AIR AND RADIATION ADMINISTRATION APPLICATION FOR A PERMIT TO CONSTRUCT

DOCKET #11-21

COMPANY: Laurel Sand & Gravel, Inc. T/A S.W. Barrick & Sons – Legore Quarry

LOCATION: 11640 Woodsboro Pike, Keymar, MD 21757

APPLICATION: Installation of one (1) Metso Lokotrack ST2.8 Mobile Scalping Screen.

<u>ITEM</u>	<u>DESCRIPTION</u>
1	Notice of Application and Opportunity to Request an Informational Meeting
2	Permit to Construct Application Forms including: Form 5, Form 5T, Form 5EP, vendor/manufacturer specifications, emissions calculations, process flow diagrams, and safety data sheets.
3	Documentation of Zoning Approval

DEPARTMENT OF THE ENVIRONMENT AIR AND RADIATION ADMINISTRATION

NOTICE OF APPLICATION AND OPPORTUNITY TO REQUEST AN INFORMATIONAL MEETING

The Maryland Department of the Environment, Air and Radiation Administration (ARA) received a permit-to-construct application from Laurel Sand & Gravel, Inc. T/A S.W. Barrick & Sons - Legore Quarry on May 12, 2021 for the installation of one (1) Metso Lokotrack ST2.8 Mobile Scalping Screen. The proposed installation will be located at 11640 Woodsboro Pike, Keymar, MD 21757.

The application and other supporting documents are available for public inspection on the Department's website. Look for Docket #11-21 at the following link:

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

Pursuant to the Environment Article, Section 1-603, Annotated Code of Maryland, the Department will hold an informational meeting to discuss the application and the permit review process if the Department receives a written request for a meeting within 10 working days from the date of the second publication of this notice. All requests for an informational meeting should be emailed to Ms. Shannon Heafey at shannon.heafey@maryland.gov.

Further information may be obtained by contacting Ms. Shannon Heafey by email at shannon.heafey@maryland.gov or by phone at (410) 537-4433.

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

LAUREL SAND & GRAVEL, INC. T/A S.W. Barrick & Sons

Barrick Quarry

Address: P.O. Box 86

Woodsboro, MD 21798

Sales Office: (301) 845-6341 Fax Number: (301) 845-2396 Orders & Dispatch: (301) 845-6343 Toll Free: (800) 546-6343



Finksburg Terminal

Address: 2700 Emory Road Finksburg, MD 21048

Sales / Dispatch: (410) 833-4400 Fax Number: (410) 833-4909

May 11, 2021

Ms. Sarah Wells
Air & Radiation Administration
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230

Re: Permit to Construct Application-Legore Quarry (021-0129)

Dear Ms. Wells:

Please find attached a permit to construct application for a Metso Lokotrack ST2.8 Mobile Scalping Screen for use at the Legore Quarry. Note that this screen is portable and may be moved between sites when material availability and market conditions dictate.

If you have any questions or require additional information, please contact me at 410-792-7234 ex 1120 or by email at Collin@aggmgt.com. Thank you for your assistance.

Sincerely,

Collin Sumpter

Resource Manager



AIR QUALITY PERMIT TO CONSTRUCT APPLICATION CHECKLIST

OWNER OF EQUIPMENT/PROCESS									
COMPANY NAME:	Laurel Sand & Gravel, Inc. T/A S.W. Barrick & Sons								
COMPANY ADDRESS:	P.O. Box 850 Laurel, MD 20725								
	LOCATION OF EQUIPMENT/PROCESS								
PREMISES NAME:	Legore Quarry (021-0129)								
PREMISES ADDRESS:	11640 Woodsboro Pike, Keymar, MD 21757								
CONTACT	INFORMATION FOR THIS PERMIT APPLICATION								
CONTACT NAME:	Collin Sumpter								
JOB TITLE:	Resource Manager								
PHONE NUMBER:	410-792-7234 ext. 1120								
EMAIL ADDRESS:	collin@aggmgt.com								
DES	CRIPTION OF EQUIPMENT OR PROCESS								
Metso Lokotrack ST2.8 Mobile Scalping Screen									

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.

	\boxtimes	Application package cover letter describing the proposed project	describing the proposed project								
	\boxtimes	Complete application forms (Note the number of forms included or NA if no applicable.)	t								
		No. X Form 5 No. N/A Form 11 No. X Form 5T No. N/A Form 41 No. X Form 5EP No. N/A Form 42 No. N/A Form 6 No. N/A Form 44 No. N/A Form 10									
	\boxtimes	Vendor/manufacturer specifications/guarantees									
	\boxtimes	Evidence of Workman's Compensation Insurance									
	\boxtimes	Process flow diagrams with emission points									
PORTABLE		Site plan including the location of the proposed source and property bounds	ary								
	\boxtimes	Material balance data and all emissions calculations									
	\boxtimes	Material Safety Data Sheets (MSDS) or equivalent information for materials processed and manufactured.									
		Certificate of Public Convenience and Necessity (CPCN) waiver documentate from the Public Service Commission (1)									
		Documentation that the proposed installation complies with local zoning an use requirements (2)	d land								
		(1) Required for emergency and non-emergency generators installed on or aft October 1, 2001 and rated at 2001 kW or more.	er								

