

MARYLAND DEPARTMENT OF THE ENVIRONMENT

**AIR AND RADIATION ADMINISTRATION
APPLICATION FOR A PERMIT TO CONSTRUCT**

DOCKET #02-21

COMPANY: Allan Myers MD, Inc.

LOCATION: 2203 Old Mountain Road, Joppa, MD, 21085

APPLICATION: Installation of a 450 ton per hour portable waste concrete and recycled asphalt pavement crushing and screening plant powered by diesel engines.

<u>ITEM</u>	<u>DESCRIPTION</u>
1	Notice of Application and Informational Meeting
2	Permit to Construct Application Forms – Forms 5, 5EP, 5T, 44, emissions calculations, manufacturer information, fugitive dust plan, and site drawings.
3	Zoning Approval

**DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION ADMINISTRATION**

NOTICE OF APPLICATION AND VIRTUAL INFORMATIONAL MEETING

The Maryland Department of the Environment, Air and Radiation Administration (ARA) received a permit-to-construct application from Allan Myers MD, Inc. on January 25, 2021 for the installation of a 450 ton per hour portable waste concrete and recycled asphalt pavement crushing and screening plant powered by diesel engines. The proposed installation will be located at 2203 Old Mountain Road, Joppa, MD, 21085.

The application and other supporting documents are available for public inspection on the Department's website at the following link:

<https://mde.maryland.gov/programs/Permits/AirManagementPermits/Pages/index.aspx>

Pursuant to Environment Article, Sections 1-601 and 1-603, Annotated Code of Maryland, and as allowed under the Order of the Governor of the State of Maryland No. 21-03-09-03, a Virtual Informational Meeting has been scheduled so that citizens can discuss the application and the permit review process with the applicant and the Department.

VIRTUAL INFORMATIONAL MEETING

The Virtual Informational Meeting has been scheduled for May 25, 2021 at 7 pm. In order to view or participate in the Virtual Informational Meeting, a participant must register using the following link:

<https://attendee.gotowebinar.com/register/1782059173975581707>

Once registered, directions to participate online or by phone will be electronically forwarded to the email provided.

Phone-only participants will not have the ability to ask questions or comment during the meeting; however, questions and comments may be sent to Ms. Shannon Heafey via e-mail to at shannon.heafey@maryland.gov or by phone at 410-537-4433. Questions and comments must be received by May 24, 2021 in order to be read at the Virtual Informational Meeting.

Further information may be obtained by calling Ms. Shannon Heafey at 410-537-4433.

George S. Aburn, Jr., Director
Air and Radiation Administration



January 6th 2021

Maryland Department of the Environment
1800 Washington Blvd
Baltimore, MD 21230

ATTN: Air and Radiation Management Administration
Air Quality Permits Program

RE: Jenkins Property (79-SP-0119) Permit to Crush Application

Dear Sir or Madame,

Attached is our permit application to crush recyclable materials at our Jenkins Property at 2203 Old Mountain Rd. Central Joppa, MD 21085.

We currently hold a permit to operate, permit number 025-0662, which we have utilized for the past three years. Due to the limits of our current permit, which list specific equipment, we are reapplying for a new, more flexible permit to construct.

To clarify some items unique to this facility and permit request, our intent is to crush mainly in the winter months, with various periods of crushing through the year. Crushing months are dependent on our demand and site capacity.

We currently have an approved quality control plan on file with MDSHA that details procedures and testing requirements (TCLP testing) for the recycled concrete generated and is attached for your review. We have also reached out to our neighbors and made them aware of our intent to reapply for a more flexible permit that will allow us to use state of the art equipment with lower emissions, and quieter engines. No objections have been made to us and we are firm in our commitment to keep our crushing operations contained to the winter months.

Respectfully

A handwritten signature in black ink, appearing to read 'S. Saillot', written over a horizontal line.

Samantha Saillot
Project Engineer
443-243-2157



AIR QUALITY PERMIT TO CONSTRUCT APPLICATION CHECKLIST

OWNER OF EQUIPMENT/PROCESS	
COMPANY NAME:	ALLAN MYERS MD, INC
COMPANY ADDRESS:	PO BOX 278 Fallston MD 21047
LOCATION OF EQUIPMENT/PROCESS	
PREMISES NAME:	Allan Myers MD - Jenkins Property
PREMISES ADDRESS:	2203 Old Mountain Rd. Joppa, MD 21085
CONTACT INFORMATION FOR THIS PERMIT APPLICATION	
CONTACT NAME:	Samantha Saillot
JOB TITLE:	Project Engineer
PHONE NUMBER:	443-243-2157
EMAIL ADDRESS:	samantha.saillot@allanmyers.com
DESCRIPTION OF EQUIPMENT OR PROCESS	
One (1) crushing and screening plant equipped with wet suppression and powered by diesel engines	

Application is hereby made to the Department of the Environment for a Permit to Construct for the following equipment or process as required by the State of Maryland Air Quality Regulation, COMAR 26.11.02.09.

Check each item that you have submitted as part of your application package.

- Application package cover letter describing the proposed project
- Complete application forms (Note the number of forms included or NA if not applicable.)

No. <u> 1 </u> Form 5	No. <u> n/a </u> Form 11
No. <u> 1 </u> Form 5T	No. <u> n/a </u> Form 41
No. <u> 1 </u> Form 5EP	No. <u> n/a </u> Form 42
No. <u> n/a </u> Form 6	No. <u> 1 </u> Form 44
No. <u> n/a </u> Form 10	
- Vendor/manufacturer specifications/guarantees
- Evidence of Workman's Compensation Insurance
- Process flow diagrams with emission points
- Site plan including the location of the proposed source and property boundary
- Material balance data and all emissions calculations
- Material Safety Data Sheets (MSDS) or equivalent information for materials processed and manufactured.
- Certificate of Public Convenience and Necessity (CPCN) waiver documentation from the Public Service Commission ⁽¹⁾
- Documentation that the proposed installation complies with local zoning and land use requirements ⁽²⁾

⁽¹⁾ Required for emergency and non-emergency generators installed on or after October 1, 2001 and rated at 2001 kW or more.

⁽²⁾ Required for applications subject to Expanded Public Participation Requirements.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Blvd • Baltimore, Maryland 21230
(410) 537-3230 • 1-800-633-6101 • www.mde.state.md.us

Air and Radiation Management Administration • Air Quality Permits Program

APPLICATION FOR PROCESSING/MANUFACTURING EQUIPMENT

Permit to Construct Registration Update Initial Registration

1A. Owner of Equipment/Company Name

ALLAN MYERS MD, INC

Mailing Address

2011 BEL AIR RD

Street Address

FALLSTON

City

MD

State

21047

Zip

Telephone Number

(443) 243-2157

Signature

Samantha E. Sailot

SAMANTHA E. SAILLOT, PROJECT ENGINEER

Print Name and Title

01-06-2021

Date

DO NOT WRITE IN THIS BLOCK
2. REGISTRATION NUMBER

County No.

1-2

Premises No.

3-6

Registration Class Equipment No.

7

8-11

Data Year

12-13

Application Date

1B. Equipment Location and Telephone Number (if different from above)

2203 OLD MOUNTAIN RD.

Street Number and Street Name

JOPPA

City/Town

MD

State

21085

Zip

(443) 271-7318

Telephone Number

JENKINS PROPERTY

Premises Name (if different from above)

3. Status (A= New, B= Modification to Existing Equipment, C= Existing Equipment)

Status

A

15

New Construction

Begun (MM/YY)

0421

16-19

New Construction

Completed (MM/YY)

20-23

Existing Initial

Operation (MM/YY)

20-23

4. Describe this Equipment: Make, Model, Features, Manufacturer (include Maximum Hourly Input Rate, etc.)

JAW CRUSHER, 375HP, 450TPH MAX. FEED SPEED

5. Workmen's Compensation Coverage WA763D510067010

Binder/Policy Number

12-31-2021

Expiration Date

LIBERTY INSURANCE CORPORATION

NOTE: Before a Permit to Construct may be issued by the Department, the applicant must provide the Department with proof of worker's compensation coverage as required under Section 1-202 of the Worker's Compensation Act.

6A. Number of Pieces of Identical Equipment Units to be Registered/Permitted at this Time 0

6B. Number of Stack/Emission Points Associated with this Equipment 2

7. Person Installing this Equipment (if different from Number 1 on Page 1)

Name _____ Title _____
 Company _____
 Mailing Address/Street _____
 City/Town _____ State _____ Telephone (____) _____

8. Major Activity, Product or Service of Company at this Location

EQUIPMENT AND STORAGE YARD, LIMITED MINING AND RECUAMATION

9. Control Devices Associated with this Equipment

None
 24-0

Simple/Multiple Cyclone <input type="checkbox"/> 24-1	Spray/Adsorb Tower <input type="checkbox"/> 24-2	Venturi Scrubber <input type="checkbox"/> 24-3	Carbon Adsorber <input type="checkbox"/> 24-4	Electrostatic Precipitator <input type="checkbox"/> 24-5	Baghouse <input type="checkbox"/> 24-6	Thermal/Catalytic Afterburner <input type="checkbox"/> 24-7	Dry Scrubber <input type="checkbox"/> 24-8
--	---	---	--	---	--	--	---

Other

Describe DUST SUPPRESSION SPRAY BARS

24-9

10. Annual Fuel Consumption for this Equipment

OIL-1000 GALLONS <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 26-31 25.6	SULFUR % <input type="text"/> <input type="text"/> <input type="text"/> 32-33 03	GRADE <input type="text"/> <input type="text"/> 34 2	NATURAL GAS-1000 FT ³ <input type="text"/> <input type="text"/> 35-41	LP GAS-100 GALLONS <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 42-45	GRADE <input type="text"/> <input type="text"/> 43-44
COAL- TONS <input type="text"/> <input type="text"/> 46-52	SULFUR % <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 53-55	ASH% <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 56-58	WOOD-TONS <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 59-63	MOISTURE % <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 64-65	

OTHER FUELS <input type="checkbox"/> ANNUAL AMOUNT CONSUMED (Specify Type) 66-1 (Specify Units of Measure)	OTHER FUEL <input type="checkbox"/> ANNUAL AMOUNT CONSUMED (Specify Type) 66-2 (Specify Units of Measure)
---	--

1= Coke 2= COG 3=BFG 4=Other

11. Operating Schedule (for this Equipment)

Continuous Operation <input type="checkbox"/> 67-1	Batch Process <input type="checkbox"/> 67-2	Hours per Batch <input type="text"/> <input type="text"/> 68-69	Batch per Week <input type="text"/> 70-71	Hours per Day <input type="text"/> <input type="text"/> 70-71 10	Days Per Week <input type="text"/> 72 5	Days per Year <input type="text"/> <input type="text"/> <input type="text"/> 73-75 260
Seasonal Variation in Operation:						
No Variation <input type="checkbox"/> 76	Winter Percent <input type="text"/> <input type="text"/> 77-78 55	Spring Percent <input type="text"/> <input type="text"/> 79-80 15	Summer Percent <input type="text"/> <input type="text"/> 81-82 15	Fall Percent <input type="text"/> <input type="text"/> 83-84 15	(Total Seasons= 100%)	

12. Equivalent Stack Information- is Exhaust through Doors, Windows, etc. Only? (Y/N)

N
85

If not, then

Height Above Ground (FT)

Inside Diameter at Top

Exit Temperature (°F)

Exit Velocity (FT/SEC)

0 | 1 | 1

| | 4

| 8 | 0 | 0

2 | 2 | 5

86-88

89-91

92-95

96-98

NOTE:

Attach a block diagram of process/process line, indicating new equipment as reported on this form and all existing equipment, including control devices and emission points.

13. Input Materials (for this equipment only)

Is any of this data to be considered confidential? (Y or N)

NAME	CAS NO. (IF APPLICABLE)	PER HOUR	INPUT RATE		UNITS
			UNITS	PER YEAR	
1. BROKEN ASPHALT		200	TN		
2. BROKEN CONCRETE		200	TN		
3.					
4.					
5.					
6.					
7.					
8.					
9.					
TOTAL		400	TN		

14. Output Materials (for this equipment)

Process/Product Stream

NAME	CAS NO. (IF APPLICABLE)	PER HOUR	OUTPUT RATE		UNITS
			UNITS	PER YEAR	
1. RECYCLED ASPHALT (MILL)		200	TN		
2. RECYCLED CONCRETE (R-6)		200	TN		
3.					
4.					
5.					
6.					
7.					
8.					
9.					
TOTAL		400	TN		

15. Waste Streams - Solid and Liquid

NAME	CAS NO. (IF APPLICABLE)	PER HOUR	OUTPUT RATE		UNITS
			UNITS	PER YEAR	
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
TOTAL					

16. Total Stack Emissions (for this equipment only) in Pounds Per Operating Day

Particulate Matter
 N / N

99-104

Oxides of Sulfur
 3 . 0

105-110

Oxides of Nitrogen
 4 6 . 0

111-116

Carbon Monoxide
 9 . 9

177-122

Volatile Organic Compounds
 3 . 8

123-128

PM-10
 3 . 2

129-134

17. Total Fugitive Emissions (for this equipment only) in Pounds Per Operating Day

Particulate Matter
 1 5 . 1

135-139

Oxides of Sulfur
 N / A

140-144

Oxides of Nitrogen
 N / A

145-149

Carbon Monoxide
 N / A

150-154

Volatile Organic Compounds
 N / A

155-159

PM-10
 5 . 9

160-164

Method Used to Determine Emissions (1= Estimate 2= Emission Factor 3= Stack Test 4= Other)

TSP
 2

165

SOX
 2

166

NOX
 2

167

CO
 2

168

VOC
 2

169

PM10
 2

170

AIR AND RADIATION MANAGEMENT ADMINISTRATION USE ONLY

18. Date Rec'd. Local _____

Date Rec'd. State _____

Return to Local Jurisdiction
 Date _____ By _____

Reviewed by Local Jurisdiction
 Date _____ By _____

Reviewed by State
 Date _____ By _____

19. Inventory Date

Month/Year

171-174

Equipment Code

175-177

SCC Code

178-185

20. Annual Operating Rate

Maximum Design Hourly Rate

Permit to Operate Month

Transaction Date (MM/DD/YR)

186-192

193-199

200-201

202-207

Staff Code

208-210

VOC Code

211 212

SIP Code

213 214

Regulation Code

215-218

Confidentiality

219

Point Description

220-238

Action

A: Add
 C: Change

239

MARYLAND DEPARTMENT OF THE ENVIRONMENT
 Air and Radiation Management Administration • Air Quality Permits Program
 1800 Washington Boulevard • Baltimore, Maryland 21230
 (410)537-3225 • 1-800-633-6101 • www.mde.maryland.gov

FORM 5EP: Emission Point Data

Complete one (1) Form 5EP for EACH emission point (stack or fugitive emissions) related to the proposed installation.

