REGION 3
PHILADELPHIA, PA 19103

Report Title:	Clean Water Act Compliance Inspection Report
Inspection Date:	5/2/2024
Regulatory Program:	National Pollutant Discharge Elimination System (NPDES)
Type of Activity:	Industrial Stormwater
Facility Name:	Virginia Concrete-Vulcan SWDC Plant
Permittee:	Virginia Concrete-Vulcan SWDC Plant
Facility Owner/Operator:	Virginia Concrete-Vulcan SWDC Plant
Facility Address:	2 S Street, SW, Washington D.C. 20003
Latitude and Longitude:	38.868106°N, 77.009203°W
Permit No.:	DCR050000 (Master General Permit)
Site Specific Permit No.:	DCR053018 (No Exposure Certification)
NPDES Permit Effective Date:	05/25/2021 (Applied for Coverage)
NPDES Permit Expiration Date:	02/28/2026
SIC code:	3273
Unique Project #:	ECAD-5375

Site/Facility Representative(s):

Tom Foley
Phone: 571-437-1273 Email: foleyt@vmcmail.com

EPA Inspectors:

Pete Gold, USEPA Region 3-Inspector
Phone: 215-814-5236 Email: gold.peter@epa.gov
Shane McAleer, USEPA Region 3-Inspector
Phone: 215-814-5616 Email: mcaleer.shane@epa.gov

State/Local Inspectors:

Robert Burnett, DC DOEE-Inspector
Phone: 202-578-6237 Email: robert.burnett@dc.gov

Report Preparer Signature/Date

PETER GOLD
Digitally signed by PETER GOLD
Date: 2024.05.22 13:47:44 -04'00'

Peter Gold (3ED32), NPDES Section 1

Supervisor Signature/Date

MICHAEL GREENWALD
Digitally signed by MICHAEL GREENWALD
Date: 2024.05.22 14:06:56 -04'00'

Mike Greenwald (3ED32), Acting Section Chief, NPDES Section 1

TABLE OF CONTENTS

List of Attachments:

I. INTRODUCTION

On May 2, 2024, representatives from EPA Region 3 and representatives of the DC Department of Energy and Environment ("DOEE") (hereinafter, collectively referred to as "the Inspection Team") arrived at the Virginia Concrete – Vulcan SWDC Plant (hereinafter, "the Facility") in Washington, DC. The purpose of the inspection was to assess the Facility's compliance with EPA's Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity, Permit No. DCR053018 (hereinafter, the "Permit") and other applicable regulations.

A. Inspection Opening Conference

The Inspection Team arrived at the Facility at approximately 12:00 p.m. for the inspection. The Inspection Team met with the following Facility representatives:

Table 1: Inspection Attendee List

Name	Affiliation	Telephone	Email
EPA Region 3 Inspectors			
Peter Gold	USEPA Region 3	215 814-5236	Gold.Peter@epa.gov
Shane McAleer	USEPA Region 3	215-814-5616	Mcaleer.shane@epa.gov
Sam Magro	USEPA Region 3	215-814-3158	Magro.Samuel@epa.gov
State/Local Inspectors			
Robert Burnett	DC DOEE	202-578-6237	Robert.Burnett@dc.gov
Hokti Shepard	DC DOEE	202-878-0389	Hotki.Shepard@dc.gov
Site/Facility Representatives			
Tom Foley	Vulcan	571-437-1279	Foleyt@vmcmail.com
Amodu Koroma	Vulcan	703-926-1928	Koromaa@vmcmail.com

Mr. Pete Gold, Mr. Shane McAleer, Mr. Sam Magro, Ms. Hokti Shepard and Mr. Robert Burnett displayed their credentials to the Facility Representatives at the outset of the inspection, and explained the purpose of the inspection was to evaluate the Facility's compliance with the Permit. A copy of the 2021 Permit is provided in Attachment A. The Inspection Team informed the Facility Representatives that any information that the Facility 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

At the time of the inspection, the weather was partly cloudy skies. No precipitation was experienced during the inspection. National Oceanic and Atmospheric Administration

(NOAA) National Weather Service precipitation data for the date of the inspection and 5 days prior are provided in Table 2 below.