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

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 PR	OCESSING/MANUFAC	TURING EQUIPMENT
Permit to Construct ✓	Registration Update 🗖	Initial Registration

rel Sand & Gr	uipment/Company Name ravel, Inc. T/A S.W. Barrick			ITE IN THIS BLOCK RATION NUMBER		
Mailing Addr			County No. Premises I			
P.O. Box 85	0		o carrier inter	11011110001101		
Street Address						
Laurel	MD	20725	1-2	3-6		
City	State	Zip	Registration Cla	ass Equipment No		
Telephone N	umber					
(410) 7	92-7234 ext. 1120		Data Year	8-11		
Signature						
10	10 -		12-13	Application Date		
tach	Sight		12.10	rippinoation pare		
Collin Sump	ter, Resource Manager		05/11/2021			
Print Name and	l Title		Date			
Keymar	and Street Name MD		21757 (301	845-6343		
City/Town	State			elephone Number		
Only 10 min				analyticative (transparent		
Legore Quar						
	rry e (if different from above)					
Premises Name		isting Equipment, C	= Existing Equipme	nt)		
Premises Name	w, B= Modification to Ex New Construction	isting Equipment, C New Construction	on Exi	sting Initial		
Premises Name	e (if different from above) w, B= Modification to Ex		on Exi			
Premises Name	w, B= Modification to Ex New Construction Begun (MM/YY)	New Construction Completed (MM/	on Exi	sting Initial tion (MM/YY)		
Premises Name tatus (A= Ne Status	w, B= Modification to Ex New Construction Begun (MM/YY) 0 5 2 1	New Construction	on Exi	sting Initial tion (MM/YY) 6 9 7		
Premises Name tatus (A= Ne Status A 15	w, B= Modification to Ex New Construction Begun (MM/YY) 0 5 2 1	New Construction Completed (MM/ 0 5 2 20-23	on Exi YY) Opera 1 0	sting Initial tion (MM/YY) 6 9 7		
Premises Name tatus (A= Ne Status A 15 escribe this	w, B= Modification to Ex New Construction Begun (MM/YY) 0 5 2 1 16-19 Equipment: Make, Model	New Construction Completed (MM/ 0 5 2 20-23	on Exi YY) Opera 1 0	sting Initial tion (MM/YY) 6 9 7		
Premises Name tatus (A= Ne Status A 15 escribe this	w, B= Modification to Ex New Construction Begun (MM/YY) 0 5 2 1	New Construction Completed (MM/ 0 5 2 20-23	on Exi YY) Opera 1 0	sting Initial tion (MM/YY) 6 9 7		
Premises Name tatus (A= Ne Status A 15 escribe this to Lokotrack ST2	w, B= Modification to Ex New Construction Begun (MM/YY) 0 5 2 1 16-19 Equipment: Make, Model 8 Mobile Scalping Screen - 400	New Construction Completed (MM/ 0 5 2 20-23 Features, Manufacture	on Exi YY) Opera 1 0	sting Initial tion (MM/YY) 6 9 7 20-23 Hourly Input Rate, e		
Premises Name tatus (A= Ne Status A 15 escribe this to Lokotrack ST2	w, B= Modification to Ex New Construction Begun (MM/YY) 0 5 2 1 16-19 Equipment: Make, Model	New Construction Completed (MM/ 0 5 2 20-23 Features, Manufactur TPH WC 695307	on Exi YY) Opera 1 0	sting Initial tion (MM/YY) 6 9 7 20-23 Hourly Input Rate, e		
Premises Name tatus (A= Ne Status A 15 escribe this to Lokotrack ST2 forkmen's C	w, B= Modification to Ex New Construction Begun (MM/YY) 0 5 2 1 16-19 Equipment: Make, Model 8 Mobile Scalping Screen - 400 compensation Coverage	New Construction Completed (MM/ 0 5 2 20-23 Features, Manufacture TPH WC 695307	on Exi YY) Opera 1 0	sting Initial tion (MM/YY) 6 9 7 20-23 Hourly Input Rate, e		
Premises Name tatus (A= Ne Status A 15 escribe this to Lokotrack ST2 forkmen's Company Rockw HOTE: Before a fe	w, B= Modification to Ex New Construction Begun (MM/YY) 0 5 2 1 16-19 Equipment: Make, Model 8 Mobile Scalping Screen - 400	New Construction Completed (MM/ 0 5 2 20-23 Features, Manufactur TPH WC 695307 Binder/Policy Number Co. ed by the Department, the	on Exi YY) Opera 1 0 rer (include Maximum applicant must provide the	sting Initial tion (MM/YY) 6 9 7 20-23 Hourly Input Rate, e 12/31/2021 Expiration Date e Department with proof		
Premises Name tatus (A= Ne Status A 15 escribe this to Lokotrack ST2 forkmen's Company Rockw HOTE: Before a F	w, B= Modification to Ex New Construction Begun (MM/YY) 0 5 2 1 16-19 Equipment: Make, Model 8.8 Mobile Scalping Screen - 400 compensation Coverage cood Casualty Insurance Permit to Construct may be issued ser's compensation coverage as	New Construction Completed (MM/ 0 5 2 20-23 Features, Manufactur TPH WC 695307 Binder/Policy Number Co. ed by the Department, the required under Section 1-	on Exi (YY) Opera 1 0 rer (include Maximum applicant must provide the 202 of the Worker's Comp	sting Initial tion (MM/YY) 6 9 7 20-23 Hourly Input Rate, e 12/31/2021 Expiration Date e Department with proof pensation Act.		
Premises Name tatus (A= Ne Status A 15 escribe this to Lokotrack ST2 forkmen's Company Rockw HOTE: Before a F	w, B= Modification to Ex New Construction Begun (MM/YY) 0 5 2 1 16-19 Equipment: Make, Model 8.8 Mobile Scalping Screen - 400 ompensation Coverage ood Casualty Insurance	New Construction Completed (MM/ 0 5 2 20-23 Features, Manufactur TPH WC 695307 Binder/Policy Number Co. ed by the Department, the required under Section 1-	on Exi (YY) Opera 1 0 rer (include Maximum applicant must provide the 202 of the Worker's Comp	sting Initial tion (MM/YY) 6 9 7 20-23 Hourly Input Rate, e 12/31/2021 Expiration Date e Department with proof pensation Act.		