Applicant Name: ALLAN MYERS MD, INC

1. Emission Point Identification Name/Number

List the applicant assigned name/number for this emission point and use this value on the attached required plot plan:

CRUSHER EMISSION STACK

2. Emission Point Description

Describe the emission point including all associated equipment and control devices:

MANIFOLD EXHAUST STACK

3. Emissions Schedule for the Emission Point

Continuous or Intermittent (C/I)?	I	Seasonal Variation Check box if none: <input checked="" type="checkbox"/> Otherwise estimate seasonal variation:	
Minutes per hour:	<u>60</u>	Winter Percent	<u>55</u>
Hours per day:	<u>10</u>	Spring Percent	<u>15</u>
Days per week:	<u>5</u>	Summer Percent	<u>15</u>
Weeks per year:	<u>52</u>	Fall Percent	<u>15</u>

4. Emission Point Information

Height above ground (ft):	<u>11</u>	Length and width dimensions at top of rectangular stack (ft):	Length:	Width:
Height above structures (ft):	<u>N/A</u>			
Exit temperature (°F):	<u>800°</u>	Inside diameter at top of round stack (ft):	<u>0.33</u>	
Exit velocity (ft/min):	<u>3.75</u>	Distance from emission point to nearest property line (ft):	<u>600</u>	
Exhaust gas volumetric flow rate (acfm):		Building dimensions if emission point is located on building (ft)	Height <u>N/A</u>	Length Width

5. Control Devices Associated with the Emission Point

Identify each control device associated with the emission point and indicate the number of devices. A Form 6 is also required for each control device. If none check none:

- | | | | |
|---|--------------|--|--|
| <input type="checkbox"/> None | | <input type="checkbox"/> Thermal Oxidizer | No. _____ |
| <input type="checkbox"/> Baghouse | No. _____ | <input type="checkbox"/> Regenerative | |
| <input type="checkbox"/> Cyclone | No. _____ | <input type="checkbox"/> Catalytic Oxidizer | No. _____ |
| <input type="checkbox"/> Elec. Precipitator (ESP) | No. _____ | <input type="checkbox"/> Nitrogen Oxides Reduction | No. _____ |
| <input checked="" type="checkbox"/> Dust Suppression System | No. <u>1</u> | <input type="checkbox"/> Selective | <input type="checkbox"/> Non-Selective |
| <input type="checkbox"/> Venturi Scrubber | No. _____ | <input type="checkbox"/> Catalytic | <input type="checkbox"/> Non-Catalytic |
| <input type="checkbox"/> Spray Tower/Packed Bed | No. _____ | <input type="checkbox"/> Other | No. _____ |
| <input type="checkbox"/> Carbon Adsorber | No. _____ | Specify: | |
| <input type="checkbox"/> Cartridge/Canister | | | |
| <input type="checkbox"/> Regenerative | | | |

FORM 5EP: Emission Point Data

6. Estimated Emissions from the Emission Point

Criteria Pollutants	At Design Capacity (lb/hr)	At Projected Operations		
		(lb/hr)	(lb/day)	(ton/yr)
Particulate Matter (filterable as PM10)	0.74	0.74	7.4	0.962
Particulate Matter (filterable as PM2.5)				
Particulate Matter (condensables)	1.9	1.9	19.0	2.47
Volatile Organic Compounds (VOC)	0.48	0.48	4.8	0.624
Oxides of Sulfur (SOx)	0.33	0.33	3.3	0.429
Oxides of Nitrogen (NOx)	5.75	5.75	57.5	7.475
Carbon Monoxide (CO)	1.24	1.24	12.4	1.612
Lead (Pb)				
Greenhouse Gases (GHG)	At Design Capacity (lb/hr)	At Projected Operations		
		(lb/hr)	(lb/day)	(ton/yr)
Carbon Dioxide (CO ₂)				
Methane (CH ₄)				
Nitrous Oxide (N ₂ O)				
Hydrofluorocarbons (HFCs)				
Perfluorocarbons (PFCs)				
Sulfur Hexafluoride (SF ₆)				
Total GHG (as CO ₂ e)				
List individual federal Hazardous Air Pollutants (HAP) below:	At Design Capacity (lb/hr)	At Projected Operations		
		(lb/hr)	(lb/day)	(ton/yr)
ASPHALT CEMENT 8052-42-4	N/A			
CRYSTALLINE SILICA 14808-60-7	N/A			

(Attach additional sheets as necessary.)

FORM 5T: Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstration

Applicant Name: _____

Step 1: Quantify premises-wide emissions of Toxic Air Pollutants (TAP) from new and existing installations in accordance with COMAR 26.11.15.04. Attach supporting documentation as necessary.

Toxic Air Pollutant (TAP)	CAS Number	Class I or Class II?	Screening Levels (µg/m ³)			Estimated Premises Wide Emissions of TAP			
			1-hour	8-hour	Annual	Actual Total Existing TAP Emissions (lb/hr)	Projected TAP Emissions from Proposed Installation (lb/hr)	Premises Wide Total TAP Emissions (lb/hr)	(lb/yr)
<i>ex. ethanol</i>	64175	II	18843	3769	N/A	0.60	0.15	0.75	1500
<i>ex. benzene</i>	71432	I	80	16	0.13	0.5	0.75	1.00	400
ASPHALT CEMENT	8052424	I		0.25			0.014	0.014	36.4
CRYSTALLINE SILICA	14808607	I		0.25			0.014	0.014	36.4

(attach additional sheets as necessary.)

Note: Screening levels can be obtained from the Department's website (<http://www.mde.maryland.gov>) or by calling the Department.

Step 2: Determine which TAPs are exempt from further review. A TAP that meets either of the following Class I or Class II small quantity emitter exemptions is exempt from further TAP compliance demonstration requirements under Step 3 and Step 4.

Class II TAP Small Quantity Emitter Exemption Requirements (COMAR 26.11.15.03B(3)(a))

A Class II TAP is exempt from Step 3 and Step 4 if the Class II TAP meets the following requirements: Premises wide emissions of the TAP shall not exceed 0.5 pounds per hour, and any applicable 1-hour or 8-hour screening level for the TAP must be greater than 200 µg/m³.

Class I TAP Small Quantity Emitter Exemption Requirements (COMAR 26.11.15.03B(3)(b))

A Class I TAP is exempt from Step 3 and Step 4 if the Class I TAP meets the following requirements: Premises wide emissions of the TAP shall not exceed 0.5 pounds per hour and 350 pounds per year, any applicable 1-hour or 8-hour screening level for the TAP must be greater than 200 µg/m³, and any applicable annual screening level for the TAP must be greater than 1 µg/m³.

If a TAP meets either the Class I or Class II TAP Small Quantity Emitter Exemption Requirements, no further review under Step 3 and Step 4 are required for that specific TAP.

FORM 5T: Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstration

Step 3: Best Available Control Technology for Toxics Requirement (T-BACT, COMAR 26.11.15.05)
 In the following table, list all TAP emission reduction options considered when determining T-BACT for the proposed installation. The options should be listed in order beginning with the most effective control strategy to the least effective strategy. Attach supporting documentation as necessary.

Target Pollutants	Emission Control Option	% Emission Reduction	Costs		T-BACT Option Selected? (yes/no)
			Capital	Annual Operating	
<i>ex. ethanol and benzene</i>	<i>Thermal Oxidizer</i>	99	\$50,000	\$100,000	no
<i>ex. ethanol and benzene</i>	<i>Low VOC materials</i>	80	0	\$100,000	yes
CRYSTALLINE SILICA	WET SUPPRESSION		N/A	MINIMAL	YES
(attach additional sheets as necessary)					

Step 4: Demonstrating Compliance with the Ambient Impact Requirement (COMAR 26.11.15.06)

Each TAP not exempt in Step 2 must be individually evaluated to determine that the emissions of the TAP will not adversely impact public health. The evaluation consists of a series of increasingly non-conservative (and increasingly rigorous) tests. Once a TAP passes a test in the evaluation, no further analysis is required for that TAP. "Demonstrating Compliance with the Ambient Impact Requirement under the Toxic Air Pollutant (TAP) Regulations (COMAR 26.11.15.06)" provides guidance on conducting the evaluation. Summarize your results in the following table. Attach supporting documentation as necessary.

Toxic Air Pollutant (TAP)	CAS Number	Screening Levels (µg/m ³)			Premises Wide Total TAP Emissions (lb/hr) (lb/yr)		Allowable Rate (AER) per COMAR 26.11.16.02A (lb/hr) (lb/yr)		Off-site Concentrations per Screening Analysis (µg/m ³)			Compliance Method Used? AER or Screen
		1-hour	8-hour	Annual	(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)	1-hour	8-hour	Annual	
<i>ex. ethanol</i>	64175	18843	3769	N/A	0.75	1500	0.89	N/A	N/A	N/A	N/A	AER
<i>ex. benzene</i>	71432	80	16	0.13	1.00	400	0.04	36.52	1.5	1.05	0.12	Screen
CRYSTALLINE SILICA	14808607		0.25		0.014	36.4		166.44				
(attach additional sheets as necessary)												

If compliance with the ambient impact requirement cannot be met using the allowable emissions rate method or the screening analysis method, refined dispersion modeling techniques may be required. Please consult with the Department's Air Quality Permit Program prior to conducting dispersion modeling methods to demonstrate compliance.

**MARYLAND DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION MANAGEMENT ADMINISTRATION
AIR QUALITY PERMITS PROGRAM**

**Procedures for Estimating PM-10 Emissions and Demonstrating Compliance with the Air
Toxics Ambient Impact Requirement for Crystalline Silica Emissions
from Crushing and Screening Operations**

1. Table 1 lists emission factors for different activities in a typical crushing and screening plant.

Table 1: PM₁₀ Emission Factors

Equipment	Emission Factor ^(a) (lb PM-10/ton)	Number of Pieces of Equipment	Total Emission Factor (lb PM-10/ton)
Crusher with wet suppression (WS)	0.00054	1	0.00054
Screen with WS	0.00074	1	0.00074
Conveyor Transfer Points with WS	4.6 x 10 ⁻⁵ (0.000046)	1	0.000046
Truck Unloading	1.6 x 10 ⁻⁵ (0.000016)	-----	1.6 x 10 ⁻⁵
Truck Loading	0.0001	-----	0.0001
Storage Piles	0.0016	-----	0.0016
TOTAL EMISSION FACTOR (TEF):	-----	-----	0.003042

(a) From AP-42, Table 11.19.2-2 and Equation 1 of Section 13.2.4-4 (Assuming moisture content of 2.1%, a mean wind speed of 6.9 miles per hour, and a particle size multiplier of 0.35 for particles less than 10 µm in diameter)

2. Complete Table 1 by entering the number of pieces of each type of equipment in column 3 (ex. If plant has two crushers, enter 2 in column 3 for the number of crushers). For truck loading and unloading and storage piles, the emission factors are based on throughput and not based on the number of trucks or piles.
3. Calculate the total emission factor (column 4) for each type of equipment by multiplying the number in column 2 by the number in column 3.
4. Find the total emission factor for the plant by adding the values in column 4. You can multiply this total emission factor by the throughput to determine total PM-10 emissions.
5. For respirable crystalline silica emissions (which is a fraction of respirable PM-10 emissions), use the following formula to calculate the emissions to meet the requirement of COMAR 26.11.15.04 to quantify emissions:

$$\text{Total Respirable Crystalline Silica Emissions (lbs/hr)} = 0.01 (\text{CS} \times (\text{TEF} \times \text{TPH}))$$

Where:

0.01 = Percent of PM-10 emissions that is respirable, expressed as a decimal

CS = Percent by weight of total crystalline silica in material expressed as a decimal

(ex. 1% = 0.01)

TEF = Total emission factor in pounds of PM-10 per ton (from Table 1)

TPH = Projected production of the plant in tons per hour

6. The minimum control strategy considered to meet the best available control technology requirement for toxic air pollutant emissions under COMAR 26.11.15.05 (T-BACT requirement), is the use of wet suppression systems to control fugitive emissions from plant operations. Other control strategies include the use of capture systems such as a baghouse or a combination of capture and wet suppression techniques.
7. Respirable crystalline silica has an eight-hour toxic air pollutant screening level of 0.25 µg/m³. To demonstrate compliance with the toxic air pollutant ambient impact requirement of COMAR 26.11.15.06, emissions of crystalline silica cannot cause an impact that exceeds the screening level, or 0.001 pounds of crystalline silica per hour.

For a crushing and screening plant equipped with one (1) crusher, one (1) screen, and one (1) conveyor, Table 2 lists the maximum plant capacity allowed that demonstrates compliance with COMAR 26.11.15.06 at varying levels of crystalline silica content in the material processed.

Table 2: Maximum Plant Throughputs Allowed That Demonstrate Compliance with COMAR 26.11.15.06

Crystalline Silica Content (%)	1	2	5	10	20
Plant Capacity, Tons/hr	3,330	1,660	660	330	160

8. The content of crystalline silica in recycled asphalt pavement (RAP) material is about 1%. (Source: http://www.lafarge-na.com/MSDS_North_America_English_-_RAP.pdf) Therefore, a typical RAP crushing and screening plant equipped with wet suppression systems demonstrates compliance with the requirements of COMAR 26.11.15.05 and COMAR 26.11.15.06.
9. Crystalline silica content of other materials processed in crushing and screening plants can be found on Material Safety Data Sheets (MSDS) or other specification sheets for those materials. If a range of content is provided, the average of the range may be used for the compliance demonstration.
10. If estimated emissions of crystalline silica from projected crushing and screening operations exceed 0.001 pounds per hour, advanced computer screening or dispersion models may be used to demonstrate compliance with the toxic air pollutant screening level.

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Air and Radiation Management Administration / Air Quality Permits Program
1800 Washington Boulevard, STE 720 Baltimore, MD 21230-1720
(410) 537-3230 • 1-800-633-6101 • www.mde.state.md.us

Mail application to
MDE/ARMA
1800 Washington Blvd, Suite 720
Baltimore, MD 21230-1720

Don't forget to:
✓ Sign the application
✓ Include vendor literature

Air Quality Permit to Construct & Registration Application for
INTERNAL COMBUSTION ENGINES
(Electrical Power Generators, Power Equipment, Fire Protection Pumps)

1) Applicability

You must check off one the following items to use this application form

- Electrical power generation (off grid, base load, peak, load shaving, etc)
 - Use MDE Form 42 for emergency use only generators
- Power equipment (hydraulic, mechanical, etc)
- Fire protection pump

For electrical power generators only, you must check off one the following items to use this application form

- I have a CPCN Exemption from the Public Service Commission for this generator
(contact the Public Service Commission at 410.767.8131)
- This generator was installed before October 1, 2001 and I do not need a CPCN Exemption

2) Business/Institution/Facility where the engine will be located Check if this is a federal facility

Name: ALLAN MYERS INC. JENKINS PROPERTY Phone: 410-879-3055
Street Address: 2203A OLD MOUNTAIN RD. CENTRAL
City: JOPPA State: MD Zip Code: 21085 County: HARFORD

3) Owner/Operator of the engine (if different than above)

Name: _____ Phone: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____

4) Installer Check if installer is applying for permit. If checked, complete the following:

Name: ALLAN MYERS INC. Phone: 410-879-3055
Mailing Address: 2011 BEL AIR RD.
City: FALLSTON State: MD Zip Code: 21047

5) Engine Information

_____	CAT C4.4	99	_____	_____	} SAMPLE ONLY
_____	CAT C9.3B	375	_____	_____	
Installation Date	Engine Manufacturer & Model	Horsepower	Manufacture Date	Fuel Type	

6) Operating Information

Intended use description: (Examples, "a portable generator at a construction site" or "peak shaving with the emergency generator", etc)

PORTABLE CRUSHER / SCREENER TO CRUSH CONCRETE AND RAP

10	2600
Hours per day	Hours per year

7) Required Attachments

(Check that they are attached)

- Vendor literature **SAMPLE ONLY**
- CPCN Exemption from the Public Service Commission
 - Electrical generators only
 - Not needed for generators installed before October 1, 2001

8) Workers Compensation (Environmental article §1-202)

Workers insurance policy or binder number: WA763DS10067010

Check if self employed or otherwise exempt from this requirement

"I CERTIFY UNDER PENALTY OF LAW THAT THE INFORMATION SUBMITTED IN THIS REQUEST FOR COVERAGE IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

Owners Signature

Printed Name & Title

Date

LEAVE BLANK, MDE use only

- Permit
- Registration (Less than 1,000 brake horsepower & installed prior to 11/24/03)

Permit/Registration Number: _____ - _____ - _____ - _____

AI: _____

Emissions Stack	_____	_____	_____	_____	_____	_____
-----------------	-------	-------	-------	-------	-------	-------

Fugitive	_____	_____	_____	_____	_____	_____
	SOx	Nox	CO	VOC	PM	PM-10

SANDVIK

QJ341+ JAW CRUSHER PIONEERING SOLUTIONS FOR YOU

TECHNICAL SPECIFICATION

- SAMPLE ONLY -

The QJ341+ comes with the added benefit of a double deck pre-screen as standard. This will enable the removal of many fines to increase your throughput resulting in greater efficiency, higher productivity and less wear on the crusher. This will be particularly effective in quarrying applications where you have a high proportion of fines in the feed material.

Alongside the pre-screen we have incorporated a telescopic natural fines conveyor with a discharge height of 3.1 m / 10' 3" for greater stockpiling capabilities and a three-position by-pass chute to increase flexibility in material distribution. These are in addition to a new design of self-locking hopper which is safe and easy to set-up from ground level.

The QJ341+ will come with the same user-friendly features as the standard model, such as hydraulic adjustment, reversible jaw and hydraulic drive to enable the crusher to start under load, minimizing downtime. Fitted with 18% Optitooth™ jaw plates as standard.

KEY BENEFITS

- Large 1200 x 750 mm / 47" x 29" feed opening for highest rates of production in its class.
- Fitted with a double deck pre-screen for efficiency and greater productivity.
- Load control system for feeder drive to ensure continuous, uninterrupted crushing.
- Steep dirt chute for faster fines transfer increasing the ability to deal with sticky material.
- Telescopic natural fines conveyor for greater stockpiling capabilities.
- Self-locking hopper, for quick and safe set-up from ground level.
- Full PLC control system and colour screen allowing visual data output of all plant operating parameters.
- Low drag main conveyor for maximum power transfer and efficiency.
- Hydraulic raise and lower facility on the main conveyor, ideal for recycling operations.
- Highly efficient, radial piston and bent axis motors fitted to reduce hydraulic flow rates, increase fuel economy and durability.
- Fitted with My Fleet remote monitoring system as standard for live monitoring of plant, hours, location, etc.

