

**REPORT OF INDUSTRIAL STORMWATER
COMPLIANCE EVALUATION INSPECTION**

**AT
Vance Brothers – Brighton Location,
5201 Brighton Ave
Kansas City, MO 64130
NPDES NO: MOG490576**

September 19, 2023

**by U. S. ENVIRONMENTAL PROTECTION AGENCY
Region 7: Enforcement and Compliance Assurance Division**

INTRODUCTION

I performed a compliance evaluation inspection at Vance Brothers – Brighton Location in Kansas City, Missouri on September 19, 2023. Section 308(a) of the Federal Water Pollution Control Act, as amended, authorizes the inspection. I conducted this inspection following the procedures described here and followed applicable EPA Region 7 standard operating procedures. This narrative report presents the findings of the inspection.

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INSPECTION PROCEDURES

I, Caitlin Dix, EPA Region 7 Lead Inspector, arrived at Vance Brothers – Brighton Location (the “site” or “facility”), located at 5201 Brighton Ave, Kansas City, MO 64130, at 9:00 a.m. (CT) on September 19, 2023, for an unannounced inspection. I presented credentials to Mr. Kevin Nordhues, compliance director, and informed him that this was an EPA Region 7 inspection to determine compliance as authorized by Clean Water Act Section 308 and implementing regulations. This report is based on information supplied by Vance Brothers representatives, direct observations made by the EPA Region 7 inspectors, records and reports maintained by the permittee, and other information including:

- photographs taken by the EPA Region 7 inspector,
- physical evidence collected by the EPA Region 7 inspector,
- measurements taken by the EPA Region 7 inspector,
- verbal or written statements made, and information supplied by Vance Brothers representatives during or after the on-site inspection, and
- materials, processes, data, photographs, or documents shown, demonstrated, or submitted to the EPA Region 7 inspectors by Vance Brothers representatives during or after the on-site inspection.

In addition, information gathered before or after the inspection from a review of the EPA, State, and public records may be included in this report.

Before the inspection, I reviewed facility background information including existing permits, information on the receiving stream, compliance and enforcement history including a past inspection by MoDNR, facility website, maps, aerial images, and a copy of the SWPPP provided by MoDNR from their most recent inspection.

I met with Mr. Kevin Nordhues, compliance director, and Mr. James Abraham, the new environmental compliance administrator, in the compliance office at Vance Brothers – Brighton Location. I told Mr. Nordhues and Mr. Abraham that the inspection would be a review of required records, their Stormwater Pollution Prevention Plan (SWPPP), and a visual inspection of areas covered by their industrial stormwater permit.

I described the Confidential Business Information (CBI) Notice for information collected during the inspection and Small Business Resource Sheet during the opening conference. I emailed both forms to Mr. Nordhues and Mr. Abraham after the onsite inspection on September 19, 2023. Vance Brothers claimed the EPA collected proprietary information during the inspection. The claimed proprietary information is contained in the record for this inspection but not included in this report.

I completed the visual inspection on September 19, 2023. I documented my findings and observations by taking photographs and taking notes.

I summarized areas of concern seen during the visual inspection with Mr. Nordhues and Mr. Abraham during the closing conference of the inspection on September 19, 2023. I requested additional documents be sent to the EPA. I requested they send their Stormwater Pollution

Prevention Plan including the cross-referenced Spill Containment and Countermeasure Plan and five years of records of employee training, inspections, corrective action reports, sampling data, and spill records. Mr. Nordhues reviewed the observation and photos the facility claimed as proprietary business information and I marked the photos and observations as proprietary business information. I did not issue a Notice of Preliminary Findings.

FACILITY DESCRIPTION

The facility is a 45-acre facility located on both the east and west side of Brighton Avenue in the Swope Parkway-Elmwood neighborhood. The facility is on the west bank of the Blue River, a permanent stream (assessment unit ID: MO_418.00). The Blue River is impaired for boating and canoeing and whole-body contact recreation by pathogen *Escherichia Coli* (E. coli) according to the 2020 assessment available in How's My Waterway. The probable sources contributing to the impairment are urban runoff and storm sewers. The Blue River flows to the Missouri River.