7. Person Installing this Equipment (if different from Number 1 on Page 1) NameSame as #1 Title	
Company	
Mailing Address/Street	
City/Town State Telephone ()	
StateTelephone () 8. Major Activity, Product or Service of Company at this Location	
Aggregate Quarry	
9. Control Devices Associated with this Equipment	
None	
24-0	
Cimple/Multiple Carey/Adearh Venturi Carbon Fleetrestatio Bagbauga Thermal/Catabitie	Dn
Simple/Multiple Spray/Adsorb Venturi Carbon Electrostatic Baghouse Thermal/Catalytic Cyclone Tower Scrubber Adsorber Precipitator Afterburner	Dry Scrubber
24-1 24-2 24-3 24-4 24-5 24-6 24-7	24-8
24-1 24-2 24-3 24-4 24-5 24-0 24-7 Other	24-0
X Describe The moisture content of the material is sufficient to control the release of particulate m	natter.
24-9	
10. Annual Fuel Consumption for this Equipment	
OIL-1000 GALLONS SULFUR % GRADE NATURAL GAS-1000 FT ³ LP GAS-100 GALLO	NS GRADE
26-31 32-33 34 35-41 42-45 Ultra Low Sulfur Diesel - < 15ppm or 0.0015%	
	STURE %
46-52 53-55 56-58 59-63	64-65
OTHER FUELS ANNUAL AMOUNT CONSUMED OTHER FUEL ANNUAL AMOU	INT CONSUMED
(Specify Type) 66-1 (Specify Units of Measure) (Specify Type) 66-2 (Specify Units of Measure) 1= Coke 2= COG 3=BFG 4=Other	its of Measure)
44 Operation Calcula (for this Franciscoper)	
11. Operating Schedule (for this Equipment) Continuous Operation Batch Process Hours per Batch Batch per Week Hours per Day Days Per Week	Days per Year
	2 6 0
67-1 67-2 68-69 70-71 72 Seasonal Variation in Operation:	73-75
No Variation Winter Percent Spring Percent Summer Percent Fall Percent (Total Seaso	ns= 100%)
1 0 3 0 3 0 77 79 70 90 91 93 94 93 93 94	
76 77-78 79-80 81-82 83-84	

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12. Equivalent Stack Innformat	tion- is Exhaust through D	oors, Windows	, etc. Only	y? (Y/N)						
N/A				N 85						
If not, then Height Avove Groui	nd (FT) Inside Diameter at To	p Exit Tempe	rature (°F)	Exit Velocity (FT/SEC)					
86-88	89-91	92-9	95	96-98						
	NOTE: S	See Attachment #	1 - Flow Dia	agram						
Attach a block diagram of pr					s 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 con		(Y or N)								
-				<u> </u>						
NAME	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS					
1. Dirty Shot Rock		400	Tons	1,664,000	Tons					
3.										
4.										
5.										
6.										
7.										
8.										
9.										
TOTAL										
14. Output Materials (for this e	guipment) Draduct & Outrout	Data varias bass	d au aanaan	a a mfi au mati a m						
Process/Product Stream	7 Product & Output	Rate varies base	d on screer	i configuration.						
				UT RATE						
NAME	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS					
1. Limestone/Dirt Product 2. Limestone/Dirt Product		133.33	Tons Tons	554,666 554.666	Tons Tons					
3. Limestone/Dirt Product		133.33	Tons	554,666	Tons					
4.					100					
5.										
6.										
7.										
8.										
9. TOTAL										
TOTAL										
15. Waste Streams- Solid and I	_iquid									
	•			UT RATE						
NAME	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS					
1. N/A 2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
TOTAL										