- SAMPLE ONLY -



- SAMPLE ONLY -

SAMPLE ONLY

KEY SPECIFICATIONS	QJ341+
Hopper	
Width	2435 mm / 7' 11"
Length	4315 mm / 14' 2"
Level capacity	5.1 m ³ / 6.8 yds ³
Heaped capacity	9.4 m ³ / 12.3 yds ³
Heaped capacity hopper extensions	13 m ³ / 17 yds ³
Rear loading height	4381 mm / 14' 4"
Rear loading height hopper extensions	4618 mm / 15' 2"
Rear loading width hopper extensions	4073 mm / 13' 4"
Feeder	
Type	Hyd - variable speed primary pan
Width	1024 mm / 42"
Total length	2285 mm / 7' 6"
Pre screen	
Type	Hyd drive 2 bearing, high amplitude
Number of decks	Double deck
Top deck size	1108 x 2020 mm / 3' 7" x 6' 7"
Bottom deck size	1108 x 1500 mm / 3' 7" x 4' 11"
Standard top deck aperture	50 - 70 mm / 2" - 3"
Standard bottom deck aperture	40 mm / 1.5"
Crusher	
Type	Single toggle - C12
Feed opening	1200 mm x 750 mm / 47" x 29"
Speed	264 - 283 rpm
Adjustment type	Hyd wedge
CSS range	50 - 160 mm / 2" - 6"
Hydraulically lowering main conveyor	
Belt width	1000 mm / 39"
Discharge height	3894 mm / 12' 9"

STANDARD SPECIFICATION

Feed hopper complete with wear resistant liner
 Vibrating feeder (including stepped grizzly)
 Single pole overband magnet
 Main conveyor with dust covers
 Hydraulic jacking legs
 Tool kit
 Light mast and cabinet lights
 Pull stop cords
 Belt protection plate under jaw crusher discharge
 Central greasing to the jaw crusher and torque arm
 Dust suppression spray bars
 Level sensor on crushing chamber
 Telescopic natural fines conveyor with dust cover
 Remote diesel pump
 Radio control tracking, proportional

KEY SPECIFICATIONS	QJ341+
Engine	
Engine	CAT C9 Tier 3 261 kW / 350 hp CAT C9.3B Stage 3A Constant Speed 279 kW / 375 hp CAT C9.3B Stage 5 / T4F 280 kW / 375 hp
Diesel tank capacity	660 litres / 174 USG
Hyd tank capacity	660 litres / 174 USG
Magnet	
Model	Single Pole Magnetic separator
Type	Self cleaning
Telescopic Natural fines conveyor	
Belt width	650 mm / 26"
Discharge height	3120 mm / 10' 3"
Tracks	
Length (centres)	3715 mm / 12' 2"
Width (shoe)	500 mm / 20"
Control	Radio / Umbilical
Transport dimensions	
Length	14,720 m / 48' 3"
Width	2800 m / 9' 2"
Height	3790 m / 12' 5"
Standard weight	50,365 kg / 111,035 lbs
Operating dimensions	
Length	16,040 m / 52' 7"
Width with NF conveyor	6390 m / 20' 11"
Height	4380 m / 14' 4"
Performance	
Maximum feed size	650 mm ³ / 25.6 inch ³
Capacity (up to)	450 tph / 496 stph
Travel speed	0 to 1.3 km/h / 0 to 0.81 mph
Max incline	20°
Max incline (side to side)	10°

Note. All weights and dimensions are for standard units only

Hydraulic water pump
 Heavy duty lined dirt chute
 My Fleet telematics

SAMPLE ONLY

*For option availability please speak with your local Sandvik representative.





QA330 (F542) Screen

General Information

The QA330 Tracked Screen is a Robust, Highly Durable Machine, designed specifically for the Recycling and Contractor market.

The QA330 incorporates a 3.6 x 1.5m (12' x 5') two bearing screen box with increased screening angle built into the bottom deck of the screen with an additional 5 degree screening angle. This feature coupled with the larger screening surface area, and increased throw on the screenbox, enhances screening efficiency and capacity through the actual screenbox itself.

The QA330 Tracked Screen has a unique user friendly folding access walkway fitted as standard around the screenbox, thus providing the operator with easy access for maintenance.

The Belt feeder has a 7m³ (9.2yd³) capacity and is fitted with radio controlled tipping reject grid as standard. The main conveyor is fitted with a 1050mm (41") heavy duty belt, tracks are 500mm (19.5") wide to cater for various ground conditions and are pendant track controlled.

- High production rate through large 3.6 x 1.5m (12' x 5') screening area, high frequency double deck screen and a five degree inclined angle on screen-box to produce a "banana" effect
- Fully capable of working at the quarry face, inner city development or recycling centre
- Modern chassis design ensures in-built machine quality and strength for maximum up-time
- Fully tracked for on-site mobility
- Available with optional vibrating grid
- Global aftermarket support, with standard stock parts to ensure minimum loss of production
- Capable of operating in the most hostile environments
- Massive stockpiling capability through integrated hydraulic conveyors
- Easily transported from site to site
- Machine designed for optimum fuel economy and low operating costs.

— SAMPLE ONLY —



Technical Specification

QA330 (F542) Screen

Technical Specification

	QA330
Hopper	
Width	1700mm / 67"
Length	4945mm / 195"
Capacity	8m ³ / 10.5yd ³
Tipping Grid	
Open Area	4945x1700mm / 195x67"
Standard Aperture	100mm / 4"
Feeder	
Width	1050mm / 41"
Total Length	4000mm / 157"
Type	Belt
Main Conveyor	
Belt width	1050mm / 41"
Belt length	18200mm / 717"
Drive Drum Ø	289mm / 11.5"
Tail Drum Ø	273mm / 11"
Side Conveyors	
Belt width	650mm / 26"
Belt length	19250mm / 758"
Discharge Height	4700mm / 185"
Drive Drum Ø	289mm / 11.5"
Tail Drum Ø	273mm / 11"
Fines Conveyor	
Belt width	1200mm / 47"
Belt length	9000mm / 354"
Discharge Height	3880mm / 153"
Drive Drum Ø	289mm / 11.5"
Tail Drum Ø	273mm / 11"

	QA330
Screenbox	
Screen box Speed	990 rpm
Screen Deck Measure	3650x1500mm / 144x59"
Tracks	
Length	2920mm / 115"
Width	500mm / 19.5"
Power Pack	
Engine Power	74kW (99hp)
Diesel Tank Size	400 litres / 106USG
Hydraulic Tank Size	630 Litres / 166USG
General Technical Data	
Transport dimensions	
Length	11850mm / 38.9'
Width	3000mm / 9.8'
Height	3400mm / 11.2'
Operating dimensions	
Length	15870mm / 52.1'
Width	15700mm / 51.5'
Height	5110mm / 16.8'
Standard Weight	26800kg / 59,084lbs
Performance	
Max Feed Size	200mm / 8"
Capacity (up to)	275 MTPH / 303 STPH
Travel Speed	1K/H / 0.62 MPH
Max slope climbing	20°
Max slope side to side	10°

Options

Hopper Hardox Liner Plates Back & Sides
 Central Auto Lube (conveyors/screen)
 Dust Suppression Including Canvas Covers
 Remote Diesel Pump
 Water Pump
 -20°C / -4°F Arctic Package
 -30°C / -22°F Arctic Package
 Tropical / High ambient package
 Double Deck Vibrating Grid
 12ft Grid & Crusher Feedbox
 Dead box
 Hardox Spreader Plate

Screening Media
 Extra Wedges for top Deck Screen
 Oversize Screen chute Hardox Lined
 Single Shaft Shredder Unit
 Weigh Scale
 Side Conveyor Feed Boot Hardox Lined
 Roll Back Flaps
 Main Conveyor Lift Rams
 Radio Controlled Tracks
 Lighting Masts
 Wheeled Dolly

- SAMPLE ONLY -

The units depicted show all options currently available, and the colour scheme reflects the standard scheme to be used. Current models may differ from those featured in this brochure. Please contact Sandvik to clarify specification and options. The material in this brochure is of general application for information and guidance only, and no representation or warranty is made or given by the manufacturer that its products will be suitable for a customer's particular purpose and enquiry should always be made of the manufacturer to ensure such suitability. While reasonable efforts have been made in the preparation of this document to ensure its accuracy, the manufacturer reserves no liability resulting from errors or omissions in this document, or from the use or interpretation of the information contained herein. The manufacturer reserves the right to make changes to the information in this brochure and the product design without reservation and without notification to users.

SANDVIK MINING AND CONSTRUCTION (UK) HEARTH COTE ROAD SWADLINCOTE DERBYSHIRE DE11 9DU ENGLAND
 TEL +44 (0)1283 212121 FAX +44 (0) 1283 217342 info.extec-fintec@sandvik.com www.miningandconstruction.sandvik.com





FUGITIVE DUST CONTROL PLAN

For Allan Myers at Jenkins Pit

Purpose: This plan provides a dust control program to ensure proper operation and maintenance of the equipment associated with the crushing and screening processing equipment at Jenkins Pit. This plan also provides dust control strategies for the heavy equipment traffic within site limits associated with the permitted equipment operations. Use of this plan is only intended for when dust becomes harmful to our employees and the surrounding public.

OPERATION AND MAINTENANCE OF PROCESSING EQUIPMENT AND ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT

1. Spray bars and nozzles shall be kept in good working order and inspected a minimum of once a month.
 - a. The spray bars shall be operated as per the original equipment manufacturer's recommended water delivery pressure in pounds per square inch and volumetric flow rate in gallons per hour.
 - b. The spray bar nozzles shall be checked as required by the New Source Performance Standard for Non-Metallic Mineral Processing Plants (40 CFR 60, Subpart OOO) for clogs and cleaned as needed to maintain a uniform spray pattern.
2. Accumulated material around the crusher shall be removed on a regular basis. Spillage and residual materials from the process shall be picked up regularly and returned to the raw material stockpiles for reuse.

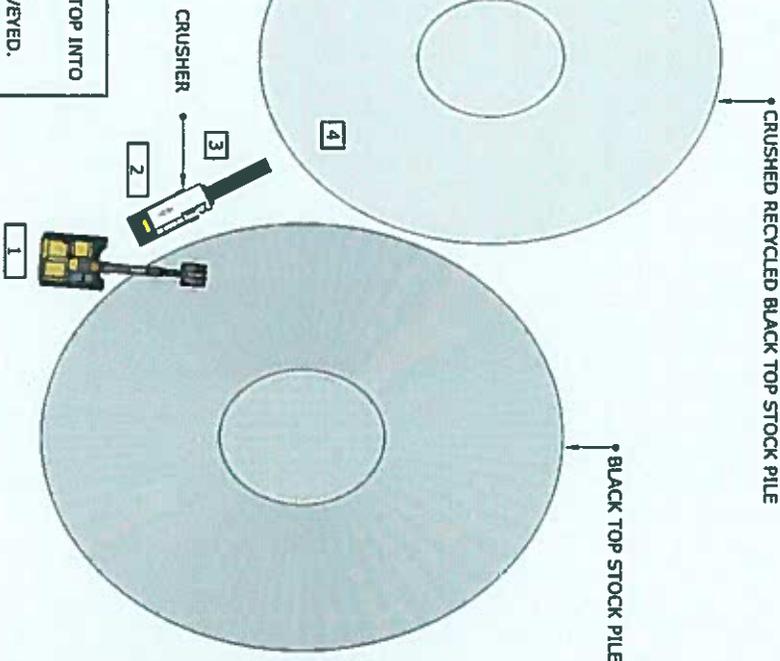
SITE MAINTENANCE

1. Dust in areas where equipment traffic will travel shall be controlled by application of water. Additional water shall be applied to control fugitive dust. In the event alternative dust suppressant aids are used, they will be applied according to the manufacturer's specifications for quantity and frequency.
2. The speed of heavy equipment associated with the crushing and screening operation will be limited to 15 miles per hour.
3. Harmful dust from stockpiles associated with the crushing and screening operation shall be controlled. The stockpiles are built up as material is conveyed from the crushing equipment, any harmful dust that might rise off the stockpiles shall be controlled with water to prevent dust beyond property lines.
4. Complaints by community members can be reported to the site manager and the problem will be corrected.

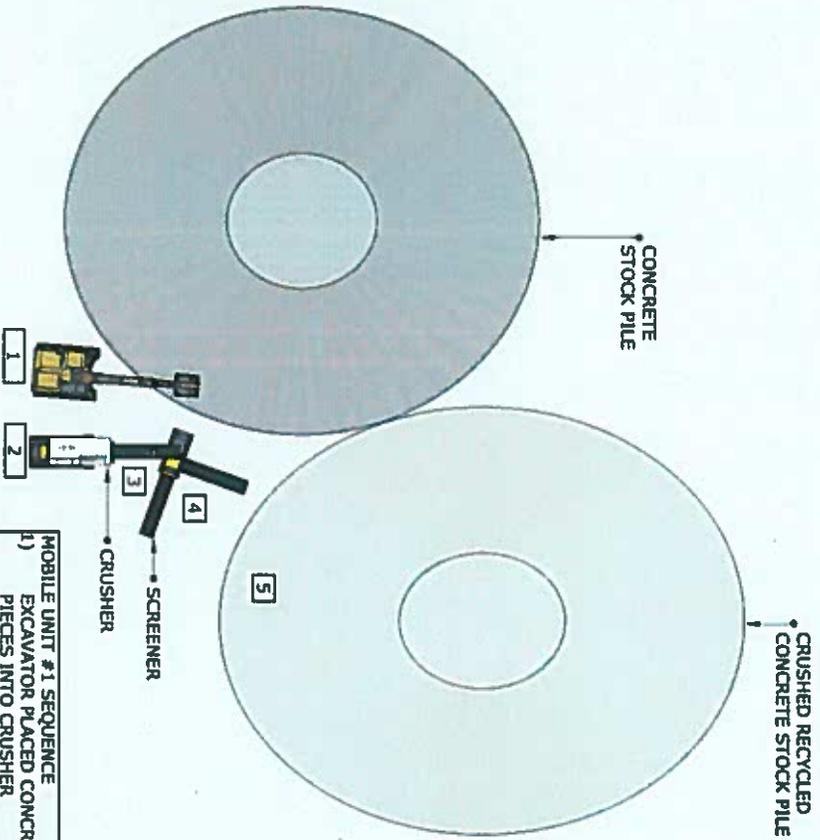
OTHER

1. The loader operator shall be directed to avoid overfilling the bucket of the loader and the feed hopper and to minimize the drop height of the material when loading the feed hopper.
2. The stockpiles shall not be worked more than necessary to keep the materials contained within their defined areas. Stockpile heights shall be kept to a minimum.

MOBILE UNIT #2 SEQUENCE
 1) EXCAVATOR PLACES BLACKTOP INTO HOPPER ON CRUSHER
 2) ASPHALT IS CRUSHED
 3) CRUSHED ASPHALT IS CONVEYED.
 4) STOCK PILE IS CREATED.



MOBILE UNIT #1 SEQUENCE
 1) EXCAVATOR PLACED CONCRETE PIECES INTO CRUSHER
 2) CRUSHER CRUSHES CONCRETE
 3) CRUSHED CONCRETE IS CONVEYED TO SCREENER
 4) SCREENER SEPARATES BY SIZE.
 5) STOCK PILE IS CREATED.



REVISIONS

DESCRIPTION	DATE

**JENKINS PIT
 AQ - EQUIPMENT SCHEMATIC**

DESIGNED BY: _____ DRAWN BY: SES
 CONST. REVIEW BY: _____ DATE: December 16, 2020 SCALE: NONE

"BETTER, FASTER, SAFE"



PO Box 278, Fallston, MD 21047
410-879-3055 Fax: 410-893-2695

January 29, 2015

Maryland State Highway Administration
7450 Traffic Ave
Hanover, MD 21076

Attn: George Hall
ADC SATD OMT

Re: Quality Control Plan - RC6

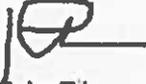
Dear Mr. Hall,

We respectfully submit the following QC plan for your approval:

- 1) This plan applies to the recycled concrete produced at Jenkins Pit, located at 2203 Old Mountain Rd Central, Joppa, MD 21085. Gradation analysis will be performed by ECS Mid-Atlantic, LLC located at 1202 Technology Drive, Suite D, Aberdeen MD 21001. TCLP testing will be performed by Test America Laboratories, Inc located at 301 Alpha Drive, Pittsburgh, PA 15238. ECS Mid-Atlantic coordinates the TCLP testing with Test America after the ECS aggregate technician samples the material pile.
- 2) Concrete demo material is imported from local highway projects only that are performed by American Infrastructure-MD, Inc (Project list available upon request). Building and hazardous concrete loads from origins other than AI-MD highway projects are not accepted. Our loader operators are trained to recognize demo material segregation and employ separation methods as well as reject loads that are not scheduled prior or when the origination of the load is in question. Material piles will be approved by the Administration for use on said projects prior to use.
- 3) This operation conforms to Section 901.01 and 915 of the MDSHA Book of Standard Specifications for Construction and Materials (July 2008).
- 4) We employ ECS Mid-Atlantic as our plants QC technician. Robert Najewicz is the branch manager and can be reached at 410-297-8108. Geradon Tellez is our aggregate technician, his certification number is D630 that expires on 11/20/2015.
- 5) One sample will be taken for gradation analysis, moisture content and pH once per week. Results will be submitted to the MDSHA Central Lab.
- 6) In the event that a gradation analysis falls outside the acceptable range of the Job Mix Formula (JMF), a second sample will be taken and tested. If those results fall outside the range of the JMF all shipments will cease and the MDSHA Project Engineer, Area Materials Engineer and Central Lab will be notified. When the problem is solved and two consecutive tests samples are back within specifications, a request to resume shipping (with test results attached to request) will be made to MDSHA Area Materials Engineer and Central Lab.
- 7) Unacceptable material will be removed from the area where RC-6 is being produced.
- 8) A TCLP test will be completed every six months and results will be submitted to MDSHA Central Lab

- 9) MDSHA shall be notified 24 hours in advance of shipments to SHA projects with the date, project name with contract number, material type, and amount of material ordered.
- 10) Notification of cancellations will be sent to the state within 24 hours of the cancellation.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Tilson', with a horizontal line extending to the right.