The land surrounding the property includes river valley, residential, industrial, and undeveloped areas. The City of Kansas City Missouri owns the land between the asphalt mix plant and the channel of the Blue River. The average precipitation for the area is about 40 inches per year and most of the rain falls during the growing season with some snow in winter. Areas of the facility are in the 1% annual chance flood hazard zone and 0.2% annual chance flood hazard zone determined by the Federal Emergency Management Agency. The regulatory floodway is close to the northeast corner of the property owned and operated by Vance Brothers.

Facility Operations

Vance Brothers manufactures and supplies asphalt products. Their standard industrial classification code is 2951: asphalt paving mixtures and blocks. The stormwater pollution prevention plan says, "[t]his facility produces, stores and ships several variations of liquid asphalts including: asphalt emulsions, polymerized asphalt emulsions, polymer modified asphalt, cutback asphalt, road track, microad emulsions, slurry seal emulsions, Bulk Tack-SS1H, industrial cutbacks and foundation coatings." Around 35 acres of the site are industrial activities exposed to stormwater with at least 153 aboveground storage tanks. The hot mix asphalt batch plant and main emulsion plant are east of Brighton Avenue and between the road and the Blue River. To the west of Brighton Avenue there is the color plant making colored emulsions, more storage yards, warehousing, and tanker trailer parking. These facilities are bounded on the west by a railroad and Brighton Avenue to the east. Crossing the railroad and further southwest using an access road is the cave yard, materials laydown yard, asphalt cement tanks, fueling, and loading and unloading of railcars and trucks. The cave yard is where product is moved throughout the site via pipelines from one tank to another.

Industrial activities exposed to stormwater include outdoor stockpiling of raw materials, storage of materials in aboveground tanks, transport of materials, storage of petroleum, synthetic based stocks and additives, asphalt manufacturing, waste storage, vehicle and tank maintenance, equipment cleaning, loading and unloading, and vehicle and equipment fueling.

Regulatory History

The Missouri Department of Natural Resources authorized Vance Brothers-Brighton Location to discharge stormwater associated with industrial activities under Missouri state-operating permit MOG490576. This permit was issued July 1, 2022, and expires April 30, 2027. Vance Brothers has seven permitted outfalls under this permit. This permit authorizes the discharge of process wastewater, mine/pit dewatering, and stormwater to waters of the State of Missouri. The permit authorizes some non-stormwater discharges. Non-stormwater discharges are prohibited unless explicitly authorized under the list of allowable non-stormwater discharges or as process water under the effluent limitations in Part III of the permit.

The MoDNR inspected Vance Brothers' Brighton facility on August 17, 2020, for compliance with their Missouri state operating permit #MOG490576. The inspection was a routine compliance evaluation. The MoDNR announced the inspection in advance and found the facility in compliance based on the observations during the evaluation.

FINDINGS AND OBSERVATIONS

I noted the following observations during the visual inspection and record review. The weather conditions during inspection were partly cloudy to sunny with temperatures around 74°F at the beginning of the inspection and 84°F in the afternoon. The last rain event greater than 0.10 inches was September 5, 2023, according to the National Weather Service mean precipitation for the Kansas City Area, Missouri.

After the opening conference and a conversation about facility background and operations, Mr. Nordhues and Mr. Abraham provided a site tour to the EPA and MoDNR inspectors.

The section of the facility between the Blue River and Brighton Avenue drains to Outfall #1 Brighton Cement Pond or Outfall #2 Brighton West Wall. Outfall #1 (Image #1) receives surface flows from the hot mix asphalt plant and pumped stormwater and process wastewater from a settling basin (Image #2). Outfall #2 receives surface flows from the main asphalt emulsion plant. Mr. Nordhues said this facility uses closed and locked ball valves at each of the outfalls to control the release of stormwater after a precipitation event and prevent unauthorized discharges. The SWPPP says all outfalls have locked release valves and only plant managers, supervisors and the environmental compliance coordinator have keys to unlock and open the outfalls. Full perimeter containment and controlled release of stormwater through locked valves is one of the primary controls at this facility according to the SWPPP and staff.