Form Number: 5 Rev. 9/27/2002

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16. Total Stack Emission		quipinont o	3,			• •	
Particulate Matte	r	Oxides	of Sulfur		Oxides of	f Nitrogen	
		0	. 0		1	. 0 6	
99-104		105	5-110		111	1-116	
Carbon Monoxide		Volatile Orgar	nic Compound	ls	PI	√ -10	
1 3 . 0	4				3	. 5	2
177-122		123-	128		129	9-134	
17. Total Fugitive Emis	sions (for this	s equipmen	t only) in F	Pounds Per C	perating	Day	
Particulate Matte		See Attachr	nent #2 of Sulfur		Ovides of	f Nitrogen	
1 4 . 9	8	Oxides	Or Sullui		Oxides o	ritiogen	
135-139		140-	144		145	<u> </u>	
Carbon Monoxide		Volatile Orgar	nic Compound	ls	PI	M-10	
					5	. 2	4
150-154		155-	159		160)-164	
Method Used to Detern	nine Emission	ns (1=	Estimate	2= Emission	Factor	3= Stack T	est 4= Other)
TSP	SOX	NOX	СО	VOC		PM10	
2	2	2	2			2	
165	166	167	168	169		170	
	166 IND RADIATIO	167	168		ON USE	170	
	ND RADIATIO	167	168		ocal Juri	170 SONLY	
AIR A	ND RADIATIO	167 ON MANAG	168	DMINISTRATI	ocal Juri	170 SONLY	
AIR A	Date Ro	167 ON MANAG ec'd. State	168 EMENT AL	Return to Lo	ocal Juri By	170 SONLY	
AIR A 18. Date Rec'd. Local Reviewed by Local Date	Date Ro	167 ON MANAG ec'd. State on	168 EMENT AL Revi	Return to Lo	ocal Juri By te	170 SONLY Soliction	
18. Date Rec'd. Local Reviewed by Local	Date Ro	167 ON MANAG ec'd. State on	168 EMENT AL	Return to Lo	ocal Juri By te	170 SONLY	
AIR A 18. Date Rec'd. Local Reviewed by Local Date 19. Inventory Date	Date Rocal Jurisdiction Month/Yea	167 ON MANAG ec'd. State on er Eq	168 EMENT AL Revi Date uipment C	Return to Long Date Sewed by Sta	bocal Juri By te By SCO	170 SONLY Soliction C Code 78-185	
18. Date Rec'd. Local Reviewed by Local Date 19. Inventory Date	Date Rocal Jurisdiction Month/Yea	DN MANAG ec'd. State on er Eq	Revi Date 175-177 esign	Return to Longiewed by Sta	berate	170 Soliction C Code 78-185 Transac	ction Date
AIR A 18. Date Rec'd. Local Reviewed by Local Date 19. Inventory Date	Date Rocal Jurisdiction Month/Yea	167 ON MANAG ec'd. State on er Eq	Revi Date 175-177 esign	Return to Long Date Sewed by Sta	berate	170 Soliction C Code 78-185 Transac	etion Date //DD/YR)
18. Date Rec'd. Local Reviewed by Local Date 19. Inventory Date	Date Ro cal Jurisdiction By Month/Yea	DN MANAG ec'd. State on er Eq	Revi Date 175-177 esign	Return to Longiewed by Sta	scorate	Transac (MM	
18. Date Rec'd. Local Reviewed by Local Date 19. Inventory Date 20. Annual Operating Rate 186-192	Date Ro	DN MANAG ec'd. State on Ir Eq Maximum Do Hourly R	Revi Date 175-177 esign	Return to Long the Long to Long to Long the Long to Long to Long the Long th	scal Juri By SCal Scal Scal Scal Scal Scal Scal Scal Sc	Transac (MM	/DD/YR) 2-207
18. Date Rec'd. Local Reviewed by Local Date 19. Inventory Date 20. Annual Operating Rate 186-192	Date Ro	DN MANAG ec'd. State on Hourly R	Revi Date 175-177 esign	Return to Long	scal Juri By SCal Scal Scal Scal Scal Scal Scal Scal Sc	Transac (MM	/DD/YR) 2-207
18. Date Rec'd. Local Reviewed by Local Date 19. Inventory Date 20. Annual Operating Rate 186-192	Date Ro	DN MANAG ec'd. State on Hourly R	Revi Date 175-177 esign	Return to Long	scal Juri By SCal Scal Scal Scal Scal Scal Scal Scal Sc	Transac (MM	/DD/YR) 2-207
AIR A 18. Date Rec'd. Local Reviewed by Local Date 19. Inventory Date 20. Annual Operating Rate 186-192 Staff Code VO	Date Ro- cal Jurisdiction By Month/Yea 171-174 C Code	DN MANAG ec'd. State on Ar Eq Maximum Do Hourly R 193-19	Revi Date 175-177 esign	Return to Lo Date	scal Juri By SCal Scal Scal Scal Scal Scal Scal Scal Sc	Transac (MM)	ion
AIR A 18. Date Rec'd. Local Reviewed by Local Date 19. Inventory Date 20. Annual Operating Rate 186-192 Staff Code VO	Date Ro- cal Jurisdiction By Month/Yea 171-174 C Code	DN MANAG ec'd. State on Hourly R 193-19 SIP Code	Revi Date 175-177 esign	Return to Lo Date	scal Juri By SCal Scal Scal Scal Scal Scal Scal Scal Sc	Transac (MM) Confide 219	P/DD/YR) P-2-207 Portiality