John Tilson
Project Manager
American Infrastructure-MD



March 1, 2015

Mr. John Tilson
Mountain Materials Corporation
P.O. Box 1310
Worcester, Pennsylvania 19490

ECS Project No. 15-2422A

Reference: Recycled Materials Testing, Mountain Materials Corporation, Jenkins Pit,
Old Mountain Road, Joppa, Harford County, Maryland

Dear Mr. Tilson:

In response to your request regarding the recycled crushed concrete materials provided we have completed the Toxicity Characteristic Leaching Procedure (TCLP) testing for Volatile Organic Compounds (Method 8260C), Semi-Volatile Organic Compounds (Method 8270D), Organochlorine Pesticides (Method 8081B), Herbicides (Method 8151A), Metals-Arsenic, Barium, Cadmium, Chromium, Lead, Selenium and Silver (Method 6010C), Mercury (Method 7470A). The results of the testing have been provided with this letter and reveal that for all of the analytes tested, the majority were reported as ND (Not detected at the reporting limit, or MDL-Method Detection Limit or FDL-Estimated Detection Limit). The only compounds detected represented Barium and Chromium, which the results were reported less than the RL-Reporting Limit, but greater than or equal to the MDL-Method of Detection Limit and the concentration is an approximate value, as designated by the "J" qualifier. Also the results in both samples are also designated by the "B" qualifier in that the compound was found in the blank and sample.

We trust that the results provided meet your needs at this time. Should you have any questions, please feel free to give us a call.

Respectfully submitted,

ECS MID-ATLANTIC, LLC

Robert M. Najewicz, P.G.
Aberdeen Branch Manager

Charles A. Shaw, P.E.
Geotechnical Manager

Attachments (TestAmerica Analytical Report)

Material Safety Data Sheet

Section 1: PRODUCT AND COMPANY INFORMATION

Product Name(s): Lafarge Reclaimed Asphalt Pavement (RAP)

Product Identifiers: Reclaimed Asphalt Pavement, RAP, Crusted Asphalt Base Course, Reclaimed Paving Material, Reclaimed Blacktop, Reclaimed Asphalt Concrete, and Recycled Asphalt Pavement.

Manufacturer: Lafarge North America Inc.
12018 Sunrise Valley Drive, Suite 500
Reston, VA 20191

Information Telephone Number: 703-480-3600 (9am to 5pm EST)

Emergency Telephone Number: 1-800-451-8346 (3E Hotline)

Product Use: RAP is used as an aggregate substitute and asphalt cement supplement in recycled asphalt paving, as a granular base or subbase, stabilized base aggregate, as an embankment or fill material and in other construction applications.

Section 2: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Percent (By Weight)	CAS Number	OSHA PEL -TWA (mg/m ³)	ACGIH TLV-TWA (mg/m ³)	LD ₅₀	LC ₅₀
Aggregate	90-95	Various	NA	NA	NA	NA
Asphalt Cement (as Fume)	< 10	8052-42-4	NA	0.5 (I)	NA	NA
Crystalline Silica	> 1	14808-60-7	[(10) / (%SiO ₂ +2)] (R); [(30) / (%SiO ₂ +2)] (T)	0.025 (R)	NA	NA
Particulate Not Otherwise Regulated	-	NA	15 (T); 5 (R)	10 (T); 3 (R)	NA	NA

Note: Asphalt pavement is a mixture of gravel or rock, sand, filler (eg. limestone or hydrated lime) and asphalt cement. It may also contain fly ash, slag, fibers (synthetic or organic), color pigment and other recycled material (eg. ceramics, plastic, glass, etc.). Properties and composition of RAP can vary depending on the original properties and composition of the recovered asphalt pavement.

Section 3: HAZARD IDENTIFICATION

	WARNING	 Respiratory Protection	 Eye Protection
	<p>Irritant – Dust and fumes may irritate eyes, skin and respiratory tract.</p> <p>Toxic - Harmful by inhalation. (Contains crystalline silica)</p> <p>Use proper engineering controls, work practices, and personal protective equipment.</p> <p>Read MSDS for details.</p>		

Emergency Overview: RAP varies in size and shape, and when cold it is as solid material that is black in color. When hardened asphalt pavement is subject to mechanical forces, such as demolition or asphalt recycling, dust particles will be generated. These particles may be an eye, respiratory or skin irritant. Hot asphalt will cause sever thermal burns. When heated, this product may release toxic hydrogen sulfide (H₂S) vapors. A single, short-term exposure to RAP dust presents little or no hazard.

Section 3: HAZARD IDENTIFICATION (continued)

Potential Health Effects:

- Eye Contact:** Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of RAP dust can cause moderate eye irritation and abrasion. Eye exposures require immediate first aid and medical attention to prevent significant damage to the eye. When this product is subject to high heat RAP will cause severe burns.
- Skin Contact:** RAP dust may cause dry skin, discomfort, irritation and dermatitis. When this product is subject to high heat RAP will cause severe burns.
- Dermatitis:** RAP dust, in association with sweat and friction, can lead to skin irritation and dermatitis. Skin affected by dermatitis may include symptoms such as, redness, itching, rash, scaling, and cracking. Irritant dermatitis is caused by the physical properties of RAP dust such as abrasion.
- Inhalation (acute):** When this product is heated, RAP may release irritating fumes or vapors such as smoke, carbon dioxide, carbon monoxide, unburned hydrocarbons. Hydrogen sulfide and other sulfur-containing gases can evolve from this product at elevated temperatures. Exposure to fumes or vapors may cause irritation of the nose and throat, and symptoms such as headache, dizziness, loss of coordination, and drowsiness. Cutting, crushing or grinding hardened asphalt products will release dust. Breathing dust may cause nose, throat or lung irritation, including choking, depending on the degree of exposure.
- Inhalation (chronic):** Risk of injury depends on duration and level of exposure.
- Silicosis:** This product contains crystalline silica. Cutting, crushing or grinding hardened asphalt or other crystalline silica-bearing materials will release respirable crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a seriously disabling and fatal lung disease. See Note to Physicians in Section 4 for further information.
- Carcinogenicity:** RAP is not listed as a carcinogen by IARC or NTP; however, RAP contains trace amounts of crystalline silica which is classified by IARC and NTP as known human carcinogens.
- Autoimmune Disease:** Some studies show that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis may be associated with the increased incidence of several autoimmune disorders such as scleroderma (thickening of the skin), systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys.
- Tuberculosis:** Silicosis increases the risk of tuberculosis.
- Renal Disease:** Some studies show an increased incidence of chronic kidney disease and end-stage renal disease in workers exposed to respirable crystalline silica.
- Ingestion:** Do not ingest RAP. Although ingestion of small quantities of RAP is not known to be harmful, large quantities can cause distress to the digestive tract. However chewing asphalt has caused gastrointestinal effects. Stomach obstructions have been reported in individuals who have chewed and swallowed asphalt.
- Medical Conditions Aggravated by Exposure:** Individuals with lung disease (e.g. bronchitis, emphysema, COPD, pulmonary disease) can be aggravated by exposure.

Section 4: FIRST AID MEASURES

Eye Contact: Rinse eyes thoroughly with water for at least 15 minutes, including under lids, to remove all particles. Seek medical attention for abrasions. For contact with hot product, flush with large amounts of water for at least 15 minutes. Immediately call a physician.

Skin Contact: Wash with cool water and a pH neutral soap or a mild skin detergent. Do not use solvents or thinners to remove product from skin. Seek medical attention for rash, irritation, and dermatitis.

For contact with hot product, immerse or flush skin with cold water for at least 15 minutes. Call a physician. Do not attempt to remove solidified product, since removal may cause further tissue injury.

Inhalation: Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

Ingestion: Do not induce vomiting. If conscious, have person drink plenty of water. Seek medical attention or contact poison control center immediately.

Note to Physician: The three types of silicosis include:

- Simple chronic silicosis – which results from long-term exposure (more than 20 years) to low amounts of respirable crystalline silica. Nodules of chronic inflammation and scarring provoked by the respirable crystalline silica form in the lungs and chest lymph nodes. This disease may feature breathlessness and may resemble chronic obstructive pulmonary disease (COPD).
- Accelerated silicosis – occurs after exposure to larger amounts of respirable crystalline silica over a shorter period of time (5-15 years). Inflammation, scarring, and symptoms progress faster in accelerated silicosis than in simple silicosis.
- Acute silicosis – results from short-term exposure to very large amounts of respirable crystalline silica. The lungs become very inflamed and may fill with fluid, causing severe shortness of breath and low blood oxygen levels.

Progressive massive fibrosis may occur in simple or accelerated silicosis, but is more common in the accelerated form. Progressive massive fibrosis results from severe scarring and leads to the destruction of normal lung structures.

Section 5: FIREFIGHTING MEASURES

Flashpoint & Method:	Asphalt Cement: > 200°C	Firefighting Equipment:	A SCBA is recommended to limit exposures to combustion products when fighting any fire.
General Hazard:	Combustible solid. Avoid breathing fumes and dust.		
Extinguishing Media:	Use extinguishing media appropriate for surrounding fire.	Combustion Products:	Toxic gases produced in fire, such as CO, CO ₂ , H ₂ S

Section 6: ACCIDENTAL RELEASE MEASURES

General: Use a shovel to scrape up product and place product into suitable containers for recovery or disposal. Avoid actions that cause the RAP dust to become airborne. Avoid inhalation of RAP dust. Avoid contact with heated product. Wear appropriate protective equipment as described in Section 8.

Waste Disposal Method: Dispose of RAP according to Federal, State, Provincial and Local regulations.

Section 7: HANDLING AND STORAGE

General: Handle with care and use appropriate control measures. Do not stand on stockpiles of RAP, they may be unstable. Use engineering controls (e.g. wetting stockpiles) to prevent windblown dust from stockpiles, which may cause the hazards described in Section 3.

Usage: Cutting, crushing or grinding hardened asphalt or other crystalline silica-bearing materials will release respirable crystalline silica. Use all appropriate measures of dust control or suppression, and Personal Protective Equipment (PPE) described in Section 8 below.

Avoid contact with skin, eyes and clothing. Use additional precautions when handling hot product. Maintain employee exposure levels below established regulatory limits. Do not allow hot product to contact skin. Use all appropriate Personal Protective Equipment (PPE) described in Section 8 below.

Housekeeping: Avoid actions that cause the RAP dust to become airborne during clean-up such as dry sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean-up dust. Use PPE described in Section 8 below.

Storage Temperature: Store away from heat, open flames, strong oxidizers or other ignition sources.

Clothing: Promptly remove and launder clothing that is dusty. Thoroughly wash skin after exposure to dust.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Use local exhaust or general dilution ventilation when using at elevated temperatures or during activities that generate dust or fumes, to maintain levels below exposure limits.

Personal Protective Equipment (PPE):

Respiratory Protection: Wear a NIOSH approved respirator that is properly fitted and is in good condition when exposed to dust or fumes above exposure limits.

Eye Protection: Wear ANSI approved glasses or safety goggles when handling RAP and when involved with activities that generate dust, to prevent contact with eyes. Wearing contact lenses when using RAP, under dusty conditions, is not recommended.

Skin Protection: Wear leather or cloth work gloves to prevent skin contact and insulated gloves when handling hot product. Thoroughly wash hands and other exposed skin after exposure to RAP. Remove clothing and protective equipment that becomes dusty and launder before reusing.

Foot Protection: Wear ANSI approved hard-toed safety boots when handling RAP.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid when cold.	Evaporation Rate:	NA.
Appearance:	Black color and various shapes.	pH (in water):	NA.
Odor:	Slight petroleum odor.	Boiling Point:	NA.
Vapor Pressure:	NA.	Freezing Point:	NA.
Vapor Density:	NA.	Viscosity:	NA.
Specific Gravity:	NA.	Solubility in Water:	Not Soluble.

Section 10: STABILITY AND REACTIVITY

Stability:	Stable. Avoid contact with incompatible materials, excessive heat, sources of ignition and open flame.
Incompatibility:	RAP is incompatible with strong acids or bases, and oxidizing agents such as nitrates, chlorates and peroxides.
Hazardous Polymerization:	None.
Hazardous Decomposition:	When heated may liberate hydrogen sulfide and various hydrocarbons.

Section 11 and 12: TOXICOLOGICAL AND ECOLOGICAL INFORMATION

For questions regarding toxicological and ecological information refer to contact information in Section 1.

Section 13: DISPOSAL CONSIDERATIONS

Dispose of waste and containers in compliance with applicable Federal, State, Provincial and Local regulations.

Section 14: TRANSPORT INFORMATION

This product is not classified as a Hazardous Material under U.S. DOT or Canadian TDG regulations.

Section 15: REGULATORY INFORMATION

OSHA/MSHA Hazard Communication:	This product is considered by OSHA/MSHA to be a hazardous chemical and should be included in the employer's hazard communication program.
CERCLA/SUPERFUND:	This product is not listed as a CERCLA hazardous substance.
EPCRA SARA Title III:	This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 and is considered a hazardous chemical and a delayed health hazard.
EPCRA SARA Section 313:	This product contains none of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
RCRA:	If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

Section 16: OTHER INFORMATION (continued)

- TSCA:** This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.
- California Proposition 65:** Crystalline silica (airborne particulates of respirable size) is a substance known by the State of California to cause cancer.
- WHMIS/DSL:** Products containing crystalline silica are classified as D2A and are subject to WHMIS requirements.
- (T)**

Section 16: OTHER INFORMATION

Abbreviations:

>	Greater than	NA	Not Applicable
<	Less than	NFPA	National Fire Protection Association
ACGIH	American Conference of Governmental Industrial Hygienists	NIOSH	National Institute for Occupational Safety and Health
CAS No	Chemical Abstract Service number	NTP	National Toxicology Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act	OSHA	Occupational Safety and Health Administration
CFR	Code for Federal Regulations	PEL	Permissible Exposure Limit
CL	Ceiling Limit	pH	Negative log of hydrogen ion
DOT	U.S. Department of Transportation	PPE	Personal Protective Equipment
EST	Eastern Standard Time	R	Respirable Particulate
HEPA	High-Efficiency Particulate Air	RCRA	Resource Conservation and Recovery Act
HMIS	Hazardous Materials Identification System	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	T	Total Particulate
LC ₅₀	Lethal Concentration	TDG	Transportation of Dangerous Goods
LD ₅₀	Lethal Dose	TLV	Threshold Limit Value
mg/m ³	Milligrams per cubic meter	TWA	Time Weighted Average (8 hour)
MSHA	Mine Safety and Health Administration	WHMIS	Workplace Hazardous Materials Information System

This MSDS (Sections 1-16) was revised on March 1, 2011.

An electronic version of this MSDS is available at: www.lafarge-na.com under the Sustainability section.

Lafarge North America Inc. (LNA) believes the information contained herein is accurate; however, LNA makes no guarantees with respect to such accuracy and assumes no liability in connection with the use of the information contained herein which is not intended to be and should not be construed as legal advice or as insuring compliance with any federal, state or local laws or regulations. Any party using this product should review all such laws, rules, or regulations prior to use, including but not limited to US and Canada Federal, Provincial and State regulations.

NO WARRANTY IS MADE, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE.

