

INDUSTRIAL FACILITY STORMWATER INSPECTION

Inspection Date(s):	11/13/2023	
Time:	Entry: 1:00 PM	Exit: 3:30 PM
Weather Conditions:	Sunny with temperatures of approximately 52° F	
Media/Program:	Water – CWA § 301, 402 – Industrial SW/NEC	
Operator Name:	Vulcan Materials Company	
Facility or Site Name:	Lower Dock Stone Yard	
Permit ID or Tracking #:	N/A, no Clean Water Act permit	
SIC Code:	5032: Brick, Stone, and Related Construction Materials The Facility representative was unsure of the Facility's SIC code. The SIC code was provided via email by Tom Foley Environmental Manager Vulcan Materials Company - Northeast Division on November 20, 2023.	
Facility Address:	5600 Old Osborne Turnpike	
(city, state, zip code)	Richmond, VA 23231	
Geographic Coordinates:	37.506900°, -77.415560°	
Mailing address:	5600 Old Osborne Turnpike	
(city, state, zip code)	Richmond, VA 23231	
County:	N/A, Independent City of Richmond	
Regular Days/Hours of Operation:	Monday – Friday, 7:00 AM – 3:00 PM	
# of Employees at location:	1-2	
Size of Facility (in acres):	Unknown, Facility representative was unable to estimate acreage	
Receiving Water(s):	James River, bordering the west side of the Facility property	
Date facility est. @ location:	At least 100 years according to Facility representative	
Onsite Representatives:		
Name: John Moore	Title: Site Superintendent/Loader	Phone: (804) 236-4160
	Email: Not provided	
Authorized Official: →	Contacted? ☒ Yes ☐ No	
Name: John Moore	Title: Site Superintendent/Loader	Phone: (804) 236-4160
	Email: Not provided	
Authorized Official: →	Contacted? ☒ Yes ☐ No	
Name: Tom Foley	Title: Environmental Manager - Northeast Division	Phone: (703) 713-3125
	Email: foleyt@vmcmail.com	
Authorized Official: →	Contacted? ☒ Yes ☐ No	
Name: Danny Perkinson	Title: Plant Manager	Phone: Not provided
	Email: Not provided	
Inspector(s):		
Taylor Fontaine (PG Environmental)	Title: Lead Inspector	Phone: (703) 956-1977

Chris Pardo (PG Environmental)	Title: Inspector	Phone: (703) 398-4251
Sean Ireland (EPA)	Title: Inspector	Phone: (202) 564-2923
Rachel Olugbemi (EPA)	Title: Inspector	Phone: (202) 564-2081
Inspection Report Author:		
Name: Taylor Fontaine (PG Environmental)	Signature: <i>Taylor Fontaine</i>	Date: 12/20/2023
Supervisor Review:		
Name: Sean Ireland (EPA, Senior Inspector)	Signature: <i>Sean Ireland</i>	Date: 12/20/2023

SECTION I – INTRODUCTION

Purpose of the Inspection

The purpose of the inspection was to determine compliance with the industrial stormwater requirements under §§ 301 and 402(p) of the Clean Water Act (CWA) and its implementing regulations found at 40 CFR Part 122.26. The inspection was unannounced and consisted of interviewing facility representatives, recording field observations, and taking photographs to document site conditions throughout the facility at the time of the inspection.

Opening Conference

- 1) Brief narrative documenting those present, introductions, presentation of credentials, and explanation of the purpose of the inspection.

On November 13, 2023, U.S. Environmental Protection Agency (EPA) contractor, PG Environmental, conducted an industrial stormwater non-filer inspection at Vulcan Materials Company – Lower Dock Stone Yard located in Richmond, Virginia (Facility). Mr. Sean Ireland of U.S. EPA (EPA) Headquarters, Ms. Rachel Olugbemi of EPA Headquarters, Mr. Taylor Fontaine of PG Environmental, and Mr. Chris Pardo of PG Environmental (collectively the EPA Inspection Team) met with the Facility representative and conducted an opening conference upon arrival. The EPA Inspection Team explained to John Moore (Site Superintendent/Loader) that the purpose of the inspection was to document the Facility's industrial activity and evaluate the requirement to apply for a National Pollutant Discharge Elimination System Permit (Permit). At the time of the inspection, the Facility did not have coverage under a Permit.