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		FORM 5	ΕP	P: Emission Point Data	3				
Complete one (1) Form 5EP for	or EAC	H emissio	n p	oint (stack or fugitive emissior	ns) rela	ated to the p	ropos	sed in	stallation.
Applicant Name: Laurel Sand &	Gravel,	Inc. T/A S.W	. Ba	arrick & Sons - Legore Quarry					
1. Emission Point Ide	ntifica	ation Nam	e/N	Number					
List the applicant assigned nam E-1	ie/numl	ber for this	emi	ission point and use this value	on the	e attached re	equire	ed plo	t plan:
2. Emission Point Des	scripti	on							
Describe the emission point inc	luding	all associate	ed e	equipment and control devices	:				
3. Emissions Schedul	le for	the Emiss	sio						
Continuous or Intermittent (C/I)?	С		Seasonal Variation					
Minutes per hour:	,	60		Check box if none: Oth Winter Percent	nerwis	e estimate s	<u>seaso</u> 10	nai va	iriation:
Hours per day:		16		Spring Percent			30		
Days per week:		5		Summer Percent			30		
Weeks per year:		37		Fall Percent			30		
4. Emission Point Info	ormati	T	Π		I	Longth			Width:
Height above ground (ft):		N/A		Length and width dimensio		Length			widtii.
Height above structures (ft):		N/A		at top of rectangular stack (ft): N/A			N/A		
Exit temperature (°F):		N/A		1					N/A
Exit velocity (ft/min):		N/A		Distance from emission point to nearest property line (ft):			N/A		
Exhaust gas volumetric flow ra (acfm):	ate	N/A	Building difficults if ethission			Width N/A			
5. Control Devices As	socia	ted with t	he	Emission Point			l		
Identify each control device as also required for each contr					numb	er of device	es. <u>A</u>	\ Fori	<u>n 6 is</u>
None				☐ Thermal Oxidizer		No			
Baghouse	No			Regenerative					
Cyclone	No			☐ Catalytic Oxidizer		No			
☐ Elec. Precipitator (ESP)	No			☐ Nitrogen Oxides Reducti	ion	No			
☐ Dust Suppression System	No			☐ Selective ☐ Catalytic		☐ Non-Sele ☐ Non-Cata			
☐ Venturi Scrubber	No			⊠ Other		_	,		
☐ Spray Tower/Packed Bed	No			Specify:		No			
Carbon Adsorber	No			The moisture content of the material is	sufficier	nt to control the	release	e of part	iculate matter.
☐ Cartridge/Canister									
Regenerative									

6. Estimated Emissions from the Emission Point **At Projected Operations** At Design Capacity **Criteria Pollutants** (lb/hr) (lb/hr) (lb/day) (ton/yr) Particulate Matter (filterable as PM10) 0.0064 0.1024 0.013312 0.0064 Particulate Matter (filterable as PM2.5) 0 0 0 0 Particulate Matter (condensables) N/A Volatile Organic Compounds (VOC) N/A Oxides of Sulfur (SOx) N/A Oxides of Nitrogen (NOx) N/A Carbon Monoxide (CO) N/A Lead (Pb) N/A **At Projected Operations At Design Capacity Greenhouse Gases (GHG)** (lb/hr) (lb/hr) (lb/day) (ton/yr) Carbon Dioxide (CO₂) N/A Methane (CH₄) N/A Nitrous Oxide (N₂O) N/A Hydrofluorocarbons (HFCs) N/A Perfluorocarbons (PFCs) N/A Sulfur Hexafluoride (SF6) N/A Total GHG (as CO₂e) N/A **At Projected Operations** List individual federal Hazardous Air At Design Capacity Pollutants (HAP) below: (lb/hr) (lb/hr) (lb/day) (ton/yr) N/A

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: Laurel Sand & Gravel, Inc. T/A S.W. Barrick & Sons - Legore Quarry									
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: E-2									
2. Emission Point Description									
Describe the emission point including all associated equipment and control devices: Feeder Discharge to D.D. Screen									
3. Emissions Schedule for the Emission Point									
Continuous or Intermittent (C/I)?			Seasonal Variation					
<u> </u>	,.	С			herwis	e estimate s		nal va	ariation:
Minutes per hour: Hours per day:		60 16		Winter Percent Spring Percent			10 30		
Days per week:		5		Summer Percent			30		
Weeks per year:		37		Fall Percent			30		
4. Emission Point Info	ormati	on							
Height above ground (ft):		N/A		Length and width dimensio	ins	Length	:	,	Width:
Height above structures (ft):				at top of rectangular stack		N/A			N/A
Exit temperature (°F):		N/A		Inside diameter at top of round stack (ft): N/A					N/A
Exit velocity (ft/min):	N/A		Distance from emission point to nearest property line (ft):			N/A			
Exhaust gas volumetric flow ra (acfm):	ite	N/A	Building dimensions if emission Height Length W			Width			
5. Control Devices As	aggiot	od with t	ha	point is located on buildin	ig (it)	N/A	l N	/A	N/A
5. Control Devices As	Social	ea with t	ne	Emission Point					
Identify each control device as also required for each control					numb	er of device	es. <u>A</u>	Fori	<u>n 6 is</u>
None				☐ Thermal Oxidizer		No			
Baghouse	No			☐ Regenerative					
Cyclone	No			☐ Catalytic Oxidizer		No			
☐ Elec. Precipitator (ESP)	No			☐ Nitrogen Oxides Reduct	ion	No			
☐ Dust Suppression System	No			☐ Selective ☐ Catalytic		☐ Non-Sele ☐ Non-Cata			
☐ Venturi Scrubber	No			□ Catalytic ☐	L	Non-cate	•		
☐ Spray Tower/Packed Bed	No			Specify:		110			
Carbon Adsorber	No		-	The moisture content of the material is	sufficien	nt to control the	release	of part	iculate matter.
☐ Cartridge/Canister									
Regenerative									