Material Safety Data Sheet

Section 1: PRODUCT AND COMPANY INFORMATION

Product Name(s): Slag

Product Identifiers: NewCem[®], Litex[™] Lightweight Aggregate, True Lite Lightweight Aggregate[™], Vitrex[™] Pelletized Slag, Ground Granulated Blast Furnace Slag (GGBFS), Blast Furnace Slag, Steel Slag, Granulated Slag, Pelletized Slag, Metallic Slag, Air Cooled Slag, Non-metallic Slag, Slag Cement, Hydraulic Slag Cement, Slag

Manufacturer: Lafarge North America Inc.
12018 Sunrise Valley Drive, Suite 500
Reston, VA 20191

Information Telephone Number: 703-480-3600 (9am to 5pm EST)

Emergency Telephone Number: 1-800-451-8346 (3E Hotline)

Product Use: Slag is used as a supplementary cementitious material for cement, concrete and concrete products. It is also used in soil stabilization and as filler in asphalt and other products that are widely used in construction.

Note: This MSDS covers many types of slag. Individual composition of hazardous constituents will vary between slag types.

Section 2: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Percent (By Weight)	CAS Number	OSHA PEL -TWA (mg/m ³)	ACGIH TLV-TWA (mg/m ³)	LD ₅₀ (mouse, intraperitoneal)	LC ₅₀
Slag	100	65996-69-2	NA	NA	NA	NA
Calcium Oxide	30-50	1305-78-8	5 (T)	2 (T)	3059 mg/kg	NA
Magnesium Oxide	0-20	1309-48-4	15 (T)	10 (T)	NA	NA
Crystalline Silica	< 1	14808-60-7	[(10) / (%SiO ₂ +2)] (R); [(30) / (%SiO ₂ +2)] (T)	0.025 (R)	NA	NA
Particulate Not Otherwise Regulated	-	NA	5 (R); 15 (T)	3 (R); 10 (T)	NA	NA

Note: Exposure limits for components noted with an * contain no asbestos and <1% crystalline silica

Slag is a nonmetallic byproduct from the production of iron. Trace amounts of chemicals may be detected during chemical analysis. For example, slag may contain trace amounts of manganese oxide, titanium oxide, chromium compounds, sulfur compounds, and other trace compounds.

Section 3: HAZARD IDENTIFICATION

	WARNING	 Respiratory Protection Eye Protection Waterproof Gloves Waterproof Boots
	<p>Irritant: Causes eye, skin and inhalation irritation</p> <p>Toxic - Harmful by inhalation. (Contains crystalline silica)</p> <p>Use proper engineering controls, work practices, and personal protective equipment to prevent exposure to wet or dry product.</p> <p>Read MSDS for details.</p>	

Section 3: HAZARD IDENTIFICATION (continued)

- Emergency Overview:** Slag is a solid, grey/black or brown/tan, odorless powder. It is not combustible or explosive. A single, short-term exposure to the dry powder presents little or no hazard.
- Potential Health Effects:**
- Eye Contact:** Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of dry powder or with wet slag can cause moderate eye irritation. Eye exposures require immediate first aid to prevent significant damage to the eye.
- Skin Contact:** Slag may cause dry skin, discomfort, irritation, and dermatitis.
- Dermatitis:** Slag is capable of causing dermatitis by irritation and allergy. Skin affected by dermatitis may include symptoms such as, redness, itching, rash, scaling, and cracking.
- Irritant dermatitis is caused by the physical properties of slag including moisture and abrasion.
- Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) present in slag. The reaction can range from a mild rash to severe skin ulcers. Persons already sensitized may react to the first contact with slag. Others may develop allergic dermatitis after years of repeated contact with slag.
- Inhalation (acute):** Breathing dust may cause nose, throat or lung irritation, including choking, depending on the degree of exposure.
- Inhalation (chronic):** Risk of injury depends on duration and level of exposure.
- Silicosis:** This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a seriously disabling and fatal lung disease. See Note to Physicians in Section 4 for further information.
- Carcinogenicity:** Slag is not listed as a carcinogen by IARC or NTP; however, slag contains trace amounts of crystalline silica and hexavalent chromium which are classified by IARC and NTP as known human carcinogens.
- Autoimmune Disease:** Some studies show that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis may be associated with the increased incidence of several autoimmune disorders such as scleroderma (thickening of the skin), systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys.
- Tuberculosis:** Silicosis increases the risk of tuberculosis.
- Renal Disease:** Some studies show an increased incidence of chronic kidney disease and end-stage renal disease in workers exposed to respirable crystalline silica.
- Ingestion:** Do not ingest slag. Ingestion of small quantities of slag is not known to be harmful, large quantities can cause distress to the digestive tract.
- Medical Conditions Aggravated by Exposure:** Individuals with lung disease (e.g. bronchitis, emphysema, COPD, pulmonary disease) or sensitivity to hexavalent chromium can be aggravated by exposure.

Section 4: FIRST AID MEASURES

Eye Contact: Rinse eyes thoroughly with water for at least 15 minutes, including under lids, to remove all particles. Seek medical attention for abrasions.

Skin Contact: Wash with cool water and a pH neutral soap or a mild skin detergent. Seek medical attention for rash, irritation, dermatitis, and prolonged unprotected exposures to wet slag, cement, cement mixtures or liquids from wet cement.

Inhalation: Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

Ingestion: Do not induce vomiting. If conscious, have person drink plenty of water. Seek medical attention or contact poison control center immediately.

Note to Physician: The three types of silicosis include:

- Simple chronic silicosis – which results from long-term exposure (more than 20 years) to low amounts of respirable crystalline silica. Nodules of chronic inflammation and scarring provoked by the respirable crystalline silica form in the lungs and chest lymph nodes. This disease may feature breathlessness and may resemble chronic obstructive pulmonary disease (COPD).
- Accelerated silicosis – occurs after exposure to larger amounts of respirable crystalline silica over a shorter period of time (5-15 years). Inflammation, scarring, and symptoms progress faster in accelerated silicosis than in simple silicosis.
- Acute silicosis – results from short-term exposure to very large amounts of respirable crystalline silica. The lungs become very inflamed and may fill with fluid, causing severe shortness of breath and low blood oxygen levels.

Progressive massive fibrosis may occur in simple or accelerated silicosis, but is more common in the accelerated form. Progressive massive fibrosis results from severe scarring and leads to the destruction of normal lung structures.

Section 5: FIREFIGHTING MEASURES

Flashpoint & Method:	Non-combustible	Firefighting Equipment:	Slag poses no fire-related hazard. A SCBA is recommended to limit exposures to combustion products when fighting any fire.
General Hazard:	Avoid breathing dust.		
Extinguishing Media:	Use extinguishing media appropriate for surrounding fire.	Combustion Products:	None.

Section 6: ACCIDENTAL RELEASE MEASURES

General: Place spilled material into a container. Avoid actions that cause the slag to become airborne. Avoid inhalation of slag and contact with skin. Wear appropriate protective equipment as described in Section 8. Scrape wet slag and place in container. Allow material to dry or solidify before disposal. Do not wash slag down sewage and drainage systems or into bodies of water (e.g. streams).

Waste Disposal Method: Dispose of slag according to Federal, State, Provincial and Local regulations.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid (powder).	Evaporation Rate:	NA.
Appearance:	Gray/black or brown/tan powder.	pH (in water):	8-11
Odor:	None.	Boiling Point:	>1000° C
Vapor Pressure:	NA.	Freezing Point:	None, solid.
Vapor Density:	NA.	Viscosity:	None, solid.
Specific Gravity:	2-3	Solubility in Water:	Negligible

Section 10: STABILITY AND REACTIVITY

Stability:	Stable. Keep dry until use. Slag may react with water resulting in a slight release of heat, depending on the amount of lime (calcium oxide) present. Avoid contact with incompatible materials.
Incompatibility:	Slag is incompatible with acids, ammonium salts and aluminum metal. Slag and cement dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Slag and cement reacts with water to form silicates and calcium hydroxide. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.
Hazardous Polymerization:	None.
Hazardous Decomposition:	Hydrogen sulfide gas may be released from moist or wet slag when it is heated.

Section 11 and 12: TOXICOLOGICAL AND ECOLOGICAL INFORMATION

For questions regarding toxicological and ecological information refer to contact information in Section 1.

Section 13: DISPOSAL CONSIDERATIONS

Dispose of waste and containers in compliance with applicable Federal, State, Provincial and Local regulations.

Section 14: TRANSPORT INFORMATION

This product is not classified as a Hazardous Material under U.S. DOT or Canadian TDG regulations.

Section 15: REGULATORY INFORMATION

OSHA/MSHA Hazard Communication:	This product is considered by OSHA/MSHA to be a hazardous chemical and should be included in the employer's hazard communication program.
CERCLA/SUPERFUND:	This product is not listed as a CERCLA hazardous substance.
EPCRA SARA Title III:	This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 and is considered a hazardous chemical and a delayed health hazard.
EPCRA SARA Section 313:	This product contains none of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
RCRA:	If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

Section 15: REGULATORY INFORMATION (continued)

TSCA:	Slag and crystalline silica are exempt from reporting under the inventory update rule.
California Proposition 65:	Crystalline silica (airborne particulates of respirable size) and Chromium (hexavalent compounds) are substances known by the State of California to cause cancer.
WHMIS/DSL:	Products containing crystalline silica and calcium oxide are classified as D2A, E and are subject to WHMIS requirements.


Section 16: OTHER INFORMATION
Abbreviations:

>	Greater than	NA	Not Applicable
ACGIH	American Conference of Governmental Industrial Hygienists	NFPA	National Fire Protection Association
CAS No	Chemical Abstract Service number	NIOSH	National Institute for Occupational Safety and Health
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act	NTP	National Toxicology Program
		OSHA	Occupational Safety and Health Administration
CFR	Code for Federal Regulations	PEL	Permissible Exposure Limit
CL	Ceiling Limit	pH	Negative log of hydrogen ion
DOT	U.S. Department of Transportation	PPE	Personal Protective Equipment
EST	Eastern Standard Time	R	Respirable Particulate
HEPA	High-Efficiency Particulate Air	RCRA	Resource Conservation and Recovery Act
HMIS	Hazardous Materials Identification System	SARA	Superfund Amendments and Reauthorization Act
		T	Total Particulate
IARC	International Agency for Research on Cancer	TDG	Transportation of Dangerous Goods
LC ₅₀	Lethal Concentration	TLV	Threshold Limit Value
LD ₅₀	Lethal Dose	TWA	Time Weighted Average (8 hour)
mg/m ³	Milligrams per cubic meter	WHMIS	Workplace Hazardous Materials Information System
MSHA	Mine Safety and Health Administration		

This MSDS (Sections 1-16) was revised on March 1, 2011.

An electronic version of this MSDS is available at: www.lafarge-na.com under the Sustainability section.

Lafarge North America Inc. (LNA) believes the information contained herein is accurate; however, LNA makes no guarantees with respect to such accuracy and assumes no liability in connection with the use of the information contained herein which is not intended to be and should not be construed as legal advice or as insuring compliance with any federal, state or local laws or regulations. Any party using this product should review all such laws, rules, or regulations prior to use, including but not limited to US and Canada Federal, Provincial and State regulations.

NO WARRANTY IS MADE, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE.



Harford County Government
Department of Planning and Zoning

SITE PLAN APPLICATION WAIVER REQUEST

Approval of this request waives the requirement for site plan approval through the Development Advisory Committee process only. The applicant is not exempt from other applicable Federal, State, or County regulations associated with the development of this site.

Pertinent regulations may include but are not limited to: landscaping requirements, stormwater management requirements, water and sewer requirements, grading permit requirements, road access permit requirements, and Harford County Health Department requirements.

A building permit or zoning certificate may be required. This waiver is valid for one year.

Applicant Name Barrett Tucker

Applicant E-Mail Address Barrett.Tucker@allanmyers.com

Address of Site 2203A Old Mountain Rd. Central Joppa, MD. 21080

Tax Map Number 60 Parcel Number 292 Zoning AG

Existing Use: Mining operation, storage of construction materials, crushing and recycling concrete and asphalt millings

Proposed Use: Continuation of existing use.
Mining operation, storage of construction materials, crushing and recycling concrete and asphalt millings

Existing Square Footage 7.9 acres Proposed Square Footage 7.9 acres

Comments:

Allan Myers
Name of Owner

Barrett Tucker 1/4/21
Signature of Applicant Date

Barrett Tucker
Name of Contact Person

410-808-0645
Phone Number of Contact Person

Development Advisory Committee: Required Not Required MDA

Comments:

M. D. Dungan 1-14-21
Signature of Planning and Zoning Date



VICINITY MAP
 SCALE: 1" = 200'
 COPYRIGHT AND THE MAP PEOPLE
 PERMITTED USE NO. 2008088

**MINING PERMIT
 SITE ANALYSIS**
 THIS SITE ANALYSIS REPORT WAS PREPARED BY THE CONSULTING ENGINEER FOR THE PROJECT AND IS NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF THE CONSULTING ENGINEER.
 CONSULTING ENGINEER
 1000 W. 10TH STREET, SUITE 100
 FALLS CHURCH, VA 22044
 PHONE: (703) 441-1111
 FAX: (703) 441-1112
 E-MAIL: INFO@MORRISANDBUTCHER.COM
 PROJECT # 21085 (S-1)

DESIGN AND SCHEMATIC CONTROL
 SUPERVISOR FOR APPROVAL
 ENGINEER OF RECORD
 PROJECT NO. 21085 (S-1)
 DATE: 7-15-09

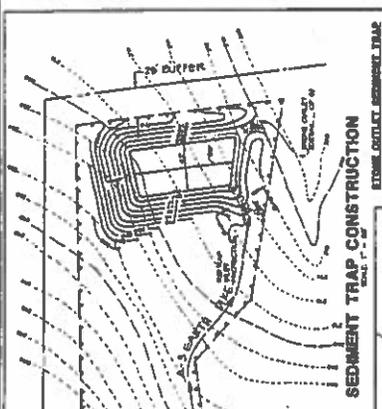
OWNERS/APPLICANTS CERTIFICATION
 I, the undersigned, being the owner of the above described property, do hereby certify that the information furnished herein is true and correct to the best of my knowledge and belief, and that I am not aware of any facts or circumstances which would render the same misleading or incomplete.
 Signature: _____
 Date: 7-15-09

ENGINEERS CERTIFICATION
 I, the undersigned, being a duly licensed Professional Engineer in the State of Virginia, do hereby certify that the information furnished herein is true and correct to the best of my knowledge and belief, and that I am not aware of any facts or circumstances which would render the same misleading or incomplete.
 Signature: _____
 Date: 7-15-09

MORRIS & BUTCHER ASSOCIATES, INC.
 CONSULTING ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS
 1000 W. 10TH STREET, SUITE 100
 FALLS CHURCH, VIRGINIA 22044
 PHONE: (703) 441-1111
 FAX: (703) 441-1112
 E-MAIL: INFO@MORRISANDBUTCHER.COM

STATE OF VIRGINIA
 DEPARTMENT OF MINING AND REFORMATION
 DIVISION OF MINING
 SURFACE MINING PERMIT
 EXTRACTOR: MORRIS & BUTCHER ASSOCIATES, INC.
 PERMIT NO. 21085 (S-1)
 COUNTY: SPOTSYLDEN
 DISTRICT: _____

