REPORT OF INDUSTRIAL STORMWATER
COMPLIANCE EVALUATION INSPECTION

AT
Hot Mix Materials, Inc.,
2701 E 85th Street
Kansas City, MO 64132
National Pollutant Discharge Elimination System ID: MOG491089

December 15, 2023

by U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
Region 7: Enforcement and Compliance Assurance Division

INTRODUCTION

I performed a compliance evaluation inspection at Hot Mix Materials, Inc. in Kansas City, Missouri on December 15, 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 following applicable EPA Region 7 standard operating procedures. This narrative report presents the findings of the inspection.

PARTICIPANTS

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INSPECTION PROCDURES

I, Caitlin Dix, EPA Region 7 Lead Inspector, arrived at Hot Mix Materials (the "site" or "facility"), located at 2701 E 85th Street in Kansas City, Missouri at 9:08 a.m. (CT) on December 15, 2023, for an unannounced inspection. I presented credentials to Mr. Allen Conway, general manager, 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 also based on other information collected by the EPA Region 7 inspectors including photographs,

physical evidence, measurements, statements made by facility representatives, and documents shown or sent to the EPA Region 7 inspectors by facility representatives during or after the on-site inspection. 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 the current National Pollutant Discharge Elimination System permit, information on the receiving stream, compliance and enforcement history including a past inspection by the Missouri Department of Natural Resources (MoDNR), facility website, relevant maps and aerial images, and National Weather Service precipitation records.

During the opening conference I met with Mr. Allen Conway, general manager, in his office at Hot Mix Materials. I told Mr. Conway that the inspection would be a visual inspection of areas covered by the permit and a review of their Stormwater Pollution Prevention Plan (SWPPP) and records that must be kept under their National Pollutant Discharge Elimination System 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. Conway during the onsite inspection. Mr. Conway said there was no proprietary information at the facility. Mr. Conway completed and returned the CBI form during the closing conference.

I completed the visual inspection on December 15, 2023. I documented my findings and observations by taking pictures and taking notes. Carson Colletier also took notes during the inspection.

I summarized areas of concern seen during the visual inspection with Mr. Conway and Mr. Knight during the closing conference on December 15, 2023. I asked Mr. Conway to send documents to the EPA. I asked them to send their Stormwater Pollution Prevention Plan including the cross-referenced Spill Prevention Control and Countermeasure (SPCC) Plan and five years of records of employee training, inspections, corrective action reports, sampling data, and spills. I issued a Notice of Preliminary Findings on December 15, 2023.

FACILITY DESCRIPTION

The facility is about 10 acres located near the intersection of E 85th Street and Prospect Avenue in the Legacy East neighborhood in Kansas City, Missouri. The facility was about eight acres when Hot Mix Materials first opened in 2007; Hot Mix Materials expanded operations around 2020 to include neighboring parcels to the west adding about two more acres to the facility.

The facility is north of the Blue River in a manufacturing district surrounded by residential properties, a community business district, undeveloped land, and river valley. A flood control levee is about 1,500 feet southeast of the facility between the Blue River and the industrial and commercial area. The facility has two permitted outfalls and discharges to the KC Water municipal separate storm sewer system which flows under the levee and discharges to the Blue River. The Blue River is a permanent stream (assessment unit ID: MO_418.00). The Blue River is

impaired for boating and canoeing and whole-body contact recreation by pathogens according to the 2020 assessment available in the How's My Waterway website hosted by the EPA. The probable sources contributing to the impairment are urban runoff and storm sewers. The Blue River flows to the Missouri River.

The average precipitation for the area is about 40 inches per year and most rain falls during the asphalt production season with some snow in winter. All areas of the facility are in the 1% annual chance flood hazard zone, or 0.2% annual chance flood hazard zone mapped by the Federal Emergency Management Agency (FEMA). The expected 24-hour precipitation event for this site is around 3 inches annually and around 5.6 inches every 10 years.

Facility Operations

Hot Mix Materials produces asphalt used in road and parking lot paving in the local community. Their standard industrial classification code is 2951: asphalt paving mixtures and blocks. Hot Mix Materials primarily produces hot-mix asphalt made from recycled asphalt pavement and recycled asphalt shingles. The facility is equipped to produce warm-mix asphalt. Hot Mix Materials is family-owned and operated and has ten employees. The facility operates from March through the end of December, Monday through Friday around 6 a.m. to 4 p.m., and Saturdays and evenings as needed. The facility averages about 1,600 tons of asphalt sold per day; they sold asphalt around 183 days in 2023.