6. Estimated Emissions from the Emission Point **At Projected Operations** At Design Capacity **Criteria Pollutants** (lb/hr) (lb/hr) (lb/day) (ton/yr) Particulate Matter (filterable as PM10) 0.0064 0.1024 0.0133 0.0064 Particulate Matter (filterable as PM2.5) 0 0 0 0 Particulate Matter (condensables) N/A Volatile Organic Compounds (VOC) N/A Oxides of Sulfur (SOx) N/A Oxides of Nitrogen (NOx) N/A Carbon Monoxide (CO) N/A Lead (Pb) N/A **At Projected Operations At Design Capacity Greenhouse Gases (GHG)** (lb/hr) (lb/hr) (lb/day) (ton/yr) Carbon Dioxide (CO₂) N/A Methane (CH₄) N/A Nitrous Oxide (N₂O) N/A Hydrofluorocarbons (HFCs) N/A Perfluorocarbons (PFCs) N/A Sulfur Hexafluoride (SF6) N/A Total GHG (as CO₂e) N/A **At Projected Operations** List individual federal Hazardous Air At Design Capacity Pollutants (HAP) below: (lb/hr) (lb/hr) (lb/day) (ton/yr) N/A

				.					
FORM 5EP: Emission Point Data									
Complete one (1) Form 5EP for					ns) rela	ated to the p	propos	sed in	stallation.
Applicant Name: Laurel Sand &	Gravel, I	nc. T/A S.W	. Barr	rick & Sons - Legore Quarry					
1. Emission Point Ide	ntificat	tion Nam	e/N	umber					
List the applicant assigned name/number for this emission point and use this value on the attached required plot plan: E-3									
2. Emission Point Description									
Describe the emission point including all associated equipment and control devices: D.D. Screen Discharge									
3. Emissions Schedul	le for t	he Emiss	sion	Point					
Continuous or Intermittent (C/I	1)2	_		Seasonal Variation					
):	С			herwis	e estimate s		nal va	ariation:
Minutes per hour:		60		Winter Percent Spring Percent			10 30		
Hours per day: Days per week:		16 5		Summer Percent			30		
Weeks per year:		37		Fall Percent			30		
4. Emission Point Info	ormatio	on							
Height above ground (ft):		N/A		Length and width dimensio	ns	Length	:		Width:
Height above structures (ft):				at top of rectangular stack		N/A		N/A	
Exit temperature (°F): N/A Inside diameter a					und s	tack (ft):			N/A
Exit velocity (ft/min):		N/A	Distance from emission point to nearest property line (ft):			N/A			
Exhaust gas volumetric flow ra	ate	N/A				Width N/A			
5. Control Devices As	sociat	ed with t	he F	<u> </u>	9 (1-)	1 17/7	.,,	,,, (14/7 (
Identify each control device as also required for each contr	sociate	d with the	emis	ssion point and indicate the	numb	er of device	es. <u>A</u>	Fori	<u>n 6 is</u>
□ None				☐ Thermal Oxidizer		No			
Baghouse	No			Regenerative					
Cyclone	No			☐ Catalytic Oxidizer		No			
☐ Elec. Precipitator (ESP)	No			☐ Nitrogen Oxides Reducti	ion	No			
☐ Dust Suppression System	No			Selective Catalytic	[☐ Non-Sele ☐ Non-Cata			
☐ Venturi Scrubber	No			☑ Other					
☐ Spray Tower/Packed Bed	No			Specify:					
Carbon Adsorber	No		Т	he moisture content of the material is	sufficier	nt to control the	release	of par	iculate matter.
☐ Cartridge/Canister									
Regenerative									

6. Estimated Emissions from the Emission Point **At Projected Operations** At Design Capacity **Criteria Pollutants** (lb/hr) (lb/hr) (lb/day) (ton/yr) Particulate Matter (filterable as PM10) 4.7360 0.2960 0.6157 0.2960 Particulate Matter (filterable as PM2.5) 0.0200 0.0200 0.3200 0.0416 Particulate Matter (condensables) N/A Volatile Organic Compounds (VOC) N/A Oxides of Sulfur (SOx) N/A Oxides of Nitrogen (NOx) N/A Carbon Monoxide (CO) N/A Lead (Pb) N/A **At Projected Operations At Design Capacity Greenhouse Gases (GHG)** (lb/hr) (lb/hr) (lb/day) (ton/yr) Carbon Dioxide (CO₂) N/A Methane (CH₄) N/A Nitrous Oxide (N₂O) N/A Hydrofluorocarbons (HFCs) N/A Perfluorocarbons (PFCs) N/A Sulfur Hexafluoride (SF6) N/A Total GHG (as CO₂e) N/A **At Projected Operations** List individual federal Hazardous Air At Design Capacity Pollutants (HAP) below: (lb/hr) (lb/hr) (lb/day) (ton/yr) N/A