The stormwater pollution prevention plan says all stormwater discharges from tank containment and perimeter containment are documented. The plan says any discharge of stormwater is tested for pH, visually assessed for the presence of sheen or other pollution, and a stormwater release form is completed. During the inspection, Mr. Nordhues said staff check the basin for sheen prior to discharge. All recent inspections reports submitted to the EPA by the facility say all pumped discharges that enter water of the state have been recorded. The facility did not provide any completed stormwater release forms or any other records of discharge for stormwater or process wastewater. I did not see any documentation of

stormwater or process wastewater discharges during the inspection. The facility is not following its SWPPP for monitoring and documenting stormwater discharges.

The facility has stormwater benchmarks and process wastewater effluent limitations. Discharges of stormwater commingled with process wastewater are considered process wastewater discharges even if the discharge occurs during or following a precipitation event. Process wastewater is any water used in the slurry transport of mined mineral, air emissions control, equipment and vehicle washing, separation processes (flotation, heavy media separation, etc) or processing exclusive of mining. Vehicle and equipment rinse water without added detergents, acids, caustics, solvents or other washing additives can be authorized as a process wastewater discharge, and may enter settling basins or other treatment devices as long as it meets the provisions and effluent limitations of the permit prior to discharge. The settling basin receives vehicle and equipment rinse water without added detergents. Discharges containing vehicle and equipment rinse water must meet effluent limitations prior to discharge. The SWPPP says “[n]on-stormwater discharges from pit dewatering or vehicle wash water without added detergents will be sampled and analyzed for the effluent limits as required by the facility general operating permit MO-G490576.” The facility must sample all process wastewater discharges to make sure effluent limitations are met. The facility must monitor effluent flow, settleable solids, oil and grease, pH, and total suspended solids. Monitoring reports for process wastewater discharges must be submitted quarterly to the MoDNR’s eDMR system. It is a violation of the permit to fail to sample process wastewater discharges.

The permittee is not required to sample stormwater under this permit. However, if samples are collected, they are to be compared to the benchmarks listed in the permit to assist in the evaluation of controls. The plan says stormwater runoff samples will be collected periodically as the evaluation method for benchmarks and effluent limitation established in the permit. Vance Brothers submitted a sample analysis from April 2018. The facility does not routinely monitor their stormwater discharges. The facility is required to complete quarterly visual assessments of stormwater discharges at all of its outfalls. This was a change to the renewal of the facility’s permit effective July 1, 2022. Quarterly visual assessments of stormwater discharges provide a useful and inexpensive way for facilities to evaluate the effectiveness of their BMPs/control measures. Although the visual examination cannot assess the chemical properties of the facility’s stormwater discharges, the examination provides meaningful results upon which the facility may act quickly. Quarterly visual assessments were not occurring based on the information submitted to the EPA.

The settling basin receives stormwater, process wastewater and serves as added containment for high volume spills. The stormwater pollution prevention plan does not provide implementation and maintenance details for the settling basin. There is accumulated sediment above the water line in the south corners of the basin; vegetation is growing in the sediment (Image #6). Hot Mix Plant Manager, Shawn Kerans said they will clean the sediment out of the basin floor as needed. There does not appear to be an established threshold to trigger cleanout of the basin. Since the pipe inlet is near the bottom of the basin the discharge would not be from the cleanest part of the water column and resuspension or transport of sediment during discharge is a concern. The basin does not use baffles or other controls to keep sediment

accumulation away from the discharge pipe. Deposited sediment in the basin floor that is level with or higher than the invert of the pipe shows sediment removal is needed or that there may be an issue with design or implementation of the control. Effectiveness of the controls is unknown in the absence of effluent monitoring of process wastewater discharges, quarterly visual assessments, or stormwater benchmark analysis. The facility submitted an analytical report for a sample collected in April 2018 collect from the discharge of the settling basin, or Brighton Cement Pond. The results show the pH of sample measured 8.2, but it does not appear that pH was measured within the required 15 minutes of sample collection. The results were below the detection limit for oil and grease. The results for total suspended solids were 18 mg/L. The April 2018 monitoring record is incomplete.

