage is reported to the State. There is still a city water connection that is used for potable uses. The facility stated there have been no overflows of the pond and the water levels have been mostly consistent. During the time of the inspection, there were no visible stormwater drains near or around the wash station.

A map of the Facility, including the outfalls, is included as Figure 2 of the Facility's SWPPP (Attachment 3). There are two outfalls as seen on the map: Outfall DSN002 (a non-process stormwater outfall) and Outfall DSN001 (a process stormwater discharge).

III. Observations

During the inspection, the EPA Inspection Team observed: aggregate stockpiles, vehicle washing station, concrete washout basin, an unclear outfall placard, concrete plant, saddle truck storage, and spoils (excavated recycled materials) area. The inspection observations were made pursuant to the requirements of the Permit. The observations from the inspection are described in detail below in the Observations section. Photographs were taken during the inspection by Amrita Gupta and are provided in Attachment 1. The photographs in Attachment 1 match the camera file designations.

Part I. Permit Applicability

Part I. states "This authorization is only for facilities covered (Part I.B) located in the state of Maryland, who have submitted a notice of intent (NOI) and received written approval from the Department to discharge in accordance with the eligibility requirements and other conditions in this permit and consistent with your NOI, as on file with the Department."

Observation 1: The Facility is currently covered under the General Discharge Permit NO. 15 MM with NPDES permit number MDG499718. This permit expired on April 30, 2022. The facility representative stated over e-mail correspondence that the Maryland Department of the Environment is currently drafting a new General Discharge Permit No. 22 MM. Once this draft is complete, the facility will have six months to re-submit paperwork to obtain coverage.

Part III. Stormwater Management Requirements

Part III.B.1.b.i. states “You must minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities

inside or protecting them with storm resistant coverings (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, you should pay particular attention to the following:

- use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
 - use spill/overflow protection equipment;
 - drain fluids from equipment and vehicles prior to onsite storage or disposal;
- perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray.”

Observation 2: During the field inspection, it was observed the riprap around the first pond was low exposing the concrete washout basin to the surrounding area (Photo 9). A photo was sent on October 1, 2024, showing the facility filled the riprap providing adequate protection to the area. See Appendix 5.

Observation 3: There are weak acid containers that were not observed to be in secondary containment along the edge near the truck water station. See photo 8.

Observation 4: There appeared to be signs of wash water spilled from the eroded berm of the concrete washout basin (Photo 16). In addition, there appeared to sediment track out (Photo 10) down the gradient on the side of the berm and cement solids on the rear side behind the berm. There is also sediment tracking near the truck water station towards the basin.

Observation 5: Near the truck water refill station, behind the vegetative swale, there is cement residue from the trucks loading water into the trucks. The residue appears to be causing track out through truck tires into other areas on the site. See photo 24.

Part III.B.b.ii. states “You must keep clean all exposed areas that are potential sources of pollutants...

A good practice for ensuring housekeeping activities are performed at regular intervals would be keeping a schedule for routine grounds maintenance and cleanup.”

Observation 6: The Outfall sign for 001 and 002 were overgrown with vegetation and illegible at the time of the inspection. The facility provided photographs on October 23, 2024, showing the area around the sign had been cleaned-up and maintained. See Appendix 4.

Part III.C.2.b. states “Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of your facility. Ideally this map will extend one-quarter of a mile beyond the property boundaries of the facility and identify any water body where discharge is conveyed. At least one public roadway must be identified on the map.”

Observation 7: At the time of the inspection, the facility was unaware of the first swale and if it was connected to the washout basin. The map in the SWPPP indicates that the concrete washout bay flows through three vegetative swales before flowing to the Patapsco River.

Part III.C.6. states “You must sign and date your SWPPP in accordance with Part II.C, including the date of signature.”

Observation 8: The Stormwater Pollution Prevention Plan (SWPPP)(Attachment 3) is not signed under Section 1. The SWPPP does include who it was prepared by with a date.

Corrective Actions

Part IV.B.2. states “If any of the following conditions occur, you must review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limits in this permit:

2. the average of 4 quarterly sampling results exceeds an applicable benchmark. If less the average of 4 quarterly sampling results exceeds an applicable benchmark. If less than 4 benchmark samples have been taken, but the results are such that an exceedance of the 4 quarter average is mathematically certain (i.e., if the sum of quarterly sample results to date is more than 4 times the benchmark level) this is considered a benchmark exceedance, triggering this review.”

Observation 9: According to the DMR copies supplied by the facility, there have been no discharge events causing no sampling to occur.

Inspections, Monitoring, and Reporting

Part V.A.1. states “At least two times a year, you must conduct a site assessment that will review the effectiveness of the SWPPP. At least once each calendar year, the routine facility inspection must be conducted during a period when a stormwater discharge is happening.”