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: Laurel Sand & Gravel, Inc. T/A S.W. Barrick & Sons - Legore Quarry									
1. Emission Point Ide	ntificat	ion Nam	e/Nu	umber					
List the applicant assigned name/number for this emission point and use this value on the attached required plot plan: E-4									
2. Emission Point Des	scriptio	n							
Describe the emission point inc Conveyor #1 Discharge	luding a	ll associate	ed eq	uipment and control devices	s: 				
3. Emissions Schedu	le for ti	ne Emiss	sion	Point					
Continuous or Intermittent (C/	1)?	0		Seasonal Variation_					
·	.,.	С			herwis	se estimate s		nal va	ariation:
Minutes per hour: Hours per day:		60		Winter Percent			10		
Days per week:		16 5		Spring Percent Summer Percent			30 30		
Weeks per year:		37		Fall Percent			30		
4. Emission Point Info	ormatic								
Height above ground (ft):		N/A		Length and width dimensio	ne	Length	:		Width:
Height above structures (ft):		N/A		at top of rectangular stack		N/A			N/A
Exit temperature (°F):		N/A		Inside diameter at top of ro	und s	stack (ft):		N/A	
Exit velocity (ft/min):				Distance from emission point to nearest property line (ft):			N/A		
Exhaust gas volumetric flow ra (acfm):	ate	N/A				Width N/A			
5. Control Devices As	sociat	ed with t	he F	·	9 (11)	IN/A	14	/_	IN/A
Identify each control device as also required for each control					numb	er of device	es. <u>A</u>	For	<u>n 6 is</u>
None			١	☐ Thermal Oxidizer		No			
Baghouse	No			Regenerative					
Cyclone	No			Catalytic Oxidizer		No			
☐ Elec. Precipitator (ESP)	No			☐ Nitrogen Oxides Reduct	ion	No			
☐ Dust Suppression System	No			☐ Selective ☐ Catalytic		☐ Non-Sele			
☐ Venturi Scrubber	No		1	☑ Gatalytis	'	No	•		
☐ Spray Tower/Packed Bed	No			Specify:		_			
Carbon Adsorber	No		Т	he moisture content of the material is	sufficie	nt to control the	release	of par	ticulate matter.
☐ Cartridge/Canister									
☐ Regenerative									

6. Estimated Emissions from the Emission Point **At Projected Operations** At Design Capacity **Criteria Pollutants** (lb/hr) (lb/hr) (lb/day) (ton/yr) Particulate Matter (filterable as PM10) 0.0061 0.0981 0.0128 0.0061 Particulate Matter (filterable as PM2.5) 0.0017 0.0017 0.0277 0.0036 Particulate Matter (condensables) N/A Volatile Organic Compounds (VOC) N/A Oxides of Sulfur (SOx) N/A Oxides of Nitrogen (NOx) N/A Carbon Monoxide (CO) N/A Lead (Pb) N/A **At Projected Operations At Design Capacity Greenhouse Gases (GHG)** (lb/hr) (lb/hr) (lb/day) (ton/yr) Carbon Dioxide (CO₂) N/A Methane (CH₄) N/A Nitrous Oxide (N₂O) N/A Hydrofluorocarbons (HFCs) N/A Perfluorocarbons (PFCs) N/A Sulfur Hexafluoride (SF6) N/A Total GHG (as CO₂e) N/A **At Projected Operations** List individual federal Hazardous Air At Design Capacity Pollutants (HAP) below: (lb/hr) (lb/hr) (lb/day) (ton/yr) N/A

	F	ORM 5	EP:	Emission Point Data	<u></u>				
Complete one (1) Form 5EP f	or EACH	l emissio	n poi	int (stack or fugitive emission	ns) rel	ated to the p	oropo	sed in	stallation.
Applicant Name: Laurel Sand &				 `	,		·		
1. Emission Point Ide	ntificat	ion Nam	e/Nu	ımber					
List the applicant assigned nam E-5	ne/numb	er for this	emiss	sion point and use this value	on the	e attached re	equire	ed plo	t plan:
2. Emission Point Des	scriptio	n							
Describe the emission point inc Conveyor #2 Discharge	luding al	l associate	ed eq	uipment and control devices	S:				
3. Emissions Schedu	le for ti	ne Emiss	sion	Point					
Continuous or Intermittent (C/	1/2	_		Seasonal Variation					
·	1):	С			herwis	se estimate s	seaso	nal va	ariation:
Minutes per hour:		60		Winter Percent			10		
Hours per day:		<u>16</u>		Spring Percent Summer Percent			30		
Days per week: Weeks per year:		5 37		Fall Percent			30		
4. Emission Point Info	ormatic			T all T ercent			30		
Height above ground (ft):	Jimatic					Length	:		Width:
Height above structures (ft):		N/A N/A		Length and width dimensio at top of rectangular stack		N/A			N/A
Exit temperature (°F):		N/A		Inside diameter at top of ro	ound s	tack (ft):			N/A
Exit velocity (ft/min):		N/A		Distance from emission po property line (ft):					N/A
Exhaust gas volumetric flow ra	ate	N/A		Building dimensions if emis point is located on buildin		Height	Len	•	Width
5. Control Devices As	a cociat	od with t		<u>'</u>	ig (it)	N/A	l N	I/A	N/A
Identify each control device as also required for each contr					numb	er of device	es. <u>A</u>	\ For	<u>n 6 is</u>
None			[☐ Thermal Oxidizer		No			
Baghouse	No			Regenerative					
Cyclone	No		[Catalytic Oxidizer		No			
☐ Elec. Precipitator (ESP)	No		[☐ Nitrogen Oxides Reducti	ion	No			
☐ Dust Suppression System	No			☐ Selective ☐ Catalytic	[☐ Non-Sele			
☐ Venturi Scrubber	No		F	☑ Oditalytic	L	Non-oate	•		
☐ Spray Tower/Packed Bed	No			Specify:					
Carbon Adsorber	No		TI	he moisture content of the material is	sufficie	nt to control the	release	e of par	ticulate matter.
☐ Cartridge/Canister									
☐ Regenerative									