Mr. Kerans said earlier test results from discharges from the basin showed they were having troubles, so they added the gravel berm at the inlets to screen and filter stormwater, and they relocated the sand pile. Adjusting and adding BMPs is what the facility should do when monitoring results show deficiencies, but deficiencies, exceedances, and BMP improvement efforts must be briefly documented in the SWPPP and made available to the upon request. The facility needs to update their plan to include all controls used on site and operation and maintenance information for their structural controls. Monitoring after improvement efforts helps facilities understand if the improvement effectively resolved the deficiencies.

Hot Mix Asphalt Plant - Aggregate Storage

The facility stores aggregate materials in stockpiles. Some materials are covered and contained; other materials are not covered and not contained. The facility stores much of its aggregate stockpiles in two barns on the east side of the hot mix asphalt plant (Image #10 and #11). These

permanent structures are open sided with metal roofs. The facility uses concrete bin blocks to surround the aggregate materials on three sides. The facility stores some materials, like recycled asphalt and materials collected from dust collection equipment or baghouses, in piles outside the barns (Image #12). I saw piles of powdery grey material stored to the south of the east aggregate barn (Image #12). Mr. Kerans said that the fine grey material was baghouse



Image #12 from the digital image log.

material. These baghouse materials are not covered with an awning, tarp, or roof. The baghouse materials are not surrounded with dikes or berms to contain materials. Mr. Kerans said they allow the baghouse material to "get a little water on it" to make handling easier and sometimes stir the material back into process mixtures. Mr. Kerans said they were just a little overrun this year and they try to keep a balance of incoming to outgoing material. Waste

materials from dust collection systems are not promptly disposed. Materials collected through dust collection systems are fine and easily mobilized in stormwater and by wind. The facility does not store collected dusts in a way that prevents contact with precipitation or losses due to wind.

The permit requires that facilities manage materials to prevent materials from being transported off-site (permit section VI.1.(e)). Loose materials on the east side of the stockpiles were not well contained and potentially being discharged to the Blue River in stormwater (Image #13). To the east of the uncovered stockpiles and barn is the property line and a chain link fence. Along the fence there are piles of old sheet metal roofing and deposited fines are built up around the scrap sheet metal; some of the pieces of sheet metal are



Image #13 from the digital image log.

embedded in the fines (Image #13). Flow patterns and the location of deposited materials show the materials are migrating east and north. Facility must minimize erosion from stockpiles caused by stormwater and wind through temporary cover when possible and minimize sediment in stormwater from stockpiles using sediment controls (permit section VI.1.(e)).

To the east of the stockpiles, I did not see perimeter containment as described by the facility and stormwater pollution prevention plan. Along the fence on the east side of the site and behind the barns several areas seemed flat allowing stormwater to flow east towards the Blue River (Image #9, #14, #15, #16). Flows from the loose stockpiles of recycled materials and baghouse fines appear likely to flow both north behind the barns and east towards the Blue River. Behind the barn, the ground to north gets slightly higher further suggesting that stormwater flows east toward the Blue River and not to the permitted outfall. This permit does not authorize discharges to waters of the state from any location other than the outfalls described in the facility's permit. The perimeter containment does not appear sufficient to divert discharges to outfall #1 in chronic rain events. These loose materials are also stored in the 1% annual chance flood hazard zone. The facility must make sure the materials would not be discharged in the river during a high water event (permit section VI.1.(e)).

This material storage area of the facility had a few housekeeping concerns in addition to the concerns described above about the stockpiled materials. There was insufficient sweeping, vacuuming or other appropriate cleaning methods at regular intervals around the material storage area to prevent the accumulation of particulate matter and debris (Image #13). The sheet metal roof saved from an earlier barn roof for reuse was not stored in a clean and organized manner. Pieces of the sheet metal were embedded in sediment eroded from stockpiles. Some of the sheet metal was windblown with one piece of sheet metal found on the

outside of the fence (Image #16). The facility did not store the sheet metal in a manner to prevent materials from being carried off site by wind and blown near the floodway of the Blue River. There were a few pieces of trash behind the barn on the east side of the hot mix asphalt plant including a broken safety helmet, a bucket, and drink bottles (Image #14 and #15).