Production equipment includes an 8.5' x 42' rotary dryer, five 10' x 14' cold feed bins with 30 feeders and 30 collectors, and three 200-ton silos. The facility loads aggregates into bins, materials go through a scalping screen and onto a belt conveyor, then to a sling conveyor, a drying drum, and a belt conveyor to the hot mixer. Finished product is conveyed to holding silos and the silos feed loader trucks. Industrial activities exposed to stormwater include:

- Asphalt manufacturing.
- Outdoor stockpiling of raw materials, including:
    - Sand.
    - Limestone dust.
    - Recycled asphalt pavement.
    - Recycled asphalt shingles.
    - Gravel.
- Storage of materials in aboveground tanks, including storage of petroleum, synthetic based stocks, and additives:
    - Asphalt cement.
    - Heat transfer oil used to heat the asphaltic cement.
    - Diesel aboveground storage tank.
    - Unleaded gasoline aboveground storage tank.
    - Lube and motor oils barrels.
- Oil-filled equipment
- Waste storage.
- Material handling and transport.
- Tank and vehicle maintenance including fueling.

- Equipment cleaning and maintenance.
- Loading and unloading.

Regulatory History

The Missouri Department of Natural Resources authorized Hot Mix Materials to discharge stormwater associated with industrial activities under Missouri state-operating permit MOG491089 (Attachment #1). This permit was issued August 1, 2022, and expires April 30, 2027. Hot Mix Materials has two permitted outfalls under this permit. This permit authorizes the discharge of process wastewater, mine and pit dewatering, and stormwater to waters of the State of Missouri.

The MoDNR inspected Hot Mix Materials on June 20, 2013, for compliance with their Missouri state-operating permit. The inspection was a routine compliance evaluation. The MoDNR announced the inspection in advance and found the facility in compliance based on the findings during the evaluation.

The permittee is not required to sample stormwater under this permit. However, if samples are collected, they are to be compared to the benchmarks in the permit to help evaluate the facility's stormwater pollution prevention. The permit says the best management practices (BMPs) at the facility must be designed to meet benchmarks during rainfall events up to the 10-year, 24-hour precipitation event.

FINDINGS AND OBSERVATIONS

I noted the following observations during the visual inspection and record review. The last rain event greater than 0.10 inches was December 1, 2023, and measured around 0.37 inches with trace amounts of snow according to the National Weather Service mean precipitation for the Kansas City Area, Missouri. The U.S. Drought Monitor shows the broad-scale conditions for the area as abnormally dry in the report dated December 12, 2023. The weather conditions at the start of the inspection were cloudy and around 46°F and at the end of the inspection raining and around 50°F. I saw pooling water on the ground from rain earlier that morning. After the opening conference and a conversation about facility background and operations, I inspected areas of industrial activity exposed to stormwater. It rained at the facility near the end of the inspection. It had not rained enough to generate runoff while I was on site. The National Weather Service reports 0.59 inches for the Kansas City Area on December 15, 2023.

The facility has not marked Outfall #1 in the field and the facility has not made the outfall accessible for inspection. Outfall #1 is in the northeast corner of the facility, discharges to the KC Water municipal separate storm sewer system and receives industrial stormwater from two small swales at the base of the main stockpiles of recycled asphalt pavement. These swales receive industrial stormwater from the asphalt production equipment, aboveground storage tanks of asphalt cement, fueling, loading and unloading, and aggregate stockpiles of raw materials. The facility mows part of the vegetated buffer between the north fence and the swale at the base of a stockpile. The mowed approach allows personnel to walk near the

outfall. The outfall was not adequately visible from where Mr. Conway showed us the outfall location. I did crawl through the understory of shrub honeysuckle thicket to be able to view the pipe inlet where stormwater discharges to the municipal separate storm sewer system. During the growing season vegetation would be thicker and the outfall would be less accessible and likely not visible for routine monitoring. (Attachment #2 Digital Image Log Photos #1 - #5)

The facility has not marked Outfall #2 in the field (Photo #32). Outfall #2 is on the west side of the facility and receives industrial stormwater from aggregate stockpiles like recycled asphalt shingles and wastewater from the equipment washing area.

The facility generates and improperly disposes of process wastewater. The facility has a free-standing staircase with platform and a hose used to rinse out industrial materials from the bed of contracted delivery trucks (Photos #39 - #42). Mr. Colletier and I saw dark surface soil staining, and Mr. Colletier smelled a strong petroleum odor in the area of staining. Mr. Conway said delivery trucks wash out onto the ground. Mr. Conway said he was not aware that truck washout was process wastewater. The facility does not contain process wastewater generated during truck bed washout and commingled water flows to Outfall #2 without treatment or control. Equipment and vehicle wash water is process wastewater (Permit part I.2.). Commingled water is process wastewater (Permit part I.2.). Any non-stormwater discharges other than those explicitly authorized in condition 16 and process wastewater under Part III are prohibited (Permit part I.17). The facility does not use washing additives. 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 before discharge (Permit part I.19). The facility is not making sure their discharges of process wastewater meet effluent limitations. Discharges of process wastewater are not controlled, limited, or monitored by the facility as specified in Part III of the permit.

