

GOVERNMENT OF THE DISTRICT OF COLUMBIA  
Department of Energy and Environment

TECHNICAL SUPPORT MEMORANDUM  
FOR PROPOSED SYNTHETIC MINOR PERMITTING ACTION

Permit No. 7347-SM

TO: File

FROM: Stephen S. Ours, P.E.  
Chief, Permitting Branch

Abraham T. Hagos  
Environmental Engineer

SUBJECT: **Allen Myers VA, Inc. Synthetic Minor Permit No. 7347-SM for Operations at 4901 Shepherd Parkway SW, Washington DC 20032**

DATE: June 1, 2023

---

This Technical Support Memorandum has been prepared to document the basis for a facility-wide synthetic minor operating permit for the following:

**Applicant and Permittee:**

Allan Myers VA, Inc. dba Allan Myers Materials  
638 Lancaster Avenue  
Malvern PA 19355

**Facility Location:**

Allan Myers VA, Inc. dba Allan Myers Materials  
4901 Shepherd Parkway SW,  
Washington DC 20032

**Application Signatory per 20 DCMR 200.13:**

Mr. Curtis Hall  
VP/GM Asphalt

**FACILITY DESCRIPTION AND BACKGROUND INFORMATION:**

The Allan Myers VA, Inc. dba Allan Myers Materials operates the Allan Myers VA, Inc. which is located at 4901 Shepherd Parkway SW, Washington DC 20032. The facility's primary emission units are listed in the following table:

**TECHNICAL SUPPORT MEMORANDUM**

**Allan Myers VA, Inc. dba Allan Myers Materials**

**Synthetic Minor Permit No. 7347-SM**

June 1, 2023

Page 2

<b>Emission Units</b>			
<b>Emission Unit ID</b>	<b>Stack ID</b>	<b>Emission Unit Name</b>	<b>Description</b>
HM-1	EP-1	Hot Mix Asphalt Plant	225 ton per hour continuous drum-mix asphalt plant (different from traditional drum-mix plants in that the mixer drum is separated from the dryer drum) with 75 MMBTU per hour Hauck Manufacturing Co., Model ES75-11, dual fuel (natural gas and No. 2 fuel oil) fired burner and BHS525-10 stationary baghouse filter, emission control equipment. (Formerly permitted by Title V Permit No. 048-A1)
CR-1	EF-3	Crusher	McCloskey 144R impactor crusher powered by a 350 horsepower Caterpillar engine. (Formerly permitted by Title V Permit No. 048-A1)
CR-2	EF-4	Conveyor	McCloskey ST80T stacking conveyor powered by a 49 horsepower Caterpillar engine. (Formerly permitted by Title V Permit No. 048-A1)
SC-1	EP-5	RAP Screener with up to 3 Integral conveyors	McCloskey Model R155 High Energy Screener with up to three integral conveyors, powered by a 129 horsepower Caterpillar C4.4 diesel-fired engine. (Formerly permitted by Chapter 2 Permit No. 7193)

Additionally, the facility includes the following miscellaneous activities that have the potential to emit oxides of nitrogen (NOx) or volatile organic compounds (VOCs) and are therefore addressed by this application:

1. Two (2) 20,000 gallon storage tanks for liquid asphalt;
2. One (1) 1,000 gallon storage tank of an “anti-strip” agent;
3. One (1) 10,000 gallon tank of No. 2 fuel oil; and
4. One (1) 1.41 MMBTU/hr heat input dual-fuel fired hot oil heater.

Note that the facility also has a small silo of mineral filler (a stone dust product occasionally

## **TECHNICAL SUPPORT MEMORANDUM**

**Allan Myers VA, Inc. dba Allan Myers Materials**

**Synthetic Minor Permit No. 7347-SM**

June 1, 2023

Page 3

added to the dryer), but as this is an insignificant source that does not have the potential to emit any NO<sub>x</sub> or VOC, it is not included as an identified emission unit or insignificant activity in the permit. It is, however, subject to the standard conditions of the permit, including limits on visible emissions and fugitive dust emissions.

Most of this facility was previously permitted under Title V permit No. 048, issued to Roubin & Janiero, Inc. on June 30, 2016. Additionally one unit, a recycled (reclaimed) asphalt pavement (RAP) crusher, was permitted pursuant to Chapter 2 permit No. 7193, issued to Roubin & Janeiro, Inc. on January 2, 2019.

On March 20, 2020, Roubin & Janeiro, Inc. submitted a significant permit modification application to incorporate the requirements of Permit No. 7193 into the Title V permit. Then, on December 23, 2020, Roubin & Janiero, Inc. submitted a timely Title V permit renewal application to the Department of Energy and Environment (“the Department” or “DOEE”).