Main Plant

I saw staining outside of the secondary containment for aboveground tank D8 (Image #17) on the north side of the sealer plant building B. Mr. Nordhues said that the staining is from years and years of operations, and they now train employees to put a bucket under the connection, but the staining has not been resolved. Some of the staining seemed more fresh and commingled with dirt and debris on the ground in front of the containment (Image #17). Sections of the liquid transfer hose are outside the secondary containment area. Although the facility reports taking corrective action the facility appears to need to take additional action to prevent leaks and spills at this fueling tank. The facility must prevent the spillage or loss of oil, grease, and fuel to prevent contamination of stormwater from these substances.

Near the loading dock there is a material storage building called the open warehouse or building W1 on the site map (Image #20). This warehouse stores materials for the emulsion plant. Materials are stored under roof of a three-walled warehouse. The area is clean and organized.

To the south of the loading dock are more tanks and heated tanks serving the main plant. There is a berm on the south side of the loading dock (Image #22). This berm directs flows from the south towards Outfall #2. The berm is of variable height and stormwater may be overtopping the berm at low spots (Image #22).

Main Plant - Outfall #2

As mentioned before, Outfall #2 is one of the two outfalls serving the section of the facility between Brighton Avenue and the Blue River. Outfall #2 Brighton West Wall is found on the west side of the facility near a loading dock and to the west of the main plant for emulsion and sealers. At Outfall #2 there is a two-inch pipe with a long T-handle valve key, a chain, and a padlock to secure the key. There is sediment built up around the pipe and more than halfway in the pipe (Image #23). There are high-water marks at the top of the berm (Image #23). The berm height may be insufficient to provide the intended amount of perimeter containment, treatment or settling time. The berm height, size of the drainage area, and high-water marks and deposited materials at the top of the berm suggest stormwater is overtopping the perimeter containment.

There is a small area of ground around the outfall pipe that is damp. Ronnie Simmons, main plant manager said that the ground around the outfall was wet from a water tank they drained earlier in the morning. The valve handle was parallel with the direction of the pipe. Mr. Nordhues said that the valve was currently open based on the direction of the handle being parallel with the direction of the pipe. Later, Mr. Nordhues corrected and said he confirmed

with Mr. Simmons that the valve was closed while we were at the outfall. It was unclear to me whether the pipe was open or closed during inspection and whether, given the amount of sediment in the pipe, that they could close the valve at Outfall #2. Later during the inspection, I saw that staff continued to work in the area of Outfall #2. The outfall needed maintenance to make sure it functions as intended.

At Outfall #2 there were two T-handle valve keys and three discharge pipes at Outfall #2. I could not see the inlet to the two-inch pipe associated with the second valve key (Image #26). The inlet to the pipe was potentially buried under deposited materials. Mr. Nordhues said this pipe with no visible inlet was old and no longer functional. The third discharge pipes discharges below the outfall sign (Image #25) appears to originate as a standpipe next to a secondary containment structure around heat tank #201 (Image #28). Mr. Nordhues and Mr. Simmons said the pipe was not functional. The standpipe next to the secondary containment did not appear functional with two batteries and a water bottle inside the standpipe (Image #27).

In the areas in front of Outfall #2 there are bulk storage totes of liquid process materials not in the secondary containment structures. One tank is labeled as muriatic acid (Image #22) and two tanks are an emulsion additive with a corrosive hazard (Image #29 and #30). A tanker truck with visible staining on the outside of tank is parked in front of Outfall #2.

The ditch in front of Outfall #2 had pooling water that was bright green. The pool was about 3 x 1.5 feet in size. (Image #23 and #31)

Overall, there is limited to no pollutant removal mechanism at this outfall. Capacity and performance of the perimeter containment to provide effective detention and settling time are questionable. The slope below the outfall seems destabilized and eroding. The outfall was not maintained in good working order. The bright green pool below the outfall suggests nutrient rich inflows and sedimentation in the ditch is a likely indicator of insufficient pollution reduction in discharges from the outfall.

West of Brighton Avenue

West of the main plant and across Brighton Avenue is warehousing and the color plant at building H. There is dust collection equipment outside the color plant building at the top of the driveway (Image #32 and #33). Steve Segura, West Plant Manager, said this bag house collects clay and silica. Any leaks or spills during the filling or removal operations are not within a drainage area to a permitted outfall. Stormwater from this area flows down the driveway through an unregistered outfall. I saw no trench drain, berms, or other mechanism to divert flows to the registered outfalls. The dust collection equipment appeared in good condition, and I saw no evidence of leaks or spills.