The facility is not managing stockpiles to prevent materials from being transported off-site. The facility has not provided temporary cover or other structural controls to minimize erosion of stockpiles from stormwater and wind. I saw stockpiles of recycled asphalt pavement, gravel, sand, limestone dust, and recycled asphalt shingles stored in the open exposed to precipitation and without any awnings, tarps, roofs or other cover (Photos #14, #23, #26, #27, #29, #30, #31, #33 - #39, #41, and #47). I did not see any stockpiles surrounded by block bins or another method to limit exposure and provide protection from wind. I experienced dusty conditions on site during the inspection and dust was readily deposited onto inspection equipment. I saw areas of standing water on site had a floating layer of dust (Photo #25). Mr. Knight said that when the weather is windy staff experience skin irritation from the materials.

The facility has not provided effective controls to prevent stormwater flows from causing erosion of stockpiles, for example by diverting flows around them. I saw recycled asphalt pavement, recycled asphalt shingles, sand, limestone dust, and gravel stored without curbing, diking or other best practices around the stockpiles to prevent stormwater from contacting materials stored or spilled on the ground (Photos #11, #12, #14, #27, #29, #30, #31, and #33 - #39). I saw thick sediment deposits in the curbs directly outside the facility (Photo #58). I saw

sediment deposits in the middle of the street in front of the facility (Photo #58). I saw the facility store materials in mounded piles and in general the mounded shape does increase stormwater shedding and helps keep piles drier. I saw many piles stored in a peaked shape that sheds precipitation. I saw that not all piles were shaped to shed stormwater and some piles were relatively flat and not shaped beyond the pour height and shape achievable by the delivery truck (Photo #31). Pile shape can have a considerable influence on the amount of precipitation infiltrating and amount of leachate produced from a stockpile with a flat or concave top keeping water and a convex or peaked shape shedding water. I saw that the pile of ground recycled asphalt shingles had hollows or pockets that would collect stormwater (Photos #36 and #37); hollows or pockets increase stormwater infiltration into the pile and increase leachate. Mr. Colletier noted the material looked solidified at the top of the pile or the area of greatest infiltration and, the solidified material cleaved off from the looser dry material below (Photos #36 and #37). Pile shaping without additional controls is an insufficient control to prevent stormwater pollution from stockpiles. I did not see any additional controls to prevent stormwater from causing erosion of stockpiles.

The facility has not provided sediment controls to minimize sediment in stormwater that runs off stockpiles. Once sediment been mobilized by stormwater or wind there were limited to no sediment controls to prevent the sediment from being transported off-site. There was a small, vegetated buffer on the northeast corner of the facility upstream of Outfall #1 that would provide limited sediment control (Photos #26). The Stormwater Pollution Prevention Plan says a sediment trap is used as a best management practice, but its location, size and design are unknown. I am not sure if this vegetated buffer is or was once intended to act as a sediment trap. I estimate that vegetated buffer including mowed turf, shrub-scrub, and cattail-filled ditches was less than 0.4 acres total and potentially receiving runoff from five to six acres of industrial activity. Not all of that 0.4 acres provides stormwater treatment because stormwater flows are concentrated to an even smaller area and ditch within the vegetated buffer. The vegetation buffer on the east side of the asphalt aggregate pile was around 30 feet at the widest area and spanned about 250 feet. I saw vegetation in the buffer that was overgrown with aggressive and invasive species like cattails and shrub honeysuckle. I saw volunteer tree species that appeared at least three to four years old. I saw a significant amount of fine sediment accumulation and dust in this vegetated buffer. The ground around and in the vegetative buffer was muddy with a thick layer of wet sediment. The existing sediment accumulation I saw around the base of the vegetation seemed to be the full capacity of the buffer. The facility did not provide design, installation or maintenance information for a sediment trap or the vegetative buffer. Heavier, concentrated flows would likely receive little or no treatment and overwhelm the vegetated buffer.

Sediment controls were not provided at other areas where sediment runoff flows from stockpiles, including outfall #2 and unpermitted locations along the facility perimeter. I saw no sediment controls at outfall #2. I saw at least three other low areas on the perimeter that showed material runoff from stockpiles onto neighboring property to the south and east or into the municipal right-of-way to the west (Photos #27 - #30 and #30). I did not see controls that

would prevent release of sediment from the site at low areas along the perimeter. I did not see perimeter controls that would redirect industrial stormwater to the permitted outfall. I saw about 75 feet of perimeter that lacks sufficient controls to prevent release of sediment at an unpermitted location in the southwest corner of the facility (Photo #38 and Attachment #4). I saw about 950 feet along the south and east perimeter of the facility that were low enough for sediment to flow to neighboring properties. I saw sediment and aggregate materials on the other side of the fence and on neighboring property to the east and south that appeared to flow from the stockpiles.