Weather conditions were sunny skies, and temperatures approximately 52° F. According to precipitation data from the National Oceanic and Atmospheric Administration (NOAA)¹, the Richmond, Virginia area received no rain the morning of the inspection. There was also no rain during the inspection.

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

- 2) Credentials presented to: John Moore – Site Superintendent/Loader
- 3) Facility acknowledged receiving previous outreach materials or correspondence on Permit requirements? ☐ Yes ☒ No

The Facility representative stated that he was unaware of any previous outreach regarding the requirement to apply for and obtain a permit.

John Moore and the EPA Inspection Team spoke to Danny Perkinson, Plant Manager during a phone conversation at the time of the inspection and he relayed that Vulcan's understanding is that the Facility, which was engaged in the wholesale distribution of aggregate materials, did not require an industrial stormwater permit. A company memo to this effect was provided to the Lead Inspector via email on November 20, 2023.

- 4) Facility has been individually notified by permit authority or EPA that it is subject to stormwater requirements? ☐ Yes ☒ No

The Facility representative stated that he was unaware of any notification by EPA or the State of Virginia regarding stormwater Permit requirements.

FACILITY'S OPERATION & PRODUCT DESCRIPTION

Description of business and industrial activities occurring throughout the site. (Include operator's description and note any documentation that further establishes SIC code (permit applications, reports, business registries, website...).

The Facility is in the City of Richmond, Virginia. The Facility is bordered by the James River to the west, the Virginia Capital Bike Trail and International Martex Tank Terminals (IMTT) to the north, Old Osborne Turnpike to the east, and Almond Creek/private land to the south. The Facility had a berm along the eastern and southern perimeter of the Facility, adjacent to Almond Creek; however, the EPA Inspection Team did not inspect the eastern portion of the Facility where a small pond was located near the entrance and where there was no recent industrial activity.

The Facility comprised a large, covered warehouse structure used to store lime for agricultural customers, a small office, a truck scale, and various piles of aggregate materials (refer to Appendix B, Photographs 1 through 7, 26, 27, 30 through 33). The Facility representative stated that the Facility solely serves as an aggregate materials sales yard and does not manufacture or process materials.

According to the Facility representative, the Facility receives aggregate materials (e.g., #21A gravel, #57 stone, masonry sand, etc.) via truck. The materials are then sorted into piles onsite for sale to commercial and public customers. The EPA Inspection Team observed the aggregate piles were exposed to stormwater and uncontained. Although the Facility had a dock located directly on the James River for barges to load and unload aggregate material, the Facility representative said there had been no over-water operations at the Facility for "several years". Additionally, the Facility had a large covered, open-sided warehouse used to store lime located in the northern part of the Facility.

The Facility maintained an earthen berm that extended along the western and southern boundaries of the Facility (refer to Appendix B, Photographs 8 through 23). A drainage ditch ran along the berm within the property on the southern boundary, eastern boundary, and a portion of the western boundary where stormwater is channeled toward the James River in the southwest corner of the Facility.

Other industrial facilities owned/operated by same business entity? ☒ Yes ☐ No **Describe:**
The Facility is owned/operated by Vulcan Materials Company, a national organization with locations across the southern United States including 69 facilities in Virginia according to the Vulcan website, <https://www.vulcanmaterials.com/construction-materials/facilities-map/find-by-state>.

