



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Four Penn Center – 1600 John F Kennedy Blvd
Philadelphia, Pennsylvania 19103-2852

Report Title: Clean Air Act Inspection of Allan Myers Delaware, Inc.
Inspection Date(s): October 19, 2022
Regulatory Program(s): SIP, NSPS

Company Name: Allan Myers Delaware, Inc. - Wilmington
Facility Name: Same
Facility Location: 1230 Railcar Avenue
Wilmington, DE 19802
Latitude: 39.74032 **Longitude:** -75.52318
County/Parish: New Castle

AFS Number: 1000300933
Permit Number: Number APC-2016/0026
NAICS Code: 324121 **SIC:** 2951

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I. Introduction

The United States Environmental Protection Agency (EPA) conducted a Clean Air Act (CAA) inspection at Allan Myers Delaware, Inc. (Allan Myers or Facility) to verify compliance with applicable State and Federal regulations. The Delaware Department of Natural Resources and Environmental Control (DNREC) was notified of the inspection on October 3, 2022 via email. On October 17, 2022, EPA notified the Facility of the planned inspection via phone and email. EPA emailed a list of records for review to Curtis Hall of Allan Myers, prior to the inspection (see Attachment 1).

A. Summary of the Facility

The Facility is located at 1230 Railcar Avenue, Wilmington, DE. The Delaware Department of Natural Resources and Environmental Control (DNREC) issued the Facility a Title V Synthetic Minor Permit (Number APC-2016/0026) on July 26, 2019.

Allan Myers is classified as a synthetic minor for nitrogen oxides (NO_x), carbon monoxide (CO) and volatile organic compounds (VOCs). The Facility is subject to, or potentially subject to the following federal regulations:

- 40 C.F.R. Part 60 Subpart I Standards of Performance for Hot Mix Asphalt Plants

B. Inspection Opening Conference

At 9:00am on October 19, 2022, EPA inspectors Erin Willard and Parmatma Adhikari and EPA Observer Riley Burger arrived at the Facility for a CAA Inspection and conducted a brief opening conference. Allan Myers was represented by David Schnackenberg, and the personnel listed on the first page of this report. Luke Stirparo of the DNREC was also present. EPA inspectors, Erin Willard and Parmatma Adhikari, presented their credentials and explained the purpose of the visit was to conduct a compliance evaluation to determine compliance with their permit and any applicable regulations. Additionally, EPA informed the facility representatives of their right to claim any confidential business information (CBI). At that time, Allan Myers staff did not claim any photos or documentation as CBI.

II. Site Activity/Process Description

Allan Myers is a hot mix asphalt paving facility, meaning that the facility's main business unit is to mix various grades of aggregate with hot liquid asphalt for use in paving roads and highways.

The Facility was constructed in the 1990s and was moved to the current site by Edgemoor Materials. Allan Myers acquired the site and Facility in 2015. The 3.2-acre site is officially known as the Edgemoor Railyard, and is leased from the owner, Norfolk Southern Rail.

Allan Myers currently has 10 employees working at the site, excluding truck drivers that come and go from the site as necessary for hauling. Currently, the largest project the Facility is

working on is the repaving of a large portion of Interstate 95 in the vicinity of the Facility. The paving mix being used on that project is JMC, which is a porous mix and can be put down in temperatures of roughly 50 degrees Fahrenheit (°F). Facility staff indicated that each of the many types and grades of hot mix asphalt have quality assurance standards that must be met to comply with industry standards and specific state regulations. These standards involve the speed at which the asphalt hardens at different temperatures.

Hot mix asphalt is manufactured at this site by mixing various grades and types of rock aggregate with hot liquid asphalt, which is then loaded onto trucks and transported directly to the paving job and applied to the road surface while still hot. Allan Myers receives liquid asphalt via tanker truck from three refineries, two located in New Jersey and one in Pennsylvania. Asphalt comes in ready to mix and is not “cut” with any solvent or additives at this site. Even though the Facility is co-located at a Norfolk Southern rail yard, there is no rail shipping capability currently in use.

As this inspection took place in October, EPA inquired about the temperatures at which asphalt can no longer be used, and the response was that road base has a 32°F or lower threshold, and road surface has a 40°F or lower threshold. Large jobs are discontinued typically in November or December, with some small jobs or private paving of driveways that have fewer quality control issues still possible depending on the weather. For 2022, the Facility has a proposed shutdown date of December 23. All units combusting fuel at the site are typically tuned up in March, prior to restarting the Facility for spring paving.