The permit requires the facility to manage materials to prevent materials from being transported off-site during a high-water event. This requirement is particularly relevant to the facility because the site is entirely located in the 1% and 0.2% annual flood hazard zones determined by Federal Emergency Management Agency. The facility has stockpiles of raw materials like recycled asphalt shingles, limestone dust, sand, gravel, and recycled asphalt pavement that can be mobilized during high water events. The facility does not have adequate controls to prevent materials from being mobilized and did not present a plan for how they will prevent materials from being mobilized during a high-water event. The asphalt cement tanks are in the flood hazard zone, and I did not see anchoring from above; the weight of the asphalt cement tank will not necessarily stop the tanks from being mobilized during a high-water event. I saw no evidence that the facility has evaluated whether the asphalt cement tanks are properly and sufficiently anchored to be held in place if the facility is flooded. Similarly, other tanks may and could be mobilized during a high-water event like tanks for fuel, asphalt recycling agent, and asphalt release agent. I did not see controls or a plan of how the facility will prevent surface waters from being polluted by their industrial materials if the facility floods. The facility said that they have not experienced flooding at the facility since they opened in 2007.

Controls are not implemented, not appropriate, or not appropriately sized for the pollutant loads. Swales and pipes convey industrial stormwater with little to no treatment to Outfall #1. I saw some riprap around 4 to 9 inches in size in front of outfall #1 and a small depression that showed some sediment settling (Photos #1 - #6).

A stormwater conveyance pipe from the production area flows to the east side of the property (Photos #23 - #24). Mr. Conway and Mr. Knight could not show us the outlet location of the pipe and the outlet may have been buried under an aggregate stockpile or overgrown by vegetation.

Process wastewater and stormwater flow uncontrolled through Outfall #2 without appropriate treatment (Photo #32).

The facility does not use benchmark monitoring to determine the overall effectiveness of control measures and to assist in knowing when additional corrective actions may be necessary to comply with the limitations of their industrial stormwater permit. The Missouri Department of Natural Resources recommends sampling for stormwater benchmarks at least once per year (Attachment #1 MO-G490000 Fact Sheet).

Asphalt cement storage and equipment is not provided with secondary containment or environmentally equivalent alternative controls. I saw a containment wall with a section of the wall missing. Mr. Conway said that the wall surrounding the asphalt cement tanks was aesthetic and that asphalt cement does not require secondary containment. I read in section 1.7.1 of the facility's Spill Prevention, Control, and Countermeasure Plan the claim that asphalt cement stored on site in two 200-ton storage tanks is exempt from oil storage regulations. Asphaltic cement is Class V oil subject to SPCC rule. I saw no evidence of an alternative control and there was no documentation in the spill plan of an alternative control. The facility has not provided appropriate controls to regulated oil storage areas or documentation on how they determined asphalt cement was exempt from oil storage regulations. Beyond preventing asphalt cement from discharging, secondary containment is a known structural control for containing contaminated or potentially contaminated stormwater. The facility was not preventing stormwater contact with asphalt cement and asphalt cement contaminated equipment; the facility had not provided containment or appropriate downstream treatment to polluted stormwater (Photos #16, #17, #19, #21, and #22).

The facility has not effectively prevented spillage or loss of fluids, oil, grease, fuel from vehicle maintenance, equipment cleaning, or warehouse activities. Facility did not prevent contamination of stormwater from these substances. I saw spills and leaks of oils in several locations during the inspection. Of note, the facility was not operating for the day and was not planning to operate the following two days. The National Weather Service forecasted rain before the temporary shutdown, but the facility left the leaks and spills not cleaned up and exposed to rain. I saw leaking pipes and tanks around the asphalt cement storage and equipment and the associated heat transfer oil (Photos #16 - #21). I saw an active leak of asphalt cement from piping and pooling asphalt cement on the ground (Photo #17). I saw that the pooling asphalt cement was partially covered with fine material. Mr. Knight said they use limestone dust from the stockpiles to cover spills, then at some point they remove the material and recycle it back in as a production material. I saw leaked oil and staining around and under the heat transfer oil tank (photo #18 and #20). The facility has not effectively prevented spillage or loss of oils. Both the asphalt cement leak and heat transfer oil leak are not within containment and contaminated stormwater does not enter appropriate treatment devices. Contaminated stormwater flows either through a missing section in the containment wall around the asphalt cement tanks (photo #16) or to a pit in the southeast corner inside the containment wall. A sump pump pumps water from the pit to the ground outside the containment wall; there is a hole drilled in the containment wall for the sump pump hose (photo #21 and #22). Equipment leaks have not been resolved promptly. Pooling oils are not cleaned up promptly, not cleaned up before a rain event, and not cleaned up before a temporary production shutdown.