Observation 10: The facility provided annual inspections for 2021-2023. All three inspection reports (11/09/2021, 10/28/2022, and 11/02/2023) indicate “No Discharge” on the report and do not appear to be done during a stormwater discharge event. For example, the 11/2/2023 site evaluation indicated windy conditions but no precipitation. Table 3 also states that weather data was 0.00 inches on the date of 11/2/2023. The facility did not provide an annual inspection report for 2024 nor indicated when it will be completed. Based on the provided reports and data in Table 3, the facility may not be inspecting annually during a period when “stormwater discharge” is occurring.

Part V.3.a. states “Once each quarter, you must collect a stormwater sample from each outfall (except in adverse weather conditions, substantially identical outfalls, winter shutdown as described in Appendix D for Sector D or inactive and unstaffed sites as noted below) and assess the sample visually.

- a. The Quarterly Visual Monitoring Form found in Appendix B of this permit must be completed for each sample. If no sample is possible, the form may be filled out to reflect no discharge.

Observation 11: The facility did not provide documents, including the form from Appendix B of the permit, verifying whether quarterly visual monitoring was completed.

Part V.C.3. states “All required stormwater related monitoring must be performed on a storm event that results in an actual discharge from your site (“measurable storm event”) that follows the preceding measurable storm event by at least 72 hours (3 days). The 72-hour (3-day) storm interval does not apply if you are able to document that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period.”

Observation 12: The facility provided annual site evaluations from 2021-2023 on the dates of 11/09/2021, 10/28/2022, and 11/02/2023 noting “No Discharge”. Below is the precipitation data 72 hours before the evaluation, day of, and day after each inspection date. It is unclear by the data if the site evaluations produced “an actual discharge”.

Table 3 – Precipitation data 72 hours before, during, and after site evaluations

Station Name	Date	Precipitation Amount (inches) ²
LINTHICUM 0.4 ENE, MD US US1MDAA0035	11/06/2021	0.00
LINTHICUM 0.4 ENE, MD US US1MDAA0035	11/07/2021	0.00
LINTHICUM 0.4 ENE, MD US US1MDAA0035	11/08/2021	0.00
LINTHICUM 0.4 ENE MD US US1MDAA0035	11/09/2021	0.00
LINTHICUM 0.4 ENE, MD US US1MDAA0035	11/10/2021	0.00

Station Name	Date	Precipitation Amount (inches) ³
LINTHICUM 0.4 ENE, MD US US1MDAA0035	10/25/2024	0.01
LINTHICUM 0.4 ENE, MD US US1MDAA0035	10/26/2024	0.09
LINTHICUM 0.4 ENE, MD US US1MDAA0035	10/27/2022	0.01
LINTHICUM 0.4 ENE MD US US1MDAA0035	10/28/2022	0.00
LINTHICUM 0.4 ENE, MD US US1MDAA0035	10/29/2022	0.00

Station Name	Date	Precipitation Amount (inches) ⁴
LINTHICUM 0.4 ENE, MD US US1MDAA0035	10/30/2023	0.00
LINTHICUM 0.4 ENE, MD US US1MDAA0035	10/31/2023	0.16
LINTHICUM 0.4 ENE, MD US US1MDAA0035	11/01/2023	0.00
LINTHICUM 0.4 ENE MD US US1MDAA0035	11/02/2023	0.00
LINTHICUM 0.4 ENE, MD US US1MDAA0035	11/03/2023	0.00

IV. Records Review

² Source: NOAA National Climatic Data Center (<http://www.ncdc.noaa.gov/>).

³ Source: NOAA National Climatic Data Center (<http://www.ncdc.noaa.gov/>).

⁴ Source: NOAA National Climatic Data Center (<http://www.ncdc.noaa.gov/>).

Following the inspection, the EPA Inspection Team requested multiple records on September 30, 2024. The EPA Inspection Team received records on October 2nd and 3rd, 2024. The records included:

- Most updated copy of SWPPP
- Facility fact sheet/map of facility (if available)
- Annual site evaluations (2021 – 2023)
- Quarterly DMR reports (2021-2024)
- Training certifications and sign-in sheet (2021-2024)

A copy of the Permit is provided under Attachment 2. Additional documents were requested and received on October 24, 2024. Stormwater training has been completed for 2021 – 2024.

V. Closing Conference

After the facility walk, the EPA Inspection Team met with the facility representatives for a closing conference. The EPA Inspection Team shared preliminary observations with the facility. The EPA Inspection Team reiterated to the facility representatives that all preliminary observations discussed were not compliance determinations. All preliminary observations shared were subject to further investigation by EPA upon the additional review of records and documentation. Additional observations may be contained in this inspection report that were not identified at the time of the closing conference after EPA reviewed additional materials following the inspection.

The inspection concluded at 4:44 PM.

VI. List of Attachments

- Attachment 1: Photo Log
- Attachment 2: NPDES Permit
- Attachment 3: 2024 SWPPP
- Attachment 4: Outfall Sign Maintenance
- Attachment 5: Riprap Maintenance