To the south of the driveway is Outfall #5 (OPC – northeast) or Onyx Plant Containment (northeast). Outfall #5 receives stormwater from the color plant and outdoor storage areas. There is a containment wall with a discharge pipe at the base of the wall; the outlet has a locked ball valve (Image #34). Behind the containment wall is accumulated sediment around

the discharge pipe (Image #34 and #35). There is also trash including degraded cardboard, plastic bottles and a gallon can in the containment area (Images #35). The pipe is more than half full of sediment. The facility does not provide additional filtration during discharge. There are mud cracks in the accumulated sediment suggesting clay-rich sediment that has been submerged in water and later dried out forming cracks. Sediment removal is not completed in a timely manner. This outfall receives stormwater flow from the areas with leaks and spills around the tanks serving the color plant and tote storage areas (image #36 and #41). This outfall and detention area are not maintained in good working order and may not provide sufficient treatment for the pollutants and pollutant loads generated in this drainage area. As an example, perimeter containment alone would not reduce oil and grease from leaks and spills in the drainage area. The perimeter containment may not be providing sufficient sediment removal given the location of the discharge pipe, the likelihood for resuspension of sediment, and lack of additional filtration or treatment.

Outfall #6 (OPC-southeast) Onyx Plant Containment (southeast) is further south than Outfall #5, but on the same containment wall. There is a discharge pipe at the base of the containment wall with locked ball valve (Image #37). There is an accumulation of sediment around the inlet of discharge pipe and behind the containment wall (Image #38). Directly in front of the inlet to the discharge pipe is a hollow in the accumulated sediment (Image #37). The hollow in the sediment at the invert of the pipe shows the settled solids are resuspending during discharge and the facility is discharging sediments. Sediment removal from structural control is not completed in a timely manner. Additional controls selected and designed for the target pollutants in the drainage area are likely needed.

The area surrounding the color plant is tote storage and tanks (image #39). Around the tanks serving the color plant and the tote storage area I saw spills and staining on the ground (Image #40). I saw barrels with materials on the outside (image #41). Good housekeeping appears inadequate and downstream controls do not appear to provide targeted removal for the pollutants in the drainage area.

Cave and rail yard

Outfall #3 and Outfall #4 are on a containment wall serving the cave yard and rail yard. Outfall #3 is on the north end of the containment wall on the east side of the cave yard and railyard site. Mr. Nordhues said Vance Brothers installed the containment wall around 2019. The containment wall is a few feet high and the inlet to the discharge pipe with a locked ball valve is at the base of the wall (Image #43). There is sediment accumulated at the base of the wall and in the invert of the discharge pipe (Image #43). There is vegetation growing in the accumulated sediment around the inlet. Sediment removal is not completed in a timely manner. Sediment in the invert of the pipe show sediments are being discharged; the facility does not provide further filtration during controlled releases from their containment area. Because the discharge pipe is at the base of the containment wall discharges would occur from a dirtier section of the water column and resuspension of sediment is a concern.

Outfall #4 is on the south end of the containment wall on the east side of the cave yard and railyard. The inlet to the discharge is at the base of the wall and there is a closed and locked ball valve on the outlet of the pipe to prevent unauthorized discharge (Image #45). There is sediment accumulated at the base of the containment wall and around the inlet (Image #44). There is vegetation growing in the sediment (Image #44). This outfall has the same concerns as the outfall above. The facility is not providing sufficient good housekeeping to sweep up and remove sediments in a timely manner. The facility discharges from the dirtiest part of the retained water column without further filtration. Without monitoring reports, it is unclear if this structural control provides adequate treatment to reduce the pollutant concentrations in the facility's stormwater discharges.