Outside the containment wall I saw equipment contaminated with asphalt cement stored on the ground without protection from stormwater and leaking oils and grease onto the ground (Photo #19).

I saw oil leaks on the ground of the exit road from the truck scale load out (Photo #12 and #13). Mr. Conway said the facility does not own or maintain their own material delivery truck fleet and contracted trucks and drivers deliver asphalt to their customers. The facility did not clean up oil leaks on the ground before temporary shutdown and a forecasted rain event.

I saw pools of oils on the ground near the north and east side of the barn. One pool was brown and thick (photo #40 and #41). One pool was white and thick (Photo #42). These spills were not prevented, contained, or cleaned up promptly.

I saw spills and leaks at the fuel tanks. I saw fuel leaking from the tanks from gauges, standing oil inside the containment, and leaked oils flowing from the open drain at the base of the containment (Photos #50 - #56). I saw oil staining inside and outside of the secondary containment. There was a buildup of oily residues in the drain of the secondary containment and on the ground, containment exterior and adjacent block bin around the drain. The leaks were not fixed, and the spills were not cleaned up promptly.

The facility has incomplete spill kits for the timely containment and cleanup of spilled materials. The facility spreads fine aggregate materials on the spill area then recycles the material back into production. Recycling, reclaiming, or reusing materials is an appropriate best practice because it reduces the amount of process materials that are brought on-site and reduces the amount of waste generated, but the facility must still clean up spills swiftly and must not leave spills or spill cleanup material exposed to stormwater. If production is not occurring and spilled materials cannot be immediately reintroduced into production, then alternative disposal or storage must be arranged so as not to leave the spill materials exposed to stormwater.

The facility does not cover waste materials to minimize contact with and contamination of precipitation. The facility has a dumpster for trash. The dumpster provided by the waste hauler does not have a lid and the facility has not taken measures to provide cover (Photo #48). Stormwater contacts wastes in the dumpster and flows out the bottom of the dumpster. The facility does not further contain or treat contaminated stormwater from the dumpster. I saw a material that was black, thick, and oily resembling asphalt cement leaking out of the bottom corner of dumpster and pooling on the ground (Photo #49).

I saw trash and debris on the ground at the base of stockpiles and next to the vegetated buffer (Photos #7 and #8).

The facility stores petroleum products and petroleum waste products exposed to stormwater and does not provide other controls to prevent commingling of stormwater with container contents. I saw a bucket of oily condensate generated at the heat transfer oil tanks that was not protected from exposure to stormwater (Photo #20). Oily condensate is not authorized as a non-stormwater discharge under Part I.2.16. The hole in the bucket lid is large enough to allow stormwater to commingle with container contents. The bucket of condensate looks to easily overflow whether during a rain event, or if the facility did not empty the condensate bucket promptly. I saw a small hand dug channel dug in the sediment around the heat transfer tanks.

Mr. Knight said the channel was dug by facility staff to drain water away from electrified equipment (Photo #18). The facility did not provide a standard operating procedure for proper disposal of the condensate or for prevention of improper disposal of the condensate.

The facility has made secondary containment ineffective around petroleum storage tanks stored outdoors and exposed to stormwater. The containment wall around the two 200-ton asphalt cement tanks stored outside and exposed to stormwater has around an eight-to-twelve-foot section missing (Photo #16) and has a hole drilled for a drainage pipe. The facility must provide effective BMPs to control pollutants from being discharged with stormwater.

The secondary containment for the diesel and unleaded fuel tanks exposed to stormwater had open drains with no plug available (Photos #51 and #56). Mr. Knight said the drain plugs had been missing for a while, but he did not know how long. The facility has a 1,000-gallon aboveground storage tanks for diesel and a 500-gallon tank for unleaded fuel exposed to stormwater. There was visible leaks and releases of fuel from the tanks and associated equipment (Photo #50-#55). I saw evidence of releases of fuel to the ground (Photo #51); there is a reasonable potential for future releases.

The facility stores around 450-galllons of heat transfer oil in aboveground storage exposed to stormwater and without secondary containment (Photo #18). The tank, piping, pumps, and equipment for heat transfer oil is exposed to stormwater and not controlled with effective BMPs. There is reasonable potential for release of heat transfer oil, and I saw leaking of petroleum onto the ground. I saw rain come into contact with released petroleum around the heat transfer oil tank.