The Facility has three heated asphalt tanks: Tanks 1 and 2 were manufactured in 1986 by Jencor and Tank 3 was manufactured in 2014 by Meeker¹. Each tank is rated at 20,000 gallons and is heated to approximately 310°F to prevent the asphalt from hardening. The source of heat for all three tanks is a 2mmBTU/hr natural gas-fired hot oil heater that circulates thermal oil through and around each of the tanks and associated piping. If the asphalt temperature falls, it can harden which is undesirable for the Facility. Because of the necessity to maintain temperature within the asphalt system, personnel indicated that a diesel-fired backup system has been installed in order to continue to circulate the oil; this system works to move the oil through the system but doesn’t provide supplemental heat to the oil system. Thermal oils and asphalt hold their temperatures well, and the diesel system would be used in the event of an hours or 1-2 day natural gas curtailment because the temperature in the system would not fall enough to allow the asphalt to harden. During a curtailment, no hot mix asphalt would be manufactured. The diesel system has not yet been utilized.

Aggregate material, such as stone and rock, is staged in piles at the facility. Allan Myers utilizes 15 stone grades, and most of the material comes from a quarry in Maryland. Sand is also staged on site, and comes from Dover, DE. Additionally, the facility stages recycled asphalt paving (RAP) as an aggregate supplement in some of its hot mix asphalt grades. RAP is old asphalt that

¹ This unit was permitted in 2017

has been removed during repaving work, along with some small amounts of “leftover” unused hot mix asphalt from jobs. RAP must be crushed back down to size in order to be used in the process. Once material is staged in large piles at the site, Allan Myers uses a contracted mobile vendor to remill the material to the proper size, which is typically completed in a campaign once a season. All aggregate, sand, and RAP is brought to the site via truck.

During manufacturing of hot mix asphalt, each stone grade is transported via a front-end loader from the various piles and dumped into a bank of stone bins. Currently, there are eight regular stone bins, and two that are used to store RAP. The stone bins have open tops and hold approximately 20-25 tons of aggregate per bin. There are no heaters on the bins, and since stone must be dry when added to the mixing drum, there is no water spray to control dust. Each stone bin feeds onto a conveyor that carries the stone to the mixing drum where hot asphalt cement is added.

Each hot mix asphalt type requires different size aggregate, which is fed via conveyor to a screener that shakes and mixes the different aggregates together and removes any oversize materials. RAP is also conveyed to the mixing drum in the same manner, bin to conveyor; however, because the RAP material may need further crushing, a crushing and sizing unit is in line with the conveyors. The crushing portion of the RAP conveyance system does have some water spray for dust suppression.

Aggregate is conveyed into the hot end of the mixing drum, where a 100mmBTU natural gas-fired burner is located. The burner is necessary to maintain the asphalt at a flowable temperature and it also acts to dry the aggregate fully, because water is not desirable when manufacturing hot mix asphalt. Asphalt pumps into an overflow pot and then into the mixing drum, where the rotation of the metal drum mixes the aggregate and asphalt. A drag chain then conveys the finished material into one of three 190-ton silos.

Trucks are loaded with the hot mix asphalt directly from the silos and consist of both privately contracted and state-owned trucks depending on the job. Allan Myers staff indicated that while there is a “Fold n’ Go” portable crusher with permitting requirements included in the CAA Permit, the unit has never been operated at this site. Permitting was completed for the Crusher to be operated at any of three local Allan Myers sites.

The opening conference concluded at 10:05am.

III. Observations

EPA inspectors were led on a walkthrough of the Facility at 10:15am by Allan Myers representatives (refer to the personnel list on the cover page of this report). DNREC engineer Luke Stirparo was also present for the walkthrough. EPA inspectors noted photos would be taken during the Facility walkthrough (Attachment 2).

Upon exiting the meeting room, the inspection team was on an elevated platform and able to view the facility from above. Staff indicated that the aggregate pile area is called the stockyard, with new stone located in the foreground closest to the office building, and the RAP pile in the back closest to the main road. EPA noted that the pile was creating steam and was hot from dumping excess waste from recent jobs. During the overview, EPA had noted that a slight wind was picking up dust from the piles and blowing it across the site. Staff indicated that the facility owns and operates a water truck for dust control on the roads and paved surfaces but there are no water spray bars for the piles or bins.

The inspection team entered the small control room above the main office, where control screens were viewed for the operation of the facility (this system is called Libra Load). When the walkthrough began, the Facility was not actively making hot mix asphalt – the drum was not rotating and there were no loadouts occurring. The tracking system generates a consumption report, which shows the hours of operation, asphalt usage and total tons manufactured. Each hot mix asphalt type has a “recipe” that dictates the percent by weight of the various aggregate grades and asphalt used. Those values allow Allan Myers staff to track overall raw material usage and finished materials. The permit includes throughput limits for the amounts of asphalt, and the RAP aggregate used. Staff can also track baghouse operation from the control room including fan speed and baghouse temperatures. The baghouse controls only the mixing drum. The other emissions sources at the site, including tanks, heaters and stone conveying units are uncontrolled.