Outfall #7 is found on the southeast side of the cave yard and railyard. Mr. Nordhues said they added this outfall when KC Water reworked a storm sewer and possibly sanitary sewer in this area in 2019. There is a gravel berm separating the facility from the drainage channel to the Blue River. The inlet is in a low spot on the facility side in front of the berm. Some of the ground surrounding the inlet is bare with no vegetation growing. The inlet is surrounded by a trash rack. There are degraded pollution prevention materials surrounding the trash rack that need replacement. Filter fabric partially surrounds the sides of the box but is falling off. A filter sock once surrounded the top edge of the box, but the sock has detached and degraded to the point of allowing the internal materials to spill out onto the ground. On the berm there is a plastic standpipe with a locked T-handle valve key for controlling discharges. On the discharge side of the berm the outlet emerges from the base of the berm to discharge to the receiving channel. There is some scouring at the outlet. The receiving channel is gravelly. The controls were not maintained in good working order.

I did not see any discharges during the inspection.

Stormwater Pollution Prevention Plan

The Stormwater Pollution Prevention Plan was located on site and Vance Brothers made their SWPPP available to the EPA for review. I completed a limited review of the SWPPP during the onsite inspection. Mr. Abraham sent a copy of the SWPPP on September 22, 2023. I reviewed the plan and found the plan did not meet all the requirements in the permit. The SWPPP includes a certification statement signed in 2015 and a log showing an update in 2020. The SWPPP does not appear to reflect the accurate conditions on site (permit section V.1.). The SWPPP does not appear to be reviewed annually (permit section V.1.).

The assessment of process wastewaters and stormwater discharges does not list all potential contaminants (permit section V.4.(b)). SWPPP identifies total suspended solids, pH, flow and oil and grease as pollutants, but does not identify other commonly known and accepted pollutants known for asphalt facilities including total dissolved solids (TDS), biochemical oxygen demand (BOD), chemical oxygen demand (COD), methylene blue active substances (MBAs), metals, cationic and anionic solutions, and benzene. There may be additional contaminants on site and the facility should complete a comprehensive evaluation to include all potential contaminants in their SWPPP.

The SWPPP does not list all BMPs nor provide a sufficient narrative on how the BMP will be implemented including maintenance, repairs, and replacement schedules (permit section V.4.(c)). The SWPPP does not have an effective description of wash water for vehicles, buildings, equipment, or pavement and where the wash water infiltrates or discharges through a monitored and permitted outfall (permit section V.4.(d)).

The site map does not show all required elements in permit section V.4.(e):

- direction of stormwater flow,
- location of all structural controls,
- location of all potential stormwater pollutant sources,
- the municipal separate storm sewer system, and
- locations of the following activities, including:
 - fueling stations,
 - vehicle and equipment maintenance and cleaning areas,
 - vehicle and equipment rinsing areas,
 - locations used for the treatment, storage, or disposal of wastes,
 - all liquid storage tanks, noting whether they have secondary containment, and
 - processing and storage areas.

Vance Brothers kept inspection reports and made the inspection reports available to the EPA upon request. Mr. Nordhues said corrective action reports and many of their quarterly visual assessments were completed with the monthly inspections. I briefly reviewed some inspection reports and saw that some inspection reports do document deficiencies and corrective action. I did not see quarterly visual assessments in my limited review. I reviewed monthly inspection reports for 2022 and I did not see any inspections conducted in wet weather or any documentation of visual assessments of discharge during a storm event or a controlled release. Inspection reports do not effectively show that all required observations and analysis of BMP effectiveness occurred V.4.(f). Vance Brother did not conduct or did not document monthly inspections during June and July in 2023. The SWPPP does not provide a schedule and provision for quarter visual assessments of stormwater discharges V.4.(g).

There are designated individuals responsible for environmental matters (permit section V.4.(h)). There is annual SWPPP training and Vance Brothers made proof of training available upon request. (permit section V.4.(i)).

The plan says stormwater runoff samples will be collected periodically as the evaluation method for benchmarks and effluent limitation established in the permit (permit section V.4.(j)). Vance Brothers submitted a single sample analysis from April 2018 from the settling basin at outfall #1. The existing provision and schedule for sampling discharge against benchmarks/effluent limitations appears inadequate to effectively evaluate BMP effectiveness and discharge quality. The SWPPP provides conflicting information to the user about the requirements for sampling for process wastewater discharges to make sure effluent limitations are met. The SWPPP says in section 2.3.1 that non-stormwater discharges from pit dewatering or vehicle wash water without added detergents will be sampled and analyzed for the effluent

limits as required by the facility general operating permit MO-G490576. But later in section 3.8 for the Sector-Specific Effluent Limits section of the SWPPP Table 3.1 says “Not Applicable, Stormwater Only” under the non-stormwater monitoring requirement. This SWPPP may confuse employees with competing information about non-stormwater sampling requirements and effluent limitations. Further updates to the SWPPP may help staff understand the different sampling requirements between process wastewater and stormwater, including the understanding that stormwater commingled with process wastewater is wastewater.