The facility stores three 275-gallon intermediate bulk storage containers of asphalt release agent exposed to stormwater without effective BMPs (Photos #43 - #47). The facility did not provide a safety data sheet for the asphalt release agent, the material is not identified in the stormwater pollution prevention plan, and I do not know the ingredients. Asphalt release agents often have oils as a primary ingredient and may have other ingredients of concern like foaming agents or surfactants. The facility did not evaluate the pollution risk of the asphalt release agent, including storage in intermediate bulk containers and application of the product to truck beds. The facility did not evaluate whether the controls for the asphalt release agent are appropriate to prevent stormwater contamination.

The facility stores a 5,000-gallon aboveground tank and a 2,500-gallon aboveground tank of liquid additive used to soften the recycled asphalt pavement (Photos #12 and #15). The aboveground storage tanks of asphalt recycling agent do not have effective BMPs. These tanks are operational, and materials are added and withdrawn from the tanks as part of normal operation. The facility did not provide a safety data sheet for the asphalt recycling agent and the material is not included or evaluated in the stormwater pollution prevention plan. The facility did not evaluate whether the controls for the asphalt recycling agent are appropriate to prevent stormwater contamination.

The facility must minimize track-out, but controls are informal and inadequate to prevent sediment transport. The facility restricts traffic to a designated entrance and exit (Photos #9 - #11). The entrance and exit are stabilized and are slightly higher than the material storage and production area creating some containment for sediment transport at the drive (Photo #10). Mr. Knight says they hire a street sweeper about every three weeks during peak asphalt production season. I saw sediment on the exit drive (Photo #10) and track-out into the street. I did not see added controls to remove sediment from vehicles before exit from the facility. Permit section VI.1.(g)(4) says sediment or debris that is tracked out past the exit pad or is deposited on a roadway should be removed the shorter of either daily or before a rain event. The facility's informal schedule to remove sediment tracked into the street about every three weeks during part of the production season is not shorter than daily or before rain events. The facility has not provided curb inlet protection to stormwater inlets susceptible to receiving sediment or other pollutants from the facility.

The facility's monthly inspection documentation is inadequate for inspections completed in 2019 to 2022 and monthly inspections not conducted, documented, or submitted for 2023. In the Notice of Preliminary Findings, I wrote that the facility was not conducting monthly site inspections for their SWPPP as required by Part V.4.(f)). Mr. Conway sent monthly inspections for 2019, 2020, 2021, and 2022 on December 21, 2023 (Attachment #3). The facility did not send inspection reports for 2023. I reviewed the inspection reports and found the inspection reports to be deficient. The inspection reports from 2019 to 2022 do not effectively record the scope of the inspection or the condition of controls. The inspection reports do not document any deficiencies or corrective actions. The inspection reports do not show that the facility met the minimum requirements of the permit. The inspection reports do not "include observation and analysis of BMP effectiveness, deficiencies, and corrective action to be taken, as well as the integrity of any containment structures on site" (Permit section V.4.(f)).

In addition to monthly site inspections the facility conducts quarterly visual inspections (Attachment #3). These quarterly visual inspections supplement the monthly inspections but are not quarterly visual assessments as required under (Part V.4.(g)). The quarterly visual inspections were not wet weather inspections documenting conditions during a storm event or monitoring stormwater discharge. These quarterly visual inspections are an added non-structural control that provides an opportunity for the facility staff to identify deficiencies, take corrective action and focus on pollution prevention at the facility. The quarterly visual inspection reports do not show that minimum controls are being implemented on site and effectively inspected.

The facility is not conducting Quarterly Visual Assessments as required under Part V.4.(g)). The facility did not send any documentation of quarterly visual assessments to monitor stormwater discharges. Mr. Conway and Mr. Knight were unaware that quarterly visual assessments were a requirement in their permit. Quarterly visual assessments are a new requirement when the general permit was updated by MoDNR and have been required at this facility since August 1, 2022.