DATE REVISED: _____



SEDIMENT TRAP CONSTRUCTION
 1. 24" DIA. CONCRETE PIPE
 2. 18" DIA. CONCRETE PIPE
 3. 12" DIA. CONCRETE PIPE
 4. 6" DIA. CONCRETE PIPE
 5. 4" DIA. CONCRETE PIPE
 6. 2" DIA. CONCRETE PIPE
 7. 1" DIA. CONCRETE PIPE
 8. 1/2" DIA. CONCRETE PIPE
 9. 1/4" DIA. CONCRETE PIPE
 10. 1/8" DIA. CONCRETE PIPE
 11. 1/16" DIA. CONCRETE PIPE
 12. 1/32" DIA. CONCRETE PIPE
 13. 1/64" DIA. CONCRETE PIPE
 14. 1/128" DIA. CONCRETE PIPE
 15. 1/256" DIA. CONCRETE PIPE
 16. 1/512" DIA. CONCRETE PIPE
 17. 1/1024" DIA. CONCRETE PIPE
 18. 1/2048" DIA. CONCRETE PIPE
 19. 1/4096" DIA. CONCRETE PIPE
 20. 1/8192" DIA. CONCRETE PIPE
 21. 1/16384" DIA. CONCRETE PIPE
 22. 1/32768" DIA. CONCRETE PIPE
 23. 1/65536" DIA. CONCRETE PIPE
 24. 1/131072" DIA. CONCRETE PIPE
 25. 1/262144" DIA. CONCRETE PIPE
 26. 1/524288" DIA. CONCRETE PIPE
 27. 1/1048576" DIA. CONCRETE PIPE
 28. 1/2097152" DIA. CONCRETE PIPE
 29. 1/4194304" DIA. CONCRETE PIPE
 30. 1/8388608" DIA. CONCRETE PIPE
 31. 1/16777216" DIA. CONCRETE PIPE
 32. 1/33554432" DIA. CONCRETE PIPE
 33. 1/67108864" DIA. CONCRETE PIPE
 34. 1/134217728" DIA. CONCRETE PIPE
 35. 1/268435456" DIA. CONCRETE PIPE
 36. 1/536870912" DIA. CONCRETE PIPE
 37. 1/1073741824" DIA. CONCRETE PIPE
 38. 1/2147483648" DIA. CONCRETE PIPE
 39. 1/4294967296" DIA. CONCRETE PIPE
 40. 1/8589934592" DIA. CONCRETE PIPE
 41. 1/17179869184" DIA. CONCRETE PIPE
 42. 1/34359738368" DIA. CONCRETE PIPE
 43. 1/68719476736" DIA. CONCRETE PIPE
 44. 1/137438953472" DIA. CONCRETE PIPE
 45. 1/274877906944" DIA. CONCRETE PIPE
 46. 1/549755813888" DIA. CONCRETE PIPE
 47. 1/1099511627776" DIA. CONCRETE PIPE
 48. 1/2199023255552" DIA. CONCRETE PIPE
 49. 1/4398046511104" DIA. CONCRETE PIPE
 50. 1/8796093022208" DIA. CONCRETE PIPE
 51. 1/17592186444416" DIA. CONCRETE PIPE
 52. 1/35184372888832" DIA. CONCRETE PIPE
 53. 1/70368745777664" DIA. CONCRETE PIPE
 54. 1/140737491555296" DIA. CONCRETE PIPE
 55. 1/281474983110592" DIA. CONCRETE PIPE
 56. 1/562949966221184" DIA. CONCRETE PIPE
 57. 1/1125899932442368" DIA. CONCRETE PIPE
 58. 1/2251799864884736" DIA. CONCRETE PIPE
 59. 1/4503599729769472" DIA. CONCRETE PIPE
 60. 1/9007199459538944" DIA. CONCRETE PIPE
 61. 1/18014398919077888" DIA. CONCRETE PIPE
 62. 1/36028797838155776" DIA. CONCRETE PIPE
 63. 1/72057595676311552" DIA. CONCRETE PIPE
 64. 1/144115191352623104" DIA. CONCRETE PIPE
 65. 1/288230382705246208" DIA. CONCRETE PIPE
 66. 1/576460765410492416" DIA. CONCRETE PIPE
 67. 1/1152921530820984832" DIA. CONCRETE PIPE
 68. 1/2305843061641969664" DIA. CONCRETE PIPE
 69. 1/4611686123283939328" DIA. CONCRETE PIPE
 70. 1/9223372246567878656" DIA. CONCRETE PIPE
 71. 1/18446744493137573120" DIA. CONCRETE PIPE
 72. 1/36893488986275146240" DIA. CONCRETE PIPE
 73. 1/73786977972550292480" DIA. CONCRETE PIPE
 74. 1/147573955945100584960" DIA. CONCRETE PIPE
 75. 1/295147911890201169920" DIA. CONCRETE PIPE
 76. 1/590295823780402339840" DIA. CONCRETE PIPE
 77. 1/1180591647560804679680" DIA. CONCRETE PIPE
 78. 1/2361183295121609359360" DIA. CONCRETE PIPE
 79. 1/4722366590243218718720" DIA. CONCRETE PIPE
 80. 1/9444733180486437437440" DIA. CONCRETE PIPE
 81. 1/18889466360972874874880" DIA. CONCRETE PIPE
 82. 1/37778932721945749749760" DIA. CONCRETE PIPE
 83. 1/75557865443891499499520" DIA. CONCRETE PIPE
 84. 1/151115730887782998999040" DIA. CONCRETE PIPE
 85. 1/302231461775565997998080" DIA. CONCRETE PIPE
 86. 1/604462923551131995996160" DIA. CONCRETE PIPE
 87. 1/1208925847102263911992320" DIA. CONCRETE PIPE
 88. 1/2417851694204527823984640" DIA. CONCRETE PIPE
 89. 1/4835703388409055647969280" DIA. CONCRETE PIPE
 90. 1/9671406776818111295938560" DIA. CONCRETE PIPE
 91. 1/19342813553636222518677120" DIA. CONCRETE PIPE
 92. 1/38685627107272445037354240" DIA. CONCRETE PIPE
 93. 1/77371254214544890074708480" DIA. CONCRETE PIPE
 94. 1/154742508429089780149416960" DIA. CONCRETE PIPE
 95. 1/309485016858179560298833920" DIA. CONCRETE PIPE
 96. 1/618970033716359120597667840" DIA. CONCRETE PIPE
 97. 1/1237940067432718211953335680" DIA. CONCRETE PIPE
 98. 1/2475880134844376423906671360" DIA. CONCRETE PIPE
 99. 1/4951760269688752847813342720" DIA. CONCRETE PIPE
 100. 1/9903520539377505695626685440" DIA. CONCRETE PIPE
 101. 1/19807041078755011391251370880" DIA. CONCRETE PIPE
 102. 1/39614082157510022782502717760" DIA. CONCRETE PIPE
 103. 1/79228164315020045565005435520" DIA. CONCRETE PIPE
 104. 1/158456328700400091330010871040" DIA. CONCRETE PIPE
 105. 1/316912657400800182660021742080" DIA. CONCRETE PIPE
 106. 1/633825314801600365320043484160" DIA. CONCRETE PIPE
 107. 1/1267650629603200730640086968320" DIA. CONCRETE PIPE
 108. 1/2535301259206401461280173936640" DIA. CONCRETE PIPE
 109. 1/5070602518412802922560347873280" DIA. CONCRETE PIPE
 110. 1/10141205036825658445120695746560" DIA. CONCRETE PIPE
 111. 1/20282410073651316890241389153120" DIA. CONCRETE PIPE
 112. 1/40564820147302633780482778286240" DIA. CONCRETE PIPE
 113. 1/81129640294605267560965556572480" DIA. CONCRETE PIPE
 114. 1/162259280589210535121931111144960" DIA. CONCRETE PIPE
 115. 1/324518561178421070243862222289920" DIA. CONCRETE PIPE
 116. 1/649037122356842140488724444579840" DIA. CONCRETE PIPE
 117. 1/129807424411368280977488895159680" DIA. CONCRETE PIPE
 118. 1/259614848822736561954957791319360" DIA. CONCRETE PIPE
 119. 1/519229697645473123908995582638720" DIA. CONCRETE PIPE
 120. 1/1038459395290946247817991165277440" DIA. CONCRETE PIPE
 121. 1/2076918790581892495635982330554880" DIA. CONCRETE PIPE
 122. 1/41538375811637849912719646611093760" DIA. CONCRETE PIPE
 123. 1/83076751623275699825439293221877120" DIA. CONCRETE PIPE
 124. 1/16615350324655139965087858443754240" DIA. CONCRETE PIPE
 125. 1/33230700649310279930175716887508480" DIA. CONCRETE PIPE
 126. 1/66461401298620559860351437775169760" DIA. CONCRETE PIPE
 127. 1/13292280259724111772068287555339520" DIA. CONCRETE PIPE
 128. 1/26584560519448223544136715110709040" DIA. CONCRETE PIPE
 129. 1/53169121038896447088273430221418080" DIA. CONCRETE PIPE
 130. 1/10633824207779289417654686044236160" DIA. CONCRETE PIPE
 131. 1/21267648415558578835309372088472320" DIA. CONCRETE PIPE
 132. 1/42535296831117157670618744176944640" DIA. CONCRETE PIPE
 133. 1/85070593662234315341237488353889280" DIA. CONCRETE PIPE
 134. 1/17014118732446862868247497670777760" DIA. CONCRETE PIPE
 135. 1/34028237464893725736494995341555520" DIA. CONCRETE PIPE
 136. 1/68056474929787451472989990683111040" DIA. CONCRETE PIPE
 137. 1/13611294985957490345597998136622080" DIA. CONCRETE PIPE
 138. 1/27222589771914980691199962733244160" DIA. CONCRETE PIPE
 139. 1/54445179543829961382239925466488320" DIA. CONCRETE PIPE
 140. 1/10889035907765992276447985133176640" DIA. CONCRETE PIPE
 141. 1/21778071815531984552889970266353280" DIA. CONCRETE PIPE
 142. 1/43556143631063969105779940532706560" DIA. CONCRETE PIPE
 143. 1/87112287262127938211555981065413120" DIA. CONCRETE PIPE
 144. 1/174224574524255876423111196213082240" DIA. CONCRETE PIPE
 145. 1/348449149048511752846222392421644480" DIA. CONCRETE PIPE
 146. 1/696898298097023505692444784843288960" DIA. CONCRETE PIPE
 147. 1/1393796596194047011384888969686577920" DIA. CONCRETE PIPE
 148. 1/2787593192388094022769777939373155840" DIA. CONCRETE PIPE
 149. 1/5575186384776188045539555878746311680" DIA. CONCRETE PIPE
 150. 1/11150372769552376911071111757749223360" DIA. CONCRETE PIPE
 151. 1/22300745539104753822142223515494446720" DIA. CONCRETE PIPE
 152. 1/4460149107820950764428444703098889440" DIA. CONCRETE PIPE
 153. 1/8920298215641901528856889406197778880" DIA. CONCRETE PIPE
 154. 1/17840596431283803057713778812355577760" DIA. CONCRETE PIPE
 155. 1/35681192862567606115447557624711155520" DIA. CONCRETE PIPE
 156. 1/7136238572513521223089511524942231040" DIA. CONCRETE PIPE
 157. 1/14272477145027042461779022449884622080" DIA. CONCRETE PIPE
 158. 1/2854495429005408492355804489977324480" DIA. CONCRETE PIPE
 159. 1/5708990858010816984711608979954648960" DIA. CONCRETE PIPE
 160. 1/1141798171602163396942317959990929920" DIA. CONCRETE PIPE
 161. 1/2283596343204326793884635919981859840" DIA. CONCRETE PIPE
 162. 1/4567192686408653587769271839963719680" DIA. CONCRETE PIPE
 163. 1/913438537281730717553854367992743360" DIA. CONCRETE PIPE
 164. 1/182687707456346143110717087595486720" DIA. CONCRETE PIPE
 165. 1/365375414912732286221435415190973440" DIA. CONCRETE PIPE
 166. 1/730750829825464572442870830381946880" DIA. CONCRETE PIPE
 167. 1/1461501659650929144885741660763893760" DIA. CONCRETE PIPE
 168. 1/2923003319301858289771483121327777280" DIA. CONCRETE PIPE
 169. 1/5846006638603716579542962442655554560" DIA. CONCRETE PIPE
 170. 1/11692013277207433159085924885311111040" DIA. CONCRETE PIPE
 171. 1/23384026554414866318171849770622222080" DIA. CONCRETE PIPE
 172. 1/46768053108829732636343699541244444160" DIA. CONCRETE PIPE
 173. 1/9353610621765946527268739908248888960" DIA. CONCRETE PIPE
 174. 1/18707221243319893054537478164977777280" DIA. CONCRETE PIPE
 175. 1/37414442486639786109074956329955555520" DIA. CONCRETE PIPE
 176. 1/74828884973279572218149912659911111040" DIA. CONCRETE PIPE
 177. 1/149657769746559144356299253198222222080" DIA. CONCRETE PIPE
 178. 1/29931553949311828871258505039644444160" DIA. CONCRETE PIPE
 179. 1/5986310789862365774257001007928888960" DIA. CONCRETE PIPE
 180. 1/119726215797247315485140020158577777280" DIA. CONCRETE PIPE
 181. 1/23945243159449462897028004031715555520" DIA. CONCRETE PIPE
 182. 1/478904863188989257940560080634311111040" DIA. CONCRETE PIPE
 183. 1/957809726377978515880120016126622222080" DIA. CONCRETE PIPE
 184. 1/191561944755595703760240032253244444160" DIA. CONCRETE PIPE
 185. 1/38312388951119140752048006450648888960" DIA. CONCRETE PIPE
 186. 1/766247779022382815040960129013297777280" DIA. CONCRETE PIPE
 187. 1/153249557804476563080192025802595555520" DIA. CONCRETE PIPE
 188. 1/3064991156089531261603840516051911111040" DIA. CONCRETE PIPE
 189. 1/6129982312179062523207680103210222222080" DIA. CONCRETE PIPE
 190. 1/1225996462435812504481536020640444444160" DIA. CONCRETE PIPE
 191. 1/24519929248716250089630724128088888960" DIA. CONCRETE PIPE
 192. 1/490398584974325001792614482561777777280" DIA. CONCRETE PIPE
 193. 1/98079716994865000358522896513555555520" DIA. CONCRETE PIPE
 194. 1/196159433997330000717045793027111111040" DIA. CONCRETE PIPE
 195. 1/392318867994660001434091586054222222080" DIA. CONCRETE PIPE
 196. 1/784637735989320002868183172108444444160" DIA. CONCRETE PIPE
 197. 1/15692754719786400057363664421768888960" DIA. CONCRETE PIPE
 198. 1/313855094395728001147173288435377777280" DIA. CONCRETE PIPE
 199. 1/6277101887914560022943465768715155555520" DIA. CONCRETE PIPE
 200. 1/1255420375822912004588693137742311111040" DIA. CONCRETE PIPE
 201. 1/25108407516458240091773862755444444160" DIA. CONCRETE PIPE
 202. 1/5021681503291648018354772551088888960" DIA. CONCRETE PIPE
 203. 1/10043363006583296036709545101777777280" DIA. CONCRETE PIPE
 204. 1/20086726013166592073419090203555555520" DIA. CONCRETE PIPE
 205. 1/40173452026333184146838180407111111040" DIA. CONCRETE PIPE
 206. 1/80346904052666368293676360814222222080" DIA. CONCRETE PIPE
 207. 1/160693808105332736587352721628444444160" DIA. CONCRETE PIPE
 208. 1/3213876162106654731747054432568888960" DIA. CONCRETE PIPE
 209. 1/64277523242133094634941088511377777280" DIA. CONCRETE PIPE
 210. 1/12855504648426618926988217702755555520" DIA. CONCRETE PIPE
 211. 1/257110092968532378539764354055111111040" DIA. CONCRETE PIPE
 212. 1/514220185937064757079528708110222222080" DIA. CONCRETE PIPE
 213. 1/102844037187412951401591057216444444160" DIA. CONCRETE PIPE
 214. 1/205688074374825902803182114288888960" DIA. CONCRETE PIPE
 215. 1/4113761487496518056063642285777777280" DIA. CONCRETE PIPE
 216. 1/82275229749930361121272845715555555520" DIA. CONCRETE PIPE
 217. 1/16455045949980072224445689431111111040" DIA. CONCRETE PIPE
 218. 1/32910091899760144448891778866222222080" DIA. CONCRETE PIPE
 219. 1/65820183799520288897783577332444444160" DIA. CONCRETE PIPE
 220. 1/131640367599040577795567154648888960" DIA. CONCRETE PIPE
 221. 1/2632807351980811555911343092977777280" DIA. CONCRETE PIPE
 222. 1/52656147039616231118222686189555555520" DIA. CONCRETE PIPE
 223. 1/105312294079232462364453737919111111040" DIA. CONCRETE PIPE
 224. 1/210624588158464924728907475838222222080" DIA. CONCRETE PIPE
 225. 1/421249176316929849457815151676444444160" DIA. CONCRETE PIPE
 226. 1/8424983526338596989156303133528888960" DIA. CONCRETE PIPE
 227. 1/168499670526771939783112606267111111040" DIA. CONCRETE PIPE
 228. 1/33699934105354387956622412533444444160" DIA. CONCRETE PIPE
 229. 1/673998682107087759132448250668888960" DIA. CONCRETE PIPE
 230. 1/1347997364214155582648965013377777280" DIA. CONCRETE PIPE
 231. 1/26959947284283111652997900267555555520" DIA. CONCRETE PIPE
 232. 1/53919894568566223305995800535111111040" DIA. CONCRETE PIPE
 233. 1/107839789137132446611999600670222222080" DIA. CONCRETE PIPE
 234. 1/21567957827426489223999201340444444160" DIA. CONCRETE PIPE
 235. 1/431359156548529784479984026808888960" DIA. CONCRETE PIPE
 236. 1/8627183130970595689599680536177777280" DIA. CONCRETE PIPE
 237. 1/1725436626194119137919936010723555555520" DIA. CONCRETE PIPE
 238. 1/34508732523882382758398721445111111040" DIA. CONCRETE PIPE
 239. 1/69017465047764765516779442890222222080" DIA. CONCRETE PIPE
 240. 1/138034930095529531033558885778444444160" DIA. CONCRETE PIPE
 241. 1/276069860191059062067117771568888960" DIA. CONCRETE PIPE
 242. 1/5521397203821181241344355411377777280" DIA. CONCRETE PIPE
 243. 1/110427940076423624226871108827555555520" DIA. CONCRETE PIPE
 244. 1/22085588015284724845374221717111111040" DIA. CONCRETE PIPE
 245. 1/44171176030569449690748443434222222080" DIA. CONCRETE PIPE
 246.