The facility has a Spill Prevention Containment and Countermeasures plan which provides a detailed plan of action in the case of release or spill of a hazardous substance. I did not review the SPCC plan.

Facility information section of their SWPPP says” [t]his facility does not discharge into an MS4. Stormwater from this facility is received by an unnamed tributary to Sewer Branch. It does not discharge to an MDNR Section 303(d) Impaired Water.” Outfall #2, Outfall #5, and Outfall #6 appear to discharge to publicly owned facilities used to collect and convey stormwater on Brighton Avenue and are likely a part of the KC Water MS4. Outfalls #3, #4, and #7 discharge to drainage channels that may be part of the KC Water MS4 as well. Outfall #1 discharges to an impaired section of the Blue River. Later the Stormwater Pollution Prevention Plan does identify the Blue River as the receiving stream under the outfall information (Page 4 of the SWPPP).

I did not review the stormwater discharge reports, spill reports or industrial equipment maintenance logs during the inspection. These logs and reports were either not completed or not submitted to the EPA. I noted the BMP guide (Appendix E) appears focused on metal fabrication areas and does not seem site specific.

CONCLUSION

Vance Brothers has taken several actions after the EPA inspection including updating parts of their Stormwater Pollution Prevention Plan and capping two discharge pipes at Outfall #2 on September 27, 2023. Mr. Nordhues and Mr. Abraham sent the updated SWPPP and documentation of corrective actions to the EPA. I did a limited review of the updated Stormwater Pollution Prevention Plan and deficiencies discussed above persist. The facility continues to take corrective action according to Mr. Nordhues, like preparing for quarterly visual assessments.

There are concerns seen during the inspection that the facility should further evaluate and may need to take further corrective action. The facility uses best practices towards a foundation of a stormwater pollution prevention program, but overall controls appear to be inadequate. For both structural and nonstructural controls to prevent stormwater pollution the facility should significantly build upon its existing program.

1. The Stormwater Pollution Prevention Plan does not meet all minimum requirements and must be updated.
2. The structural controls do not appear as described in the SWPPP.

3. The structural controls appear insufficient to minimize and prevent the discharge of pollutants in stormwater.
4. Erosion and sediment controls appear inadequate to prevent or reduce polluted runoff.
5. Control measures needed replacement, maintenance, or repair. Some controls were degraded or not properly installed.
6. The facility generates process wastewaters. The facility must identify process wastewaters, identify when process wastewater commingles with stormwater, and must sample process wastewater to make sure effluent limits are met prior to discharge. The facility must submit eDMRs to the Missouri Department of Natural Resources for process wastewater discharges.
7. The facility must monitor stormwater discharges quarterly. The visual assessment for water quality must be of an actual discharge from a storm event.
8. Some materials were not being managed to prevent transportation off-site in stormwater or wind. There were insufficient controls to prevent erosion of stockpiles, insufficient sediment controls, and loose materials stored in the floodplain. The facility must make sure materials are not discharged off-site or into a water of the state during a high-water event.
9. Some areas were clean and organized. Other areas of the facility were not clean and had staining, leaks, spills, accumulation of sediment, trash, and debris. The facility should evaluate their good housekeeping program and the schedule for routine pickup and disposal of waste materials because the current schedule seems inadequate.
10. There is evidence of, or the potential for, pollutants entering the stormwater drainage system. The facility must evaluate the effectiveness of their controls.

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Caitlin Dix
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Jodi Bruno
Manager, ECAD/WB

ATTACHMENTS:

1. Missouri State Operating Permit (36 pages)
2. Digital Image Log and Map (58 pages)
3. Stormwater Pollution Prevention Plan (191 pages)
4. Confidential Business Information Notice (1 page)