SECTION II – OBSERVATIONS

SITE EVALUATION	
Pollutant Sources	
Loading/Unloading Operations	The Facility had one (1) entrance off Old Osborne Turnpike. The EPA Inspection Team did not observe any active loading/unloading at the Facility during the inspection. The Facility representative stated that materials are brought in via truck, sorted into piles onsite, and then sold to commercial and public customers.
Industrial Manufacturing/Processing Operations	The Facility representative stated that the Facility operates as a sales yard and does not conduct any industrial manufacturing or processing activities. The EPA Inspection Team did not observe any industrial manufacturing/processing operations onsite.
Industrial Machinery & Equipment Storage	The EPA Inspection Team observed one (1) yellow front-end loader stored outside, as well as conveyor equipment that, according to the Facility representative, was no longer in use (refer to <u>Appendix B, Photographs 2, 3, and 7</u>).
Storage of Industrial Materials or Products	During the inspection, the EPA Inspection Team observed piles of materials (rock, stone, and sand) stored uncovered and exposed to stormwater (refer to <u>Appendix B, Photographs 5 through 7, 26, 27, 30 through 33</u>). Lime was also stored at the Facility under a covered warehouse structure that had open sides (refer to <u>Appendix B, Photographs 30 through 33</u>).
Liquid Storage (e.g., Tanks, Liquid Storage Drums)	The EPA Inspection Team observed two (2) 250-gallon, double-walled storage tanks. One tank was used to store waste oil and one tank was used to store diesel fuel for onsite equipment (refer to <u>Appendix B, Photograph 29</u>). These tanks were in the southern portion of the Facility. The EPA Inspection Team observed a spill kit located adjacent to the tanks.
Waste Storage/Disposal Areas (solid and/or hazardous)	See the “Liquid Storage Section” above.
Waste Treatment Facilities (e.g., Pretreatment Systems)	The EPA Inspection Team did not observe any waste treatment facilities or areas used to treat stormwater onsite.
Fueling Stations/Equipment Maintenance Areas & Cleaning Areas	See the “Liquid Storage Section” above.

Sediment & Erosion Controls	The EPA Inspection Team observed an earthen berm that established a stormwater conveyance that extended along the western, eastern, and southern boundaries of the Facility (refer to <u>Appendix B, Photographs 8 through 23</u>). The Facility had placed riprap in locations where stormwater entered the stormwater conveyance; there were also riprap check dams in the conveyance that had accumulated sediment and debris (refer to <u>Appendix B, Photographs 12, 14, 15, and 16</u>). Also, the Facility representative stated that the Facility utilizes a water truck for dust suppression but did not specify the frequency.
Spills/Leaks Handling	The EPA Inspection Team observed a spill kit located near the waste oil and diesel storage tanks. The EPA Inspection Team did not observe any signs of petroleum staining or pooled oil onsite.
Outside Shelters	☐ Temporary (Date Established _____) ☒ Permanent The Facility had one large, roofed structure without side coverings located in the northern portion of the Facility (refer to <u>Appendix B, Photographs 30 through 33</u>). According to the Facility representative, the structure houses lime. The piles of lime were not fully contained, and lime had migrated under the corrugated metal side of the structure and onto the ground surface outside the structure in a location along the eastern side of the structure (refer to <u>Appendix B, Photographs 31 through 33</u>).
Evidence of non-stormwater sources/discharges (allowable if permitted under Permit)?	The EPA Inspection Team did not observe evidence of non-stormwater sources/discharges that would have been allowable if permitted under Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Stormwater Discharges Associated with Industrial Activity.
Evidence of process wastewater sources/discharges?	The EPA Inspection Team did not observe any evidence of process wastewater sources/discharges onsite.

OUTFALL, STORMWATER DISCHARGE & RECEIVING WATER OBSERVATIONS	
Number and description of each potential Stormwater Discharge Point from the Facility	The EPA Inspection Team observed evidence of four (4) discharge points (Discharge Points #1 through #4) along the western property line. From north to south, the discharge points are as follows: - Discharge Point #1 – This discharge point was traced from the Facility’s storage shelter in the northern portion of the Facility. Stormwater would convey from the lime storage shelter area to the east, then north, eventually to the west and the James River (refer to <u>Appendix B, Photographs 34 through 43</u>). - Discharge Point #2 – This discharge point was located at a break in the berm along the Facility’s western boundary (refer to <u>Appendix B, Photograph 9</u>). Stormwater would be conveyed west towards the James River.