MARYLAND DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION MANAGEMENT ADMINISTRATION
APPLICATION FOR A PERMIT TO CONSTRUCT

SUPPLEMENT TO
DOCKET #02-21

COMPANY: Allan Myers MD, Inc.

LOCATION: 2203 Old Mountain Road, Joppa, MD, 21085

APPLICATION: Installation of a 400 ton per hour portable waste concrete and recycled asphalt pavement crushing and screening plant powered by diesel engines.

<u>ITEM</u>	<u>DESCRIPTION</u>
1	Notice of Tentative Determination, Public Hearing, and Opportunity to Submit Written Comments
2	Fact Sheet and Tentative Determination
3	Draft Permit to Construct and Conditions
4	Supplemental Information References List
5	Privilege Log – Not Applicable

**DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION ADMINISTRATION**

**NOTICE OF TENTATIVE DETERMINATION, PUBLIC HEARING, AND
OPPORTUNITY TO SUBMIT WRITTEN COMMENTS**

FIRST NOTICE

The Department of the Environment, Air and Radiation Administration (ARA) has completed its review of an application for a Permit to Construct submitted by Allan Myers MD, Inc. on January 25, 2021 for the installation of a 400 ton per hour portable waste concrete and recycled asphalt pavement crushing and screening plant powered by diesel engines. The proposed installation will be located at 2203 Old Mountain Road, Joppa, MD, 21085.

The issuance of the Permit-to-Construct for this facility will be the subject of a Public Hearing to be held on Thursday December 9, 2021 at 5:30 p.m. at the Joppa Branch Library (Harford County) located at 655 Towne Center Drive, Joppa, MD 21085.

Pursuant to Section 1-604, of the Environment Article, Annotated Code of Maryland, the Department has made a tentative determination that the Permit-to-Construct can be issued. A final determination on the issuance of the permit will be made after review of all pertinent information presented at the virtual and in-person public hearings, or received in written comments. Copies of the Department's tentative determination, the application, the draft permit to construct with conditions, and other supporting documents are available for public inspection on the Department's website at the following link:

<https://mde.maryland.gov/programs/Permits/AirManagementPermits/Pages/index.aspx>

Persons who wish to make a statement concerning this application at the hearing are requested to provide the Department with a copy of their statement. In lieu of oral statements at the hearing, written comments may be submitted at the time of the hearing or to the Department no later than 30 days from the date of this notice or within 5 days after the hearing, whichever is later.

Interested persons may request an extension to the public comment period. The extension request must be submitted in writing and must be received by the Department no later than 30 days from the date of this notice or within 5 days after the hearing, whichever is later. The public comment period may only be extended one time for a 60-day period.

All requests for an extension to the public comment period and all written comments should be directed to the attention of Ms. Shannon Heafey, Air Quality Permits Program, Air and Radiation Management Administration, 1800 Washington Boulevard, Baltimore, Maryland 21230.

The Department will provide an interpreter for deaf and hearing impaired persons provided that a request is made for such service at least five (5) days prior to the hearing.

Further information may be obtained by e-mailing Shannon Heafey at shannon.heafey@maryland.gov or by calling 410-537-4433.

George S. Aburn, Jr., Director
Air and Radiation Administration

**MARYLAND DEPARTMENT OF ENVIRONMENT
AIR AND RADIATION ADMINISTRATION**

**FACT SHEET AND TENTATIVE DETERMINATION
ALLAN MYERS MD, INC**

**PROPOSED INSTALLATION OF A 400 TON PER HOUR CRUSHING AND SCREENING
PLANT**

I. INTRODUCTION

The Maryland Department of the Environment (the "Department") received an application from Allan Myers MD, Inc. (Allan Myers) on January 25, 2021 for a Permit to Construct for the installation of a 400 ton per hour crushing, and screening plant. The facility will be located at 2203 Old Mountain Road, Joppa, MD 21085.

A notice was placed in The Aegis on May 12, 2021 and May 19, 2021 announcing a scheduled informational meeting to discuss the permit to construct application. The virtual informational meeting was held online on May 25, 2021.

As required by law, all public notices were also provided to elected officials in all State, county, and municipality legislative districts located within a one mile radius of the facility's property boundary.

The Department has reviewed the application and has made a tentative determination that the proposed facility is expected to comply with all applicable air quality regulations. A public hearing has been scheduled for Thursday December 9, 2021 at 5:30 p.m. at the Joppa Branch Library (Harford County) located at 655 Towne Center Drive, Joppa, MD 21085 to provide interested parties an opportunity to comment on the Department's tentative determination and draft permit conditions, and/or to present other pertinent concerns about the proposed facility. Notices concerning the date, time and location of the public hearing will be published in the legal section of a newspaper with circulation in general area of the proposed facility. Interested parties may also submit written comments.

If the Department does not receive any comments that are adverse to the tentative determination, the tentative determination will automatically become a final determination. If adverse comments are received, the Department will review the comments, and will then make a final determination with regard to issuance or denial of the permit. A notice of final determination will be published in a newspaper of general circulation in the affected area. The final determination may be subject to judicial review pursuant to Section 1-601 of the Environment Article, Annotated Code of Maryland.

II. CURRENT STATUS AND PROPOSED INSTALLATION

A. Current Status

Allan Myers currently has an existing surface mine at 2203 Old Mountain Road where they were operating a 300 ton per hour portable crushing and screening facility that has been removed.

B. Proposed Installation

Allan Myers has applied for a permit to construct for a 400 ton per hour crushing and screening plant for the processing of waste concrete and recycled asphalt pavement. The plant will include up to one (1) crusher and one (1) screen and associated conveyors. Equivalent replacement equipment may be installed as needed. The plant will be equipped with wet suppression systems to minimize dust emissions.

III. APPLICABLE REGULATIONS

The proposed installation is subject to all applicable Federal and State air quality control regulations, including, but not limited to the following:

- (a) All applicable terms, provisions, emissions standards, testing, monitoring, record keeping, and reporting requirements included in federal New Source Performance Standards (NSPS) promulgated under 40 CFR 60, Subparts A (General Provisions) and Subpart OOO for Nonmetallic Mineral Processing Plants.
- (b) COMAR 26.11.01.07C, which requires that the Permittee report to the Department occurrences of excess emissions.
- (c) COMAR 26.11.02.19C & D, which require that the Permittee submit to the Department annual certifications of emissions, and that the Permittee maintain sufficient records to support the emissions information presented in the submittals.
- (d) COMAR 26.11.06.03C & D, which requires that the Permittee take reasonable precautions to prevent particulate matter from unconfined sources and materials handling and construction operations from becoming airborne.
- (e) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.
- (f) COMAR 26.11.09.05E, which limits visible emissions from the diesel engines to 10% and 40% opacity during idle and operating modes, respectively.

- (g) COMAR 26.11.09.07A(2), which limits the sulfur content of distillate fuel oils to not more than 0.3 percent by weight.
- (h) COMAR 26.11.15.05, which requires that the Permittee implement “Best Available Control Technology for Toxics” (T – BACT) to control emissions of toxic air pollutants.
- (i) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health.

IV. GENERAL AIR QUALITY

The U.S. Environmental Protection Agency (EPA) has established primary and secondary National Ambient Air Quality Standards (NAAQS) for six (6) criteria pollutants, i.e., sulfur dioxide, particulate matter, carbon monoxide, nitrogen dioxide, ozone, and lead. The primary standards were established to protect public health, and the secondary standards were developed to protect against non-health effects such as damage to property and vegetation.

The Department utilizes a statewide air monitoring network, operated in accordance with EPA guidelines, to measure the concentrations of criteria pollutants in Maryland’s ambient air. The measurements are used to project statewide ambient air quality, and currently indicate that Harford County complies with the NAAQS for sulfur dioxide, particulate matter, carbon monoxide, nitrogen dioxide and lead.

Ground level ozone continues to present a problem for the entire Baltimore metropolitan area, which is classified as a non-attainment area for ozone. The primary contributors to the formation of ozone are emissions of oxides of nitrogen, primarily from combustion equipment, and emissions of Volatile Organic Compounds (VOC) such as paint solvents and gasoline vapors. Harford County is included in the non-attainment area for ozone.

With regard to toxic air pollutants (TAPs), screening levels (i.e., acceptable ambient concentrations for toxic air pollutants) are generally established at 1/100 of allowed worker exposure levels (TLVs)¹. The Department has also developed additional screening levels for carcinogenic compounds. The additional screening levels are established such that continuous exposure to the subject TAP at the screening level for a period of 70 years is expected to cause an increase in lifetime cancer risk of no more than 1 in 100,000.

V. COMPLIANCE DEMONSTRATION AND ANALYSIS

¹ TLVs are threshold limit values (exposure limits) established for toxic materials by the American Conference of Governmental Industrial Hygienists (ACGIH). Some TLVs are established for short-term exposure (TLV – STEL), and some are established for longer-term exposure (TLV – TWA), where TWA is an acronym for time-weight average.

The proposed installation must comply with all State imposed emissions limitations and screening levels, as well as the NAAQS. The Department has conducted an engineering and air quality review of the application. The emissions were projected based on U.S. EPA established emissions factors for crushing and screening plants. The conservative U.S. EPA's SCREEN3 model was also used to project the maximum ground level concentrations from the proposed facility, which was then compared to the screening levels and the NAAQS.

- A. Estimated Emissions** - The maximum emissions of air pollutants of concern from the proposed installation are listed in Table I.
- B. Compliance with National Ambient Air Quality Standards** - The maximum ground level concentrations for nitrogen dioxide, sulfur dioxide, carbon monoxide, and particulate matter (as PM10) based on the emissions from the proposed plant are listed in column 2 of Table II. The combined impact of the projected installation and the ambient background concentration for each pollutant shown in column 3 of Table II is less than the NAAQS for each pollutant shown in column 4.

The maximum emissions from the installation, based on continuous operation of 24 hours per day and 365 days per year, from the proposed installation comply with the NAAQS for nitrogen dioxide, carbon monoxide, and sulfur dioxide. However, the facility would not be in compliance with the 24-hour average NAAQS for particulate matter (as PM-10), if the installation operates continuously 24 hours per day. Therefore, the installation will be limited to operating no more than 8 hours per day so that the 24-hour average impact is lower.

Emissions of both oxides of nitrogen and volatile organic compounds from the proposed plant are less than the 25 ton per year major source threshold for each pollutant and therefore, the proposed plant will not significantly affect local ground level ozone concentrations.

- C. Compliance with Air Toxics Regulations** – The toxic air pollutant of concern, crystalline silica, that would be emitted from this facility is listed in column 1 of Table III. The predicted maximum off-site ambient concentration of crystalline silica is shown in column 4 of Table III, and the maximum concentration is less than the corresponding screening level for the toxic air pollutant shown in column 2.

VI. TENTATIVE DETERMINATION

Based on the above information, the Department has concluded that the proposed installation will comply with all applicable Federal and State air quality control requirements. In accordance with the Administrative Procedure Act, Department has made a tentative determination to issue the Permit to Construct.

Enclosed with the tentative determination is a copy of the draft Permit to Construct.

**TABLE I
PROJECTED MAXIMUM EMISSIONS FROM THE PROPOSED INSTALLATION**

POLLUTANT	PROJECTED MAXIMUM EMISSIONS FROM PROPOSED INSTALLATION	
	(lbs/day)	(tons/year)
Nitrogen Dioxide (NO ₂)	21.96	4.01
Sulfur Dioxide (SO ₂)	6.4	1.19
Carbon Monoxide (CO)	20.20	3.69
Volatile Organic Compounds (VOC)	7.87	1.44
Particulate Matter (PM ₁₀)	10.90	1.99

**TABLE II
PROJECTED IMPACT OF EMISSIONS OF CRITERIA POLLUTANTS FROM THE PROPOSED INSTALLATION ON AMBIENT AIR QUALITY**

POLLUTANTS	MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS CAUSED BY EMISSIONS FROM PROPOSED PROCESS (µg/m ³)	BACKGROUND AMBIENT AIR CONCENTRATIONS (µg/m ³)*	NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) (µg/m ³)
Nitrogen Dioxide (NO ₂)	annual avg. → 14.3	annual avg. → 33	annual avg. → 100
Carbon Monoxide (CO)	8-hour max → 132.4 1-hour max → 189.2	8-hr max. → 2176 1-hr max. → 5267	8-hr max. → 10,000 1-hr max. → 40,000
Sulfur Dioxide (SO ₂)	24-hour avg. → 19 annual avg. → 3.8	24-hour avg. → 15 annual avg. → 3.7	24-hour avg. → 366 annual avg. → 78.5
Particulate Matter (PM ₁₀)	24-hr max → 85.0	24-hr max. → 58	24-hr max. → 150

*Background concentrations were obtained from Maryland air monitoring stations as follows:

- NO₂ Annual Avg. → Interstate 95 Welcome Center Howard County
- PM₁₀ → Glen Burnie Monitoring Station in Anne Arundel County
- CO 1-hr max and SO₂ Annual Avg. → 600 Dorsey Avenue in Baltimore County
- SO₂ 24-hr Avg. → Piney Run, Frostburg Reservoir Garrett County
- CO 8-hr max → Old town Fire Station 1100 Hillen Street Baltimore City
- PM₁₀ 24-hr max → Baltimore City Fire Dept.–Truck Company 20 Baltimore City

**TABLE III
 PREDICTED MAXIMUM OFF-SITE AMBIENT CONCENTRATIONS FOR
 TOXIC AIR POLLUTANTS EMITTED FROM THE PROPOSED INSTALLATION**

TOXIC AIR POLLUTANTS	SCREENING LEVELS ($\mu\text{g}/\text{m}^3$)	PROJECTED WORST-CASE FACILITY-WIDE EMISSIONS (lbs/hr)	PREDICTED MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS ($\mu\text{g}/\text{m}^3$)
Crystalline Silica	1-hour→ None 8-hour→ 0.25 Annual→ None	0.00021	1-hour→ None 8-hour→ 0.041 Annual→ None

The values represent maximum facility-wide emissions of toxic air pollutants during any 1-hour period of facility operation.

The values are based on worst-case emissions from the proposed facility and were predicted by EPA's SCREEN3 model, which provides conservative estimations concerning the impact of pollutants on ambient air quality.

DRAFT

Larry Hogan
Governor

Ben Grumbles
Secretary

Air and Radiation Administration

1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

Construction Permit

Part 70 Operating Permit

PERMIT NO.:
025-0662-6-0546

DATE ISSUED:
Date

PERMIT FEE:
\$ 2,000.00

EXPIRATION DATE:
In accordance with COMAR 26.11.02.04B

LEGAL OWNER & ADDRESS

Allan Myers MD, Inc.
PO Box 278
Fallston, Maryland 21047

Attention: Rick Tisa
General Superintendent

SITE

Allan Myers MD - Jenkins Property
2203 Old Mountain Rd
Joppa, MD 21085
Premises # 025-0662
AI # 22049

SOURCE DESCRIPTION

This permit authorizes the installation of :
One (1) 400 ton per hour crushing and screening plant equipped with wet suppression and powered by diesel engines.

This permit to construct also serves as a temporary permit to operate the crushing and screening plant that expires 180 days after initiating operation of the plant.

This permit supersedes all previous permits to construct issued to Premises No. 025-0662

This permit includes limitations on premises-wide emissions of NOx in order that Allan Myers MD, Inc. may be recognized as a synthetic minor source with respect to Title V of the Clean Air Act.

This source is subject to the conditions described on the attached pages.

**ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546**

INDEX

- Part A – General Provisions
 - Part B – Applicable Regulations
 - Part C – Construction Conditions
 - Part D – Operating and Monitoring Conditions
 - Part E – Notification and Testing
 - Part F – Record Keeping and Reporting
 - Part G – Temporary Permit-To-Operate Conditions
-

This permit is issued to cover the following registered installation:

ARA Registration No.	Description	Date of Installation
025-0662-6-0546	One (1) 400 tph Crushing and screening plant consisting of no more than one (1) crusher and one (1) screen powered by tier 3 or better diesel engines not to exceed a combined rating of 475hp.	Initial installation in 2021 with equivalent replacement equipment brought on-site as needed

Part A – General Provisions

- (1) The following Air and Radiation Administration (ARA) permit-to-construct applications and supplemental information are incorporated into this permit by reference:
 - (a) Application for Processing or Manufacturing Equipment (Form 5) received January 25, 2021.
 - (b) Emissions Point Data (Form 5 EP) received January 25, 2021.
 - (c) Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstration (Form 5T) received January 25, 2021.
 - (d) Application for Internal Combustion Engines (Form 44) received January 25, 2021.

ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546

- (e) Supplemental Information; evidence of zoning approval, vendor literature, and plant diagram received January 25, 2021.

If there are any conflicts between representations in this permit and representations in the applications, the representations in the permit shall govern. Estimates of dimensions, volumes, emissions rates, operating rates, feed rates and hours of operation included in the applications do not constitute enforceable numeric limits beyond the extent necessary for compliance with applicable requirements.

- (2) Upon presentation of credentials, representatives of the Maryland Department of the Environment (“MDE” or the “Department”) and the Harford County Health Department shall at any reasonable time be granted, without delay and without prior notification, access to the Permittee’s property and permitted to:
 - (a) inspect any construction authorized by this permit;
 - (b) sample, as necessary to determine compliance with requirements of this permit, any materials stored or processed on-site, any waste materials, and any discharge into the environment;
 - (c) inspect any monitoring equipment required by this permit;
 - (d) review and copy any records, including all documents required to be maintained by this permit, relevant to a determination of compliance with requirements of this permit; and
 - (e) obtain any photographic documentation or evidence necessary to determine compliance with the requirements of this permit.
- (3) The Permittee shall notify the Department prior to increasing quantities and/or changing the types of any materials referenced in the application or limited by this permit. If the Department determines that such increases or changes constitute a modification, the Permittee shall obtain a permit-to-construct prior to implementing the modification.
- (4) This permit supersedes all previous permits to construct issued to Premises No. 025-0662
- (5) Nothing in this permit authorizes the violation of any rule or regulation or the creation of a nuisance or air pollution.

**ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546**

- (6) If any provision of this permit is declared by proper authority to be invalid, the remaining provisions of the permit shall remain in effect.
- (7) Subsequent to issuance of this permit, the Department may impose additional and modified requirements that are incorporated into a State permit-to-operate issued pursuant to COMAR 26.11.02.13.

Part B – Applicable Regulations

- (1) This source is subject to all applicable federal air pollution control requirements including, but not limited to, the following:
 - (a) All applicable terms, provisions, emissions standards, testing, monitoring and record keeping and reporting requirements included in federal New Source Performance Standards (NSPS) promulgated under 40 CFR 60, Subparts A (General Provisions) and Subpart OOO for Nonmetallic Mineral Processing Plants.
 - (b) All notifications required under 40 CFR 60, Subparts A and OOO shall be submitted to both of the following:

The Administrator
Compliance Program
Maryland Department of the Environment
Air and Radiation Administration
1800 Washington Boulevard, STE 715
Baltimore MD 21230

and

Director, Air Protection Division
U.S. EPA – Region 3
Mail Code 3AP00
1650 Arch Street
Philadelphia, PA 19103-2029

- (2) This source is subject to all applicable federally enforceable State air pollution control requirements including, but not limited to, the following regulations:

ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546

- (a) COMAR 26.11.01.07C, which requires that the Permittee report to the Department occurrences of excess emissions.
- (b) COMAR 26.11.02.04B, which states that a permit to construct or an approval expires if, as determined by the Department:
 - (i) Substantial construction or modification is not commenced within 18 months after the date of issuance of the permit or approval, unless the Department specifies a longer period in the permit or approval;
 - (ii) Construction or modification is substantially discontinued for a period of 18 months after the construction or modification has commenced; or
 - (iii) The source for which the permit or approval was issued is not completed within a reasonable period after the date of issuance of the permit or approval.
- (c) COMAR 26.11.02.09A, which requires that the Permittee obtain a permit-to-construct if an installation is to be modified in a manner that would cause changes in the quantity, nature, or characteristics of emissions from the installation as referenced in this permit.
- (d) COMAR 26.11.06.03C & D, which requires that the Permittee take reasonable precautions to prevent particulate matter from unconfined sources and materials handling and construction operations from becoming airborne.
- (e) COMAR 26.11.06.12 which states that a person may not construct, modify, or operate, or cause to be constructed, modified, or operated, a New Source Performance Standard (NSPS) source in a manner which results or will result in violation of the provisions of 40 CFR, Part 60.
- (f) COMAR 26.11.09.05E, which limits visible emissions from the diesel engines to 10% and 40% opacity during idle and operating modes, respectively. Exceptions to these opacity limits are as follows:
 - (i) The 10% opacity limit during idle mode does not apply for a period of 2 consecutive minutes after a period of idling of 15 minutes for the purpose of clearing the exhaust system;

**ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546**

- (ii) The 10% opacity limit during idle mode does not apply to emissions resulting directly from a cold engine start-up and warm-up for the following maximum periods:
 - (A) Engines that are idling continuously when not in service: 30 minutes;
 - (B) All other engines: 15 minutes.
- (iii) The 10% and 40% opacity limits do not apply while maintenance, repair, or testing is being performed by qualified mechanics.
- (g) COMAR 26.11.09.07A(2), which limits the sulfur content of distillate fuel oils to not more than 0.3 percent by weight.
- (3) This source is subject to all applicable State-only enforceable air pollution control requirements including, but not limited to, the following regulations:
 - (a) COMAR 26.11.02.13A(16), which requires that the Permittee obtain from the Department, and maintain and renew as required, a valid State permit-to-operate.
 - (b) COMAR 26.11.02.19C & D, which require that the Permittee submit to the Department annual certifications of emissions, and that the Permittee maintain sufficient records to support the emissions information presented in such submittals.
 - (c) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.
 - (d) COMAR 26.11.15.05, which requires that the Permittee implement “Best Available Control Technology for Toxics” (T – BACT) to control emissions of toxic air pollutants.
 - (e) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions would unreasonably endanger human health.

**ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546**

Part C – Construction Conditions

- (1) Except as otherwise provided in this part, the installation of the 400 ton per hour crushing and screening plant shall be constructed in accordance with the specifications included in the incorporated applications.
- (2) The 400 ton per hour crushing and screening plant shall be equipped with wet suppression systems as needed to meet the fugitive particulate matter regulations of COMAR 26.11.06.03C&D and the opacity requirements of 40 CFR, Part 60, Subpart OOO.

Part D – Operating and Monitoring Conditions

- (1) Except as otherwise provided in this part, the 400 ton per hour crushing and screening plant shall be operated in accordance with specifications included in the application and any operating procedures recommended by equipment vendors unless the Permittee obtains from the Department written authorization for alternative operating procedures.
- (2) Premises wide emissions of oxides of nitrogen (NOx) shall be less than 25 tons in any rolling 12-month period.
- (3) The Permittee shall comply with the following operating limits unless the Permittee can demonstrate, to the satisfaction of the Department, that premises wide emissions of NOx are less than 25 tons in any rolling 12-month period and compliance with the National Ambient Air Quality Standard for particulate matter (as PM-10) can be achieved at other operating conditions:
 - (a) The Permittee shall operate: one (1) crusher, and one (1) screen at any one time;
 - (b) The crushing and screening plant may not be operated more than 8 hours per calendar day;
 - (c) The crushing and screening plant shall not exceed 400 ton per hour of throughput; and
 - (d) The crushing and screening plant may have up to two (2) diesel engines rated at tier 3 or better, not to exceed a combined total of 475 Horsepower.

ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546

- (4) Wet suppression systems shall be used as needed to comply with the fugitive particulate matter requirements of COMAR 26.11.06.03C and COMAR 26.11.06.03D and the following opacity limits for nonmetallic mineral processing plants that commenced construction, modification, or reconstruction on or after April 22, 2008, as specified in 40 CFR, Part 60, Subpart OOO:
- (a) No more than 12 percent opacity from each crusher; and
 - (b) No more than 7 percent opacity from all other fugitive sources.
[Reference: 40 CFR §60.672(b) and Table 3 to 40 CFR 60 Subpart OOO]
- (5) The Permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression systems. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. **[Reference: 40 CFR §60.674(b)]**
- (6) The Permittee shall only process recycled asphalt pavement (RAP), waste concrete, and rock in the crushing and screening plant.
- (7) The Permittee shall comply with the following requirements of the Department-approved Fugitive Dust Plan, unless an alternate plan is approved by the Department:

OPERATION AND MAINTENANCE OF PROCESSING EQUIPMENT AND ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT

- (a) Spray bars and nozzles shall be kept in good working order and inspected a minimum of once a month.
 - (i) The spray bars shall be operated as per the original equipment manufacturer's recommended water delivery pressure in pounds per square inch and volumetric flow rate in gallons per hour.
 - (ii) The spray bar nozzles shall be checked as required by the New Source Performance Standard for Non-Metallic Mineral Processing Plants (40 CFR 60, Subpart OOO) for clogs and cleaned as needed to maintain a uniform spray pattern.

**ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546**

- (b) Accumulated material around the crusher shall be removed on a regular basis. Spillage and residual materials from the process shall be picked up regularly and returned to the raw material stockpiles for reuse.

SITE MAINTENANCE

- (c) Dust in areas where equipment traffic will travel shall be controlled by application of water. Additional water shall be applied to control fugitive dust. In the event alternative dust suppressant aids are used, they will be applied according to the manufacturer's specifications for quantity and frequency.
- (d) The speed of heavy equipment associated with the crushing and screening operation will be limited to no more than 15 miles per hour to minimize airborne dust.
- (e) Dust from stockpiles associated with the crushing and screening operation shall be controlled. The stockpiles are built up as material is conveyed from the crushing equipment, any dust that might rise off the stockpiles shall be controlled with water to prevent dust beyond property lines.
- (f) Complaints by community members can be reported to the site manager and will be reviewed for permit compliance under the permit. Corrective actions will be performed as required.

OTHER

- (g) The loader operator shall be directed to avoid overfilling the bucket of the loader and the feed hopper and to minimize the drop height of the material when loading the feed hopper.
 - (h) The stockpiles shall not be worked more than necessary to keep the materials contained within their defined areas. Stockpile heights shall be kept to a minimum.
- (8) Soils contaminated with petroleum based fuels, metals, or other volatile organic compounds shall not be processed at the plant.

ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546

- (9) All engines at the premises shall be nonroad engines, as defined in 40 CFR §1068.30, unless the Permittee complies with the stationary engine requirements of 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ, as applicable, for the engines.

Part E – Notifications and Testing

- (1) The Permittee shall submit written or electronic notification to the Department of the actual date of arrival of any crushing and screening plant, within 15 days after such date. **[Reference: 40 CFR §60.7(a)(3) and §60.676(i)]**
- (2) Within 60 days after a crushing and screening plant is in operation, the Permittee shall demonstrate compliance with all applicable opacity standards. A valid Method 9 test demonstrating compliance for this equipment at another premises, may be used to satisfy this requirement. **[Reference: 40 CFR §60.11(b) and §60.672(b)]**
- (3) During the compliance demonstration, the plant shall be operated at 90% or higher, of the normal operational throughput or at other operating conditions approved by the Department.
- (4) The Permittee shall use Method 9 of Appendix A-4 to 40 CFR, Part 60 and the procedures in 40 CFR §60.11, with the following additions:
- (a) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
- (b) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of this part, Section 2.1) must be followed.
- (c) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.
[Reference: 40 CFR §60.675(c)(1)]

ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546

- (5) The duration of the Method 9 (40 CFR, Part 60, Appendix A–4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable opacity standards must be based on the average of the five 6-minute averages. **[Reference: 40 CFR §60.675(c)(3)]**
- (6) The Permittee shall submit notification of the intended date of the required Method 9 observations to the Department at least 30 days prior to that date.
- (7) Within 45 days following the required Method 9 observations, the Permittee shall submit the results to the Department.

Part F – Record Keeping and Reporting

- (1) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:
 - (a) manufacturer specifications for each crushing and screening plant brought on site;
 - (b) the hours of operation for each piece of equipment for each operating day;
 - (c) the amount and types of materials processed in the crushing and screening plant in tons per month;
 - (d) the amount of diesel fuel burned in each diesel engine each month;
 - (e) a copy of the Fugitive Dust Plan as approved by the Department;
 - (f) all opacity observation test results; and
 - (g) a log of each periodic inspection of the wet suppression systems including dates and any corrective actions taken.
- (2) The Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, records necessary to support annual certifications of emissions and demonstrations of compliance for toxic air pollutants. Such records shall include, if applicable, the following:

**ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546**

- (a) mass emissions rates for each regulated pollutant, and the total mass emissions rate for all regulated pollutants for each registered source of emissions;
- (b) accounts of the methods and assumptions used to quantify emissions;
- (c) all operating data, including operating schedules and production data, that were used in determinations of emissions;
- (d) amounts, types, and analyses of all fuels used;
- (e) any records, the maintenance of which is required by this permit or by State or federal regulations, that pertain to the operation and maintenance of continuous emissions monitors, including:
 - (i) all emissions data generated by such monitors;
 - (ii) all monitor calibration data;
 - (iii) information regarding the percentage of time each monitor was available for service; and
 - (iv) information concerning any equipment malfunctions.
- (f) information concerning operation, maintenance, and performance of air pollution control equipment and compliance monitoring equipment, including:
 - (i) identifications and descriptions of all such equipment;
 - (ii) operating schedules for each item of such equipment;
 - (iii) accounts of any significant maintenance performed;
 - (iv) accounts of all malfunctions and outages; and
 - (v) accounts of any episodes of reduced efficiency.
- (g) limitations on source operation or any work practice standards that significantly affect emissions; and

ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546

- (h) other relevant information as required by the Department.
- (3) The Permittee shall submit to the Department by April 1 of each year a certification of emissions for the previous calendar year. The certifications shall be prepared in accordance with requirements, as applicable, adopted under COMAR 26.11.01.05 – 1 and COMAR 26.11.02.19D.
- (a) Certifications of emissions shall be submitted on forms obtained from the Department.
 - (b) A certification of emissions shall include mass emissions rates for each regulated pollutant, and the total mass emissions rate for all regulated pollutants for each of the facility's registered sources of emissions.
 - (c) The person responsible for a certification of emissions shall certify the submittal to the Department in the following manner:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”
- (4) The Permittee shall submit to the Department by April 1 of each year a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. Such analysis shall include either:
- (a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or
 - (b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

**ALLAN MYERS MD, INC
2203 OLD MOUNTAIN ROAD
JOPPA, MARYLAND 21085
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 025-0662-6-0546**

- (5) The Permittee shall report, in accordance with requirements under COMAR 26.11.01.07, occurrences of excess emissions to the Compliance Program of the Air and Radiation Administration.

Part G – Temporary Permit-to-Operate Conditions

- (1) This permit-to-construct shall also serve as a temporary permit-to-operate that confers upon the Permittee authorization to operate the 400 ton per hour crushing and screening plant for a period of up to 180 days after initiating operation of the 400 ton per hour crushing and screening plant.
- (2) The Permittee shall provide the Department with written or electronic notification of the date on which operation of the 400 ton per hour crushing and screening plant is initiated. Such notification shall be provided within 15 business days of the date to be reported.
- (3) During the effective period of the temporary permit-to-operate the Permittee shall operate the new installation as required by the applicable terms and conditions of this permit-to-construct, and in accordance with operating procedures and recommendations provided by equipment vendors.
- (4) The Permittee shall submit to the Department an application for a State permit-to-operate no later than 60 days prior to expiration of the effective period of the temporary permit-to-operate.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

AIR AND RADIATION ADMINISTRATION

SUPPLEMENTAL INFORMATION REFERENCES

The Code of Maryland Regulations (COMAR) is searchable by COMAR citation at the following Division of State Documents website:

<http://www.dsd.state.md.us/COMAR/ComarHome.html>

The Code of Federal Regulations (CFR), including New Source Performance Standards (NSPS) at 40 CFR, Part 60 and National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR, Parts 61 and 63, is searchable by CFR citation at the following U.S. Government Publishing Office website:

<http://www.ecfr.gov>

Information on National Ambient Air Quality Standards (NAAQS) is located at the following U.S. Environmental Protection Agency (EPA) website:

<https://www.epa.gov/criteria-air-pollutants/naaqs-table>

Information on Maryland's Ambient Air Monitoring Program is located at the following Maryland Department of the Environment website:

<http://mde.maryland.gov/programs/Air/AirQualityMonitoring/Pages/index.aspx>

Information on the U.S. EPA's Screen3 computer model and other EPA-approved air dispersion models is located at the following U.S. EPA website:

http://www.epa.gov/scram001/dispersion_screening.htm

Information on the U.S. EPA TANKS Emission Estimation Software is located at the following U.S. EPA website:

<http://www.epa.gov/ttn/chief/software/tanks/index.html>

Information on the U.S. EPA Emission Factors and AP-42 is located at the following U.S. EPA website:

<https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors>

Fugitive Dust Plan