On January 28, 2021, Allan Myers VA, Inc. requested by letter that DOEE administratively amend Title V Operating Permit No. 48 and Construction Permit No. 7193 to transfer those permits from Roubin & Janeiro, Inc., to Allan Myers VA, Inc. Allan Myers VA, Inc. took ownership of the facility on January 29, 2021. By a March 12, 2021 letter, the Department issued a letter administratively amending the Title V operating permit to transfer it to Allan Myers VA, Inc., effective January 29, 2021. The administratively amended Title V permit was designated No. 048-A1.

On March 11, 2021, Allan Myers VA, Inc. submitted an update to the pending Title V application to reflect the change in ownership of the facility.

On December 23, 2022, the Air Quality Division (AQD) of the Department received an application for a synthetic minor permit, pursuant to 20 DCMR 200.6, to replace existing Title V operating Permit No. 048-A1, to be issued in lieu of a Title V permit renewal. This application included revised facility-wide potential to emit (PTE) calculations, both with and without proposed synthetic minor limitations. However subsequent evaluation determined that the requested operational limits were not sufficient to ensure minor source status. As a result, Allan Myers VA, Inc. submitted a revision to the application on May 19, 2023. The draft permitting action accompanying this Technical Support Memorandum addresses this application, as amended.

### **DISCUSSION OF PROPOSED SYNTHETIC MINOR LIMITATIONS**

In the initial synthetic minor permit application, dated December 23, 2022, the permit applicant requested only a limit of 800,000 tons per 12-month rolling period hot mix asphalt production limit. Previously, limits had been taken in the old Title V permit, that included this limit as well as limits on operations of the crusher and conveyor at the site of 1,500 hours per year. These were originally taken to avoid applicability of 20 DCMR 204, Nonattainment New Source Review (NNSR). This was done prior to the establishment of the District’s synthetic minor

**TECHNICAL SUPPORT MEMORANDUM**  
**Allan Myers VA, Inc. dba Allan Myers Materials**  
**Synthetic Minor Permit No. 7347-SM**  
 June 1, 2023  
 Page 4

permit program. Upon review of the application, AQD identified that the requested limit was insufficient, and in a revision to the application, submitted on May 19, 2023, the applicant requested revised limitations as follows:

1. 600,000 tons per 12-month rolling period hot mix asphalt production limit;
2. RAP crusher operational limit of 1,500 hours per 12-month rolling period;
3. RAP screener operational limit of 1,728 hours per 12-month rolling period; and
4. RAP conveyor operational limit of 1,500 hours per 12-month rolling period.

These limits have been incorporated into the following conditions of the draft permit:

1. Condition III(a)(1)(C);
2. Condition III(a)(2)(A)(ii);
3. Condition III(c)(2)(A);
4. Condition III(d)(2)(A); and
5. Condition III(e)(2)(A).

Based on these limits, the facility’s potential to emit is estimated to be below major source and NNSR thresholds, as demonstrated in the Emissions Summary below, and therefore pursuant to 20 DCMR 200.6 and 200.7, this facility qualifies for synthetic minor status.

**EMISSIONS SUMMARY:**

The following is an estimate of overall potential emissions from the facility:

<b>FACILITY-WIDE EMISSIONS SUMMARY [TONS PER YEAR]</b>		
<b>Pollutants</b>	<b>Potential Emissions without 20 DCMR 200.6/200.7 Limits</b>	<b>Potential Emissions with 20 DCMR 200.6/200.7 Limits</b>
Sulfur Dioxide (SO <sub>2</sub> )	15.5	4.20
Oxides of Nitrogen (NO <sub>x</sub> )	68.6	19.1
Particulate Matter less than 10 microns in aerodynamic diameter (PM10)	32.2	8.71
Particulate Matter less than 2.5 microns in aerodynamic diameter (PM2.5)	7.83	2.28
Volatile Organic Compounds (VOCs)	37.3	10.6
Carbon Monoxide (CO)	140	41.1
Total Hazardous Air Pollutants (Total HAPs)	7.39	2.25

## **TECHNICAL SUPPORT MEMORANDUM**

**Allan Myers VA, Inc. dba Allan Myers Materials**

**Synthetic Minor Permit No. 7347-SM**

June 1, 2023

Page 5

### **REGULATORY REVIEW:**

This facility has been found to be subject to the requirements of the following regulations, except as noted in the discussion below:

#### Federal and District Enforceable:

- 20 DCMR Chapter 1 - General Rules
- 20 DCMR Chapter 2 - General and Non-Attainment Area Permits
- 20 DCMR Chapter 3 - Operating Permits and Acid Rain Programs
- 20 DCMR 500 - Records and reports
- 20 DCMR 502 - Sampling, tests, and measurements.
- 20 DCMR 600 - Fuel burning particulate emission.
- 20 DCMR 604 - Open Burning
- 20 DCMR 605 - Control of Fugitive Dust
- 20 DCMR 606 - Visible Emissions
- 20 DCMR 743-749 - Adhesives and Sealants
- 20 DCMR 773-778 - Architectural and Industrial Maintenance Coatings
- 20 DCMR 800 - Control of Asbestos
- 20 DCMR 801 - Sulfur Contents of Fuel Oils
- 20 DCMR 803 - Sulfur Process Emissions
- 40 CFR 60, Subpart I - Standards of Performance for Hot Mix Asphalt Facilities
- 40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels
- 40 CFR 51.212, 52.12, 52.30, 60.11, and 61.12 - Credible Evidence
- 40 CFR 60, Subpart IIII- Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CIICE)
- 40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (NESHAP for RICE)
- 40 CFR 64 - Compliance Assurance Monitoring (CAM)

#### District Enforceable Only:

- 20 DCMR 402 - Chemical Accident Prevention (*Note: AQD did not make a positive determination that this regulation was applicable to the facility, but included it as a standard requirement in the permit.*)
- 20 DCMR 900 - Onroad Engine Idling and Nonroad Diesel Engine Idling
- 20 DCMR 901 - Vehicular Exhaust Emissions.
- 20 DCMR 902 - Lead Content of Gasoline
- 20 DCMR 903 - Odorous or Other Nuisance Air Pollutants.
- 20 DCMR 1406 - Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

#### 20 DCMR Chapter 2: General and Non-Attainment Area Permits

Because the facility has stationary equipment that emits air pollutants, it is subject to Chapter 2 permitting requirements. Chapter 2 permit No. 6363-R1 was issued to this facility on April 15, 2014 for the hot mix asphalt plant. Chapter 2 permit Nos. 7044 and 7045 were issued on

## **TECHNICAL SUPPORT MEMORANDUM**

**Allan Myers VA, Inc. dba Allan Myers Materials**

**Synthetic Minor Permit No. 7347-SM**

June 1, 2023

Page 6

February 9, 2016 for a crusher and a conveyor. Title V permit No. 048 was issued on June 30, 2016, incorporating the requirements of all of these previously issued Chapter 2 permits and superseding them. As discussed above, Title V permit No. 048 was subsequently administratively amended to reflect a change in ownership and the amended permit was designated No. 048-A1. Subsequently, Chapter 2 permit No. 7193 was issued on January 2, 2019 to operate a McCloskey R155 High Energy Screener with up to three integral conveyors. In addition to the equipment covered by the previous Title V permit, the requirements of Chapter 2 permit No. 7193 are being incorporated into the synthetic minor permit that is the subject of this permitting action.

Also, as discussed above, limitations are being taken under 20 DCMR 200.6 to avoid Title V (20 DCMR Chapter 3) permit requirements, and 20 DCMR 200.7 to continue to avoid the NNSR requirements of 20 DCMR 204.

### 20 DCMR Chapter 3 – Operating Permits and Acid Rain Programs

As discussed above, the permitting requirements of this regulation are not applicable to the facility due to the operating limits taken pursuant to 20 DCMR 200.6. However, the synthetic minor fee requirements of 20 DCMR 305.5 do apply (and have been paid for this permitting action).

### 20 DCMR Chapter 6: Particulates

One of the primary pollutants from an asphalt plant operation is particulate matter from the dryer. Also, fugitive dust from material handling or other industrial-type operation is frequent therefore Chapter 6 requirements are applicable. Associated emission and operational limits are found in Conditions II(c) and in many conditions throughout Condition III and IV of the permit.

### 20 DCMR Chapter 7: Volatile Organic Compound Emissions Reduction

Chapter 7 requirements are not applicable to this facility, except as general requirements contained in Condition II of the permit (Architectural and Industrial Maintenance Coatings and Adhesives and Sealants) as there are no specifically applicable sections.

### 20 DCMR Chapter 8: Asbestos, Sulfur, Nitrogen Oxides, and Lead

20 DCMR 801 is applicable. Use of fuel oil with a sulfur content of greater than 1% is prohibited in all equipment. Additionally, the more stringent standards for “commercial fuel oil” contained in this regulation have been incorporated into the permit. For all of these requirements, see Condition II(f) of the permit.

It should be noted that, because the facility has maintained limits to their NO<sub>x</sub> emissions to keep them below 25 tons per year, 20 DCMR 805 (NO<sub>x</sub> RACT) is not applicable to the equipment.

### 40 CFR 60, Subpart I – Standards of Performance for Hot Mix Asphalt Facilities

This regulation is applicable as this facility meets the definition of a hot mix asphalt facility and it commenced construction or modification after June 11, 1973. The 0.03 gr/dscf emission limit has been streamlined with that of 20 DCMR 603.1 and can be found in Condition III(a)(1)(A)(ii) of the permit. The 20% opacity limit can be found in Condition III(a)(1)(E).