The inspection team left the control room and proceeded to the stone bin area. Personnel explained the hopper bottom bins (when in operation) feed stone onto a conveyor below which then deposits the aggregate onto screen shakers. The RAP bins also have conveyors that transport the material to a screen where oversized RAP is rejected. The rejected material is then processed through a rotary drum crusher, which acts to reduce the size while pressing the material between the walls of two nested drums. The crushed RAP is then re-introduced to the screen for further sizing and then travels to the mixing drum with the remaining aggregate. None of these units were operating when the inspection team was viewing them in close proximity.

Personnel indicated that the maximum amount of RAP that can be used in any of its mixes is 35-40%² of the total aggregate mix in the product; however, some customers do not allow for any RAP in specific hot mix asphalt types. RAP is supplied both by other Allan Myers sites, and from unaffiliated companies.

The inspection team then viewed four storage tanks: (3) 20,000-gallon horizontal asphalt cement tanks and (1) 10,000-gallon asphalt tack tank. Tack is a water-based emulsion of asphalt and water and is sprayed onto a road surface prior to the application of new asphalt. The tack tank is not used frequently.

² The permit limits RAP usage to 45% of the total aggregate

The asphalt tanks are identical but have two manufacturers. Each tank vents directly to the atmosphere during filling. A Meeker hot oil circulation system uses a 2.0 mmBTU/hour burner to heat a thermal oil to roughly 325°F. The unit's burner comes on and off based on a thermostat, and EPA noted that the run hour meter read 385 hours. As stated during the opening meeting, the system is thermally efficient as both the oil that circulates in and around the asphalt tanks and the asphalt itself holds heat for a long time.

The inspection team then viewed the baghouse, located immediately adjacent to the mixing drum. Ductwork out of the mixing drum to the baghouse was obvious, with a main pickup point at the firing end of the mixing drum. There is also a small hopper bottom settling chamber, which acts to remove any heaving materials prior to the baghouse, to prevent damage to the bags. Personnel indicated that the mixing drum cannot operate unless the baghouse is on; however, if the temperature inside the baghouse gets too hot, the system shuts down to prevent damage. Personnel pointed out the hot mix asphalt storage silos, with the truck loading area between the mixing drum and the silos.

At this point in the inspection, Allan Myers personnel indicated that the Facility was ready to begin making more hot mix asphalt, so the entire system turned on, starting with the baghouse and then the mixing drum and conveyors. EPA inspectors stood in close proximity to the mixing drum and baghouse and did not note any visible emissions from either the baghouse stack or the mixing drum. The inspection team was able to view the drag chain coming out of the mixing drum and conveying newly manufactured hot mix asphalt to a waiting truck.

The walkthrough concluded at 11:32am.

IV. Records Review

The records review commenced immediately after the plant walkthrough at 11:35am. EPA inspectors reviewed documents requested in the October 18, 2022, email to Curtis Hall (see Attachment 1). Because Allan Myers retains its records in electronic format, EPA reviewed its formatting for asphalt usage, hours of operation, pressure drop records for the baghouse, RAP usage, and visible emission surveys of the various particulate matter (PM) points across the facility. EPA noted that it appeared that records for the major points of compliance were available and requested that Allan Myers submit the info by November 4, 2022. EPA cannot accept external storage devices as a means of conveying electronic records, so electronic records were provided via EPA's GoAnywhere File Sharing service by Dave Schnackenberg on November 4, 2022.

V. Closing Conference

After the records review, EPA inspectors, Facility representatives and DNREC inspector had a brief closing conference to ask additional questions and discuss observations. The EPA inspectors noted that the investigation is on-going, and any areas of concern identified in the final reports do not necessarily reflect a violation or deviation, rather, they are areas that will

require further investigation. EPA also noted that it will issue an inspection report within 60 days, with a copy to the State. Simultaneously, EPA will perform a detailed review of records and may have additional questions. The inspection concluded at 12:30pm.

The following have been identified as *potential* issues during the inspection. They are issues that require either further investigation by EPA or additional information or explanation by Allan Myers.

- EPA noted that the light wind on the day of the inspection was blowing dust off the stockyard piles and indicated while this condition is common at aggregate facilities it still needed to be addressed on a regular basis.
- EPA will review all records supplied on November 4th to ensure compliance with permit conditions.

VI. List of Attachments

Attachment 1: Email correspondence to Curtis Hall of records requested to review during inspection

Attachment 2: Photo Log