Table. 2 Precipitation Preceding Inspection[1]

Station Name	Date	Precipitation Amount (inches)[2]
ALEXANDRIA 5.6 SSW, VA US US1VAFX0063	04/27/2024	0.00
ALEXANDRIA 5.6 SSW, VA US US1VAFX0063	04/28/2024	0.05
ALEXANDRIA 5.6 SSW, VA US US1VAFX0063	04/29/2024	0.00
ALEXANDRIA 5.6 SSW, VA US US1VAFX0063	04/30/2024	0.00
ALEXANDRIA 5.6 SSW, VA US US1VAFX0063	05/01/2024	0.01
ALEXANDRIA 5.6 SSW, VA US US1VAFX0063	05/02/2024	0.00

C. Summary of the Facility

Virginia Concrete is in southwest Washington, DC and manufactures ready-mix concrete from various raw material components located on the site. Concrete manufacturing at this facility has taken place since 2011. Raw materials used at the facility include sand, stone, cement, water, and chemical additives. The aggregate stockpiles of sand and stone are stored outside and exposed to stormwater. Cement mix is stored in a silo and delivered to the mixer through a pneumatic tube. Chemical additives are stored in drums inside a shipping container or tanks and transferred to the mixer via pumps or tubes.

II. OBSERVATIONS

As part of the inspection, the Inspection Team visually observed Facility conditions and documented those conditions through photographs.

The photographs (Attachment B) for this report have been processed using EPA Region 3 's Photo Management Process. A camera generated file name (e.g., PC050006) is assigned to each photograph as part of the process. The file names generated by the camera are used to identify each photograph in the Main Narrative and Photographs Log of this inspection report. Unused photographs are digitally stored and maintained in the inspection file. Unused photographs are available upon request.

The following section presents the Inspection Team’s observations relative to the Facility’s Permit requirements.

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

Permit Requirement

Part 2.1.2.4.e of the 2021 MSGP states "Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas…"

Part 6 of the 2021 MSGP states the permittee "…must prepare a SWPPP for your facility before submitting your NOI for permit coverage…"

Part 6.2.3 of the 2021 MSPG addresses potential pollutant sources and states "You must describe in the SWPPP areas at your facility where industrial materials or activities are exposed to stormwater or from which authorized non-stormwater discharges originate. Industrial materials or activities include but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, byproducts, final products, and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For structures located in areas of industrial activity, you must be aware that the structures themselves are potential sources of pollutants"

Observation 01:
The Inspection Team observed several drums, tanks and totes that appeared to lack secondary containment or cover. This included three large plastic admixture tanks that were partially protected by concrete jersey barriers (Attachment B, Photograph 27). Numerous drums and totes throughout the site were stored without any observed cover or secondary containment (Attachment B, Photographs 11, 16, 17, 19, 21 and 33). There is no description or discussion in the SWPPP regarding the storage of drums or admix tanks and stormwater control measures to address spills and leaks from these containers.

Permit Requirement

Section 2.1.2.2. of the 2021 MSGP states the permittee "…must keep clean all exposed area that are potential sources of pollutants. You must perform good housekeeping measures in order to minimize pollutant discharges, including but not limited to…" Section 2.1.2.2.a "Sweep or vacuum at regular intervals or, alternatively, wash down the area and collect and/or treat, and properly dispose of the washdown water…."

Section 8.E.2.1 of the 2021 MSGP addresses good housekeeping at cement plants and states "As part of your good housekeeping program, prevent or minimize the discharge of spilled cement aggregate (including sand or gravel), kiln dust, fly ash, settled dust, or other significant material in stormwater from paved portions of the site that are exposed to stormwater…."

Part 6 of the 2021 MSGP states the permittee "…must prepare a SWPPP for your facility before submitting your NOI for permit coverage."

Section 3.1.2 of the SWPPP under good housekeeping states that there is a "Daily inspection of material storage areas."

Observation 02:
The Inspection Team observed sand and aggregate piles where materials were outside of the storage unit. Aggregate and sand were seen on paved surfaces throughout the entire site. There were also piles of sediments (Material Drying Storage in SWPPP map) from the three-chamber settling system and the stormwater detention area that appeared to be beyond their storage structure. A mixture of stormwater and cement manufacturing materials were ponded in the rear of the site along the Anacostia River. At the time of the inspection this mixture was being held on site due to the site grading and the concrete barrier along the riverbank. These conditions are documented in Photographs 1, 2, 3, 7, 8, 9, 10, and 40 of Attachment B.

Permit Requirement

Part 4.2.2.3 of the 2021 MSGP states "Benchmark monitoring of stormwater discharges is required quarterly, as identified in Part 4.1.7, in the first and fourth year of permit coverage…."

Part 8 Subpart E of the 2021 MSGP states "You must comply with Part 8 sector-specific requirements associated with your primary industrial activity…."