**TECHNICAL SUPPORT MEMORANDUM**  
**Allan Myers VA, Inc. dba Allan Myers Materials**  
**Synthetic Minor Permit No. 7347-SM**  
June 1, 2023  
Page 7

Testing requirements required by this subpart and the referenced 40 CFR 60.8 can be found in Condition III(a)(3)(J).

40 CFR 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Per 40 CFR 60.110b(b), this subpart is applicable to storage vessels with a capacity greater than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 15.0 kPa. Only the two 20,000 gallon liquid asphalt tanks are larger than 75 m<sup>3</sup> (75.7 m<sup>3</sup>). Per the Antoine's equation in AP-42 (page 11.1-9), the vapor pressure at 453 K (180°C) (a typical maximum storage temperature) is 2.08 mmHg (0.277 kPa), well below the 15.0 kPa threshold of applicability. Thus, this subpart is not applicable.

40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

The requirements of this regulation apply to the engines powering the RAP crusher, conveyor, and screener. As such, the requirement of this regulation are found throughout Conditions III(c), (d), and (e) of the permit.

40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (NESHAP for RICE)

Subpart ZZZZ of 40 CFR 63 regulates/monitors HAPs such as acetaldehyde, acrolein, benzene, toluene, xylene, cadmium, chromium, lead, etc., through surrogate compounds such as formaldehyde, CO and/or VOC.

A facility that emits or has the PTE 10 tons/year of any single HAP or 25 tons/year of any combination of HAPs is considered a major source of HAPs. Any source that is not a major source is an area source of HAPs. Because this facility does not have the PTE more than 10 tons/year of a single HAP or an aggregate of more than 25 tons of total HAPs, it is not a major source; it is an area source.

Subpart ZZZZ is applicable to new or reconstructed compression ignition (CI) engines at this facility, where "new" is defined as those engines that are manufactured or reconstructed after June 12, 2006.

The three engines are considered "new" (construction commenced after June 12, 2006) under this regulation. Therefore, per 40 CFR 63.6590(c)(1), the only requirement placed on them by Subpart ZZZZ is to comply with NSPS Subpart IIII. As such, the requirements of Subpart ZZZZ are not cited in the permit for these units, but rather NSPS Subpart IIII is cited.

40 CFR 64 – Compliance Assurance Monitoring (CAM)

The requirements of 40 CFR 64 to develop a Compliance Assurance Monitoring (CAM) Plan is applicable to this facility because the asphalt plant cannot achieve compliance without the use of the control device (the baghouse) for compliance. A CAM plan was submitted by the Permittee

**TECHNICAL SUPPORT MEMORANDUM**  
**Allan Myers VA, Inc. dba Allan Myers Materials**  
**Synthetic Minor Permit No. 7347-SM**  
June 1, 2023  
Page 8

in 2010 as part of the Chapter 2 permitting process. However, some aspects of this plan were not fully consistent with the requirements of 40 CFR 64. As such, significant revisions to the plan were made by the Department and incorporated into Condition III(b) of the previous Title V permit. These requirements have been carried over into this synthetic minor permit.

**PROCEDURE FOR SUBMITTING COMMENTS OR REQUESTING PUBLIC HEARING:**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The District shall grant such a request if it is deemed appropriate. The venue, date, and time for any public hearing will be announced in the D.C. Register and on the Department's website.

**COMMENT PERIOD:**

Beginning Date: June 9, 2023  
Ending Date: July 10, 2023

All written comments should be addressed to the following individual and office:

Stephen S. Ours, P.E.  
Chief, Permitting Branch  
Department of Energy and Environment  
Air Quality Division  
1200 First Street, NE, 5<sup>th</sup> Floor  
Washington DC 20002  
[stephen.ours@dc.gov](mailto:stephen.ours@dc.gov)

**POINT OF CONTACT FOR INQUIRIES:**

Abraham T. Hagos  
Environmental Engineer  
Department of Energy and Environment  
Air Quality Division  
1200 First Street, NE, 5<sup>th</sup> Floor  
Washington DC 20002  
(202) 535-1354



**TECHNICAL SUPPORT MEMORANDUM**  
**Allan Myers VA, Inc. dba Allan Myers Materials**  
**Synthetic Minor Permit No. 7347-SM**  
June 1, 2023  
Page 9

**REVIEWS:**

Prepared by:

Approved by:

For

\_\_\_\_\_  
Abraham T. Hagos  
Environmental Engineer  
Air Quality Division

\_\_\_\_\_  
Stephen S. Ours, P.E.  
Chief, Permitting Branch  
Air Quality Division

SSO/ATH