Stormwater Pollution Prevention Plan

During the opening conference, Mr. Conway was not sure if they had a Stormwater Pollution Prevention Plan, but he presented a three-ring binder of compliance information built by their environmental consultant. In the large binder presented to the EPA by Mr. Conway there was a Stormwater Pollution Prevention Plan initially developed in 2011 and last reviewed in 2015. This plan is out of date because it did not include all the permitted outfalls and properties acquired in 2020, and the plan was not updated when the new permit requirements were issued by MoDNR in August 2022. I did not review this plan further. Mr. Conway sent an updated Stormwater Pollution Prevention Plan dated March 2022 on December 19, 2023. The facility sent the cross-referenced Spill Prevention, Control and Countermeasure plan on December 27, 2023. I reviewed the plans on December 28, 2023, and found the Stormwater Pollution Prevention Plan to be incomplete. I noted the following deficiencies:

1. The plan was not reviewed and updated when MoDNR issued a new permit to the facility in August of 2022 (Part V.1).
2. The assessment of all process wastewater and stormwater discharges, facility activities and facility materials required under V.4.(b) is incomplete and inadequate. The assessment:
    a. Does not effectively identify all process wastewater and stormwater discharges occurring on site.
    b. Does not effectively identify all industrial activities occurring on site.
    c. Does not include all potential contaminants and an annual estimate of amounts used and produced.
        i. The description of potential contaminants lists "aggregate" but does not identify the materials used on site. Aggregates used on site have unique properties and pollution potential, from recycled asphalt shingles to limestone dust, the facility's stockpiles have properties that may require different management practices or treatment technologies.
        ii. Description of potential contaminants does not identify asphalt recycling agent, asphalt release agent, and equipment wash water from delivery trucks.
3. The plan does not list all best management practices (BMPs) used on site and does not provide a narrative explaining how the BMPs will be implemented to control and minimize the amount of potential contaminants entering stormwater as required under V.4.(c). The plan does not include details on BMP maintenance, repair, and replacement schedules.
    a. The plan says Figure 2 in Appendix 2 shows the BMP locations used at the facility. Appendix 2 does not show any BMP locations.
    b. The plan says more information about each BMP to be used on site is included in Appendix 4 and 5. Appendices 4 and 5 are empty or blank.
    c. Plan section 3.0 says that a berm and sediment trap are used as structural controls for aggregate materials, but no further information is in the plan about how and where these controls are implemented, like location, size,

design, performance expectations, and maintenance schedules. These controls are not identified on the site map and were not seen during the inspection.

4. The plan does not effectively describe the generation of wash water occurring on site and where the wash water infiltrates or discharges through a monitored or permitted outfall (Part V.4.(d).)
5. Site map does not include elements required under permit part V.4.(c):
    a. Site map does not identify structural BMPs and other stormwater control measures.
    b. Site map does not identify stormwater conveyances such as ditches, pipes and swales.
    c. Site map does not identify the location of potential stormwater pollutants sources.
    d. Site map does not identify the locations of industrial activities exposed to precipitation such as fueling stations, vehicle and equipment maintenance and cleaning areas, loading and unloading areas, waste storage areas, liquid storage tanks and processing and storage areas.
    e. Site map does not identify which outfalls receive process wastewater.
6. The plan does not include schedule for quarterly visual assessments of discharge as required under Part V.4.(g).

The permit requires the development and implementation of a Stormwater Pollution Prevention Plan. The facility is not implementing best management practices from their Stormwater Pollution Prevention Plan, including:

1. “This SWPPP should be used during daily operations and will be amended as appropriate during the term of the operation." Facility is not using the Stormwater Pollution Prevention Plan during daily operations and has not amended the plan as appropriate.
2. Section 3.4 of the plan says that if the facility is generating wastewater from vehicle or equipment washing and rinsing that the operator must treat the resulting wastewater before discharge to meet the effluent limitations. Facility was generating wastewaters and did not identify the wastewater as wastewater. Facility was not providing treatment to stormwater commingled with wastewater. Facility was not sampling to make sure that discharges were meeting effluent limitations.
3. Section 3.4 of SWPPP says the operator must prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment maintenance, or warehousing activities and thereby prevent contamination of stormwater from these substances. Facility was not effectively preventing the loss of fluids, oil, grease, and fuel from fuel tanks for vehicle fueling and from the heat transfer oil used for warehousing of hot asphalt cement, as examples.
4. Section 3.6 specifies that the facility will submit a report of no discharge to MDNR quarterly.
5. Section 3.6 says that stormwater samples will be collected and reported to MoDNR.

Please note that these requirements from the Stormwater Pollution Prevention Plan updated March 2022 may not align with the updated permit issued in August 2022. This is not an

inclusive list and only examples based on my inspection observations that the facility was not following requirements in their plan whether they aligned or diverged from the permit requirements.