Part 8.E.5 of the 2021 MSGP and Table 8.E.2 of the MSGP identify the benchmark monitoring parameters for SIC codes 3271-3275. Sector E2 is required to conduct benchmark monitoring for total suspended solids.

Observation 03:
In the Notice of Intent (NOI) the Facility identified itself as a Sector E (GLASS, CLAY, CEMENT, CONCRETE AND GYPSUM PRODUCTS) Subsector E2 and classified under SIC code 3273 (Attachment G). EPA's Integrated Compliance Information System (ICIS) has no discharge monitoring reports for the plant (Attachment G).

Permit Requirement

Part 3.2.1 of the 2021 MSGP requires the permittee to "Once each quarter for your entire permit coverage, you must collect a stormwater sample from each discharge point (except as noted in Part 3.2.4) and conduct a visual assessment of each of these samples…"

Observation 04:
As noted in Virginia Concrete's 2021, 2022 and 2023 Annual Reports, quarterly visual assessments were not collected from the facility because it did not discharge. Facility representatives stated that the site was constructed to hold discharges associated with the 100-year storm. Attachment H contains photographs provided by DC DOEE and taken on 07/31/23, 12/18.2023 and 1/10/2024 showing the entire Anacostia River border of the facility inundated with water.

Permit Requirement

Section 2.1.2.10 of the 2021 MSGP states "You must minimize the generation of dust and off-site tracking of raw, final, or waste materials in order to minimize pollutants discharges via stormwater."

Part 6 of the 2021 MSGP states the permittee "…must prepare a SWPPP for your facility before submitting your NOI for permit coverage…."

Section 3.1.8 of the SWPPP states "All concrete truck travel ways are paved. The exterior of the truck is rinsed prior to leaving the site. Daily we use a mechanical sweeper to remove any accumulated dust. Wet suppression is used to minimize off site tracking of material. Wet suppression is used on non-paved areas to prevent dust generation."

Observation 05:
The facility sprays concrete trucks prior to exiting the facility to remove sediment and dust from the trucks and thus minimize track out. At the time of the inspection, the Inspection Team observed cement trucks that were still wet and dripping a potential mix of washwater and sediments onto the street. The street in front of the facility had a significant amount of sediment and the inlet across from the facility's exit had a significant amount of sediment present. This is documented in Photographs 25, 26, 31 and 32 of Attachment B.

Permit Requirement

Section 2.1.2.2.b. of the 2021 MSGP relates to the facility's good housekeeping practices and states the facility must "Store materials in appropriate containers..."

Section 2.1.2.4.d. of the 2021 MSGP address spill prevention and response and states the facility must "Plainly label containers…".

Observation 06:
The Inspection Team saw a black plastic 5-gallon container with a red lid that was partially cut open containing an unknown liquid. This is documented in Photographs 13 and 14 of Attachment B.

Permit Requirement

Section 2.1 of the 2021 MSGP states "You must select, design, install and implement stormwater control measures (including best management practices) to minimize pollutant discharges that address the selection and design considerations in Part 2.1.1, meet the non-numeric effluent limits in Part 2.1.2, meet limits contained in applicable effluent limitations guidelines in Part 2.1.3, and meet the water quality-based effluent limitations in Part 2.2…"

Part 6 of the 2021 MSGP states the permittee "…must prepare a SWPPP for your facility before submitting your NOI for permit coverage…."

Section 3.1.6 of the SWPPP states "The facility has been designed to contain a 100 year storm event. Process water (and co-mingled storm water) flow into a series of concrete settling pits. Storm water from the remainder of the site flows toward a block wall that contains runoff. A weir system allows the storm water to flow into the settling pits where it can be recycled into our concrete process."

Declaration of Covenants page 8 Maintenance Guidelines states "The stormwater management facility for the subject property consists of a water detention structure located in the southeast corner of the site. All stormwater run-off, up to the 100-year storm will be detained on-site within this facility and will not discharge into any storm sewer system or body of water. The detention structure consists of 3 separate chambers. Two chambers will allow for settlement of any sediment captured by the runoff while the third chamber will provide detention storage. The sediment collected in these chambers will be removed and hauled off-site to an approved recycling facility. Stormwater detained in this facility will be pumped onsite to the concrete mixing plant to be used in the production operations on a daily basis. Inspection of the stormwater facility will be conducted on a regular basis and after severe storm events."