	- Discharge Point #3 – This discharge point was located at a break in the berm along the Facility’s western boundary, to the south of Discharge Point #2 (refer to <u>Appendix B, Photograph 11</u>). Stormwater would convey from the Facility’s scale house to this point west towards the James River. - Discharge Point #4 – This discharge point was in the Facility’s southwestern corner collecting stormwater from the majority of the Facility, including the aggregate storage areas, towards the James River (refer to <u>Appendix B, Photograph 18</u>).
Evidence of pollutants migrating offsite (stains, deposits, ponding) at discharge points, into Receiving Waters or in MS4	The EPA Inspection Team observed evidence of directional deposit of silt/sediment on leaves and branches (i.e., “racking”) within the drainage ditch and offsite adjacent to the James River (refer to <u>Appendix B, Photographs 8, 11, 14, 17, 19, 20, 22, and 23</u>). More specifically, sediment deposition was evident throughout much of the conveyance and the direction of flow could be determined by leaves and debris racking upgradient of limbs and rocks at Discharge Points #2, #3, and #4. Discharge Point #1 had water within the heavily vegetated conveyance leading to the James River. At Discharge Point #3 and #4, sediment could be traced to the top of the steep embankment of the James River where stormwater velocity would significantly increase and carry sediment downslope to the river.
Evidence of Non-stormwater Discharges leaving site (authorized or unauthorized)	The EPA Inspection Team did not observe evidence of non-stormwater discharges leaving site.
Description of general gradients/slopes onsite, all apparent discharge points, and discharge pathway from Facility to Receiving Water or MS4 (storm drains, channel, swale, ditches, driveway, pipes, & etc.)	The ground surface throughout the Facility was compacted dirt and gravel, excluding the poured concrete floor in the storage warehouse. Most of the site sloped west towards the James River, with the highest points located in the center of the Facility east and south of the scale house (refer to <u>Appendix B, Photograph 2</u>). The northeast portion of the Facility by the storage structure sloped to the northeast. The Facility is bordered on the western, eastern, and southern boundaries by an earthen berm. See the Section above titled “Number and description of each potential Stormwater Discharge Point from the Facility” above for more information on discharge points.

SECTION III – AREAS OF CONCERN

- 1) The EPA Inspection Team observed four (4) discharge points (Discharge Points #1 through #4) along the Facility’s western property line that would convey stormwater from the Facility to the James River (refer to Appendix B, Photographs 9, 11, 18, and 34 through 43). See the Section titled “Number and description of each potential Stormwater Discharge Point from the Facility” above for more information.
- 2) The Facility had placed riprap at discharge points in the stormwater conveyances to mitigate sediment intrusion and check dams to slow down stormwater velocity (refer to Appendix B, Photographs 12, 14, 15, and 16). However, the riprap was not effective enough to inhibit discharge of sediment offsite.
- 3) The EPA Inspection Team observed more than five (5) aggregate storage piles without cover or containment (refer to Appendix B, Photographs 5 through 7, 26, and 27).
- 4) Piles of lime were not fully contained, and lime had migrated under the corrugated metal side of the storage structure and onto the ground outside the structure (refer to Appendix B, Photographs 31 through 33).

SECTION IV – CLOSING CONFERENCE

Attendees: John Moore, Sean Ireland, Rachel Olugbemi, Taylor Fontaine, and Chris Pardo

At the conclusion of the inspection, the EPA Inspection Team met with the Facility representative to discuss preliminary observations. The EPA Inspection Team explained that there was evidence of pollutant discharges from the Facility to surface waters and the Facility may require a Permit regardless of the SIC code.

On November 20, 2023, following the inspection, Tom Foley – Environmental Manager for Vulcan’s northeast division explained that the Facility does not have a Permit and based on the industrial activity, does not need a Permit. The Facility representative provided the EPA Inspection Team with an internal Vulcan Materials’ memo dated November 20, 2009, which claimed that aggregate sales yards are not required to obtain a federal or state stormwater Permit (refer to Appendix C for a copy of the provided document).

SECTION V – LIST OF APPENDICES

Appendix A – Aerial Map

Appendix B – Photograph Log

Appendix C – Exhibit Log