Other noteworthy observations from the Stormwater Pollution Prevention Plan review include:

1. General manager Allen Conway is listed as the SWPPP coordinator for the facility. During the inspection Mr. Conway did not have immediate access to the most current plan and did not seem familiar with newer requirements of their National Pollutant Discharge Elimination System permit.
2. The facility has not completed a structured evaluation to determine which controls are reasonable and cost effective and has not demonstrated why "no discharge" or "no exposure" are not workable alternatives at the facility.
3. The SWPPP does not provide reportable spill quantities for the materials found on site but directs the user to the Code of Federal Regulations. Cross referencing to the Code of Federal Regulations may not provide enough guidance to the user on what materials are on site and when a spill needs to be reported. The Spill Prevention, Control and Countermeasure plan provides incomplete reporting requirements for materials found on site.
4. The Spill Prevention, Control and Countermeasure plan incorrectly identifies that asphalt cement is exempt from oil storage regulations. Asphalt cement is not exempt from oil storage regulations.

Overall, the Stormwater Pollution Prevention Plan restates many permit and fact sheet elements but is not up to date with the most recent permit requirements and may misguide the user. Plan sections are generalized and informational about what the facility should be doing rather than providing a site-specific plan of how the facility will prevent stormwater pollution. The plan does not effectively identify the specific best practices that need to be implemented to prevent polluted discharges at this facility.

CONCLUSION

Hot Mix Materials controls were inadequate to prevent polluted discharges under the National Pollutant Discharge Elimination System permit. Both structural and nonstructural controls are inappropriate for the facility.

1. Outfall #1 is not accessible as required by permit part VI.6.(b) for routine inspection and quarterly visual assessment. Outfall #1 and Outfall #2 are not marked in the field as required in the permit part VI.4.(a).
2. The facility is releasing process wastewater to the ground. Process wastewater is commingling with stormwater and commingled water is discharging to outfall #2 without control, treatment, or monitoring (Part I.2, Part I.17, Part I.19). The facility did not effectively identify process wastewaters generated during routine activities. The facility did not identify discharges of commingled water as discharges of process wastewater. The facility is not sampling process wastewater to make sure effluent limits are met prior to discharge (Part III). The facility is not submitting electronic discharge

monitoring reports to the Missouri Department of Natural Resources for process wastewater discharges (Part VI.7).

3. The facility is not managing stockpiles to prevent materials from being transported off-site (VI.1.(e)). Materials are 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, including during a high-water event.
4. The facility has not effectively prevented spillage or loss of fluids, oil, grease, fuel from vehicle maintenance, equipment cleaning, or warehouse activities. (VI.1.(b)). Facility did not prevent contamination of stormwater from these substances.
5. The facility has not covered waste materials to minimize contact with and contamination of precipitation (Part VI.1.(a).).
6. The facility stores petroleum products and petroleum waste products exposed to stormwater and does not provide other controls to prevent commingling of petroleum with stormwater (Part VI.1.(a) and Part VI.1.(c)).
7. The facility releases stormwater from contaminated petroleum secondary containment structures without examination for hydrocarbon odor and presence of sheen (Part VI.5.(a)).
8. The interior and exterior of secondary containment structures for diesel and unleaded fuel had signs of leaks, spills, and unintentional releases (Part VI.5.(b)).
9. The facility is not effectively preventing track-out of sediment by vehicles into the street as required under Part VI.1.(g)(4). The facility does not remove sediment or debris that is tracked out past the exit pad or is deposited on a roadway shorter of either daily or before a rain event. The facility has not provided stormwater inlets susceptible to receiving sediment or other pollutants from the facility with curb inlet protection.
10. The facility is not conducting Quarterly Visual Assessments as required under Part V.4.(g)).
11. The facility's monthly inspection documentation is inadequate for inspections completed in 2019 to 2022 and monthly inspections not conducted, documented, or submitted for 2023. (Permit Part V.4.(f))
12. The Stormwater Pollution Prevention Plan does not meet all minimum requirements and must be updated (Permit Part V.4.).
13. The facility's controls are inadequate to minimize and prevent the discharge of pollutants in stormwater. Control measures needed replacement, maintenance, or repair. Some controls were degraded, compromised, not properly installed or not installed. Good housekeeping was inadequate at areas of the facility seen with staining, leaks, spills, accumulation of sediment, trash, and debris. (Part V. and Part VI.)

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JODI BRUNO
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Jodi Bruno
Manager, ECAD/WB

ATTACHMENTS:

1. Missouri State Operating Permit (40 pages)
2. Digital Image Log and Image Location Map (61 pages)
3. Stormwater Pollution Prevention Plan (245 pages)
    a. Stormwater Pollution Prevention Plan
    b. Spill Prevention Control & Countermeasure Plan
    c. 2019 Monthly Inspections
    d. 2020 Monthly Inspections
    e. 2021 Monthly Inspections
    f. 2022 Monthly Inspections
    g. Annual Training Records
    h. Quarterly Visual Inspections
    i. 2016 Quarter 3 Notification of Discharge Activity and Quarterly Report
4. Maps (5 pages)
5. Notice of Preliminary Findings (2 pages)