Observation 07:
The grading of the facility directed stormwater to the Facility's border with the Anacostia River. Water would accumulate at this section of the site and mix with cement production materials from the site and form a thick, gray-colored mud. The Inspection Team was unable to document any discernable boundary or banks for this area or any discernable instrument or marker to measure depth or capacity. The facility appeared to actively work in this area to remove sediments and muds. The ponded area abutted the concrete wall which prevented flows from going into the Anacostia River at the time of the inspection. However, based on photographic evidence taken by DC DOEE on 07/31/23, 12/18/23 and 1/10/24, during heavy rainfall events this area filled with water that extended throughout the border of the site. It appeared that during heavy rainfall this material may have been able to circumvent the wall and discharge to the Anacostia River.

The facility SWPPP describes stormwater as being contained in this area. However, the Declaration of Covenants seems to identify only the three-chamber system for the storage of stormwater.

Permit Requirement

Section 6.2.2.3 of the 2021 MSGP identifies the components that are required in the SWPPP Map among other items the SWPPP map is to include locations of stormwater inlets and discharge points (6.2.2.3.j) and liquid storage tanks (6.2.2.3.m.v).

Observation 08:
The SWPPP that was provided to EPA did not contain any location for a discharge or monitoring point, though the SWPPP states under the routine facility inspection section that "Any discharge point would be along the block wall along the river." The SWPPP map contained an Admix block but at the time of the inspection the Inspection Team observed at least 3 tanks in this area and an empty tank (Attachment B, Photograph 27). At the time of the inspection there were also totes and drums stored outside that did not appear to be on

the SWPPP map (Attachment B, Photographs 11, 16, 17, 19, 21 and 33). There was also a water retention structure within the facility's production area that did not appear on the SWPPP map or discussed in the SWPPP (Attachment B, Photograph 15). There was a laydown area located at the Water Street and T Street corner of the facility that did not appear on the SWPPP map (Attachment B, Photograph 12).

Permit Requirement

Section 6.2.5.1.b of the 2021 MSGP pertains to the stormwater control measures that are used to comply with effluent limits and states "Preventive maintenance including regular inspections, testing, maintenance and repair of all stormwater control measures to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a storm event resulting in a stormwater discharge occur while a control measure is off-line. The SWPPP shall include the schedule or frequency for maintaining all control measures used to comply with the effluent limits in Part 2…"

Section 3.1.3 of the SWPPP addresses maintenance and states "Routine preventive maintenance on the concrete batch plant. This includes weekly, monthly and quarterly checklists. Routine preventive maintenance on concrete mixer trucks. Maintenance of non-structural control devices (spill response equipment, employee training). Inspection and maintenance of dust pollution control devices to prevent escape of dust from delivery and batching process."

Page 9 of the Declaration of Covenants identifies that minor maintenance should occur twice per year and after major storms and major maintenance should occur annually.

Page 9 of the Declaration of Covenants states, under minor maintenance of the three-chamber settling system, "Take notes about the external and internal condition of the vault, be sure to record the level of sediment build-up on the floor of the chambers. If flow is occurring, note the level of water and estimate the flow rate per chamber. Record all observations."

Page 10 of the Declaration of Covenants under Related Maintenance Activities states "Inspection of the pumps which convey water from the chambers to the concrete plant operations shall be conducted on a regular basis."

Observation 9:
The facility collects stormwater runoff on site via the 3-chamber settlement system and, according to the SWPPP, the storm water detention area that is located along the concrete wall on the banks of the Anacostia River. The SWPPP does not appear to define a maintenance schedule or evaluation procedure for either of these structural controls in section 3.1.3. The Declaration of Covenants provides maintenance guidance on the three-chamber settlement system as cited above. It did not appear that either of the controls had a means to have their capacity measured or the amount of water they were holding. The stormwater detention area did not appear to have a clearly defined location or boundary.

The Inspection Team requested stormwater inspection documents from the facility. The Inspection Team was unable to find any documentation of the minor or major inspections of

the three-chamber settling system, inspections of the pumps associated with the system, or documentation of the sediment cleanouts. The stormwater inspection forms provided to the Inspection Team did have a check box for the settling pits and a line for comments on their condition. Haul-out records documented the amount of waste taken off-site which are believed to be the sediments from the Material Drying Storage area which holds clean-out from the three-chamber settling system and stormwater detention area.

III. CLOSING CONFERENCE

At the conclusion of the onsite inspection, the Inspection Team met with the Facility Representatives for a closing conference. The Inspection Team shared preliminary observations with the Facility Representatives and requested additional documentation from the Facility. The Inspection Team reiterated that all preliminary observations discussed were not compliance determinations. All preliminary observations shared were subject to further review 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 approximately 2:30 PM (EST).