6. Estimated Emissions from the Emission Point **At Projected Operations** At Design Capacity **Criteria Pollutants** (lb/hr) (lb/hr) (lb/day) (ton/yr) Particulate Matter (filterable as PM10) 0.0061 0.0981 0.0128 0.0061 Particulate Matter (filterable as PM2.5) 0.0017 0.0017 0.0277 0.0036 Particulate Matter (condensables) N/A Volatile Organic Compounds (VOC) N/A Oxides of Sulfur (SOx) N/A Oxides of Nitrogen (NOx) N/A Carbon Monoxide (CO) N/A Lead (Pb) N/A **At Projected Operations At Design Capacity Greenhouse Gases (GHG)** (lb/hr) (lb/hr) (lb/day) (ton/yr) Carbon Dioxide (CO₂) N/A Methane (CH₄) N/A Nitrous Oxide (N₂O) N/A Hydrofluorocarbons (HFCs) N/A Perfluorocarbons (PFCs) N/A Sulfur Hexafluoride (SF6) N/A Total GHG (as CO₂e) N/A **At Projected Operations** List individual federal Hazardous Air At Design Capacity Pollutants (HAP) below: (lb/hr) (lb/hr) (lb/day) (ton/yr) N/A

	F	ORM 5	EP:	Emission Point Data	a				
Complete one (1) Form 5EP f	or EACH	l emissio	n poi	int (stack or fugitive emission	ns) rel	ated to the p	oropo	sed ir	stallation.
Applicant Name: Laurel Sand &	Gravel, li	nc. T/A S.W	. Barri	ick & Sons - Legore Quarry					
1. Emission Point Ide	ntificat	ion Nam	e/Nu	umber					
List the applicant assigned nam E-6	ne/numb	er for this	emiss	sion point and use this value	on th	e attached r	equire	ed plo	t plan:
2. Emission Point Des	scriptio	n							
Describe the emission point inc Conveyor #3 Discharge	luding al	l associate	ed eq	uipment and control devices	s: 				
3. Emissions Schedu	le for ti	ne Emiss	sion	Point					
Continuous or Intermittent (C/	1)?	0		Seasonal Variation_					
·	.,.	С			herwis	se estimate s		nal va	ariation:
Minutes per hour: Hours per day:		60		Winter Percent Spring Percent			10		
Days per week:		16 5		Summer Percent			30		
Weeks per year:		37		Fall Percent			30		
4. Emission Point Info	ormatic								
Height above ground (ft):		N/A		Length and width dimensio	ne	Length	:		Width:
Height above structures (ft):		N/A		at top of rectangular stack		N/A			N/A
Exit temperature (°F):		N/A		Inside diameter at top of ro	ound s	stack (ft):			N/A
Exit velocity (ft/min):		N/A		Distance from emission po property line (ft):	int to	nearest			N/A
Exhaust gas volumetric flow ra (acfm):	ate	N/A	Building dimensions if emission Height Length Wid						Width N/A
5. Control Devices As	sociat	ed with t	he F	·	19 (11)	IN//A	1	-	19/73
Identify each control device as	ssociate	d with the	emis	ssion point and indicate the	numb	per of device	es. <u>A</u>	For	m 6 is
also required for each contr	oi aevid	<u>:e</u> . If none	cne	ck none:					
None			1	☐ Thermal Oxidizer		No			
Baghouse	No			Regenerative					
Cyclone	No		1	☐ Catalytic Oxidizer		No			
☐ Elec. Precipitator (ESP)	No		1	☐ Nitrogen Oxides Reduct	ion	No			
☐ Dust Suppression System	No			☐ Selective ☐ Catalytic		☐ Non-Sele			
☐ Venturi Scrubber	No		1	☑ Gatalytis	'	No			
☐ Spray Tower/Packed Bed	No			Specify:		_			
Carbon Adsorber	No		Т	he moisture content of the material is	sufficie	nt to control the	release	e of par	ticulate matter.
☐ Cartridge/Canister									
Regenerative									

6. Estimated Emissions from the Emission Point **At Projected Operations** At Design Capacity **Criteria Pollutants** (lb/hr) (lb/hr) (lb/day) (ton/yr) Particulate Matter (filterable as PM10) 0.0061 0.0981 0.0128 0.0061 Particulate Matter (filterable as PM2.5) 0.0017 0.0017 0.0277 0.0036 Particulate Matter (condensables) N/A Volatile Organic Compounds (VOC) N/A Oxides of Sulfur (SOx) N/A Oxides of Nitrogen (NOx) N/A Carbon Monoxide (CO) N/A Lead (Pb) N/A **At Projected Operations At Design Capacity Greenhouse Gases (GHG)** (lb/hr) (lb/hr) (lb/day) (ton/yr) Carbon Dioxide (CO₂) N/A Methane (CH₄) N/A Nitrous Oxide (N₂O) N/A Hydrofluorocarbons (HFCs) N/A Perfluorocarbons (PFCs) N/A Sulfur Hexafluoride (SF6) N/A Total GHG (as CO₂e) N/A **At Projected Operations** List individual federal Hazardous Air At Design Capacity Pollutants (HAP) below: (lb/hr) (lb/hr) (lb/day) (ton/yr) N/A

	F	ORM 5	EP:	Emission Point Data	3				
Complete one (1) Form 5EP for						ated to the p	ropos	sed in	stallation.
Applicant Name: Laurel Sand &					,	·	·		
1. Emission Point Ide	ntificat	ion Nam	e/Nu	ımber					
List the applicant assigned nam E-7	ne/numb	er for this	emiss	sion point and use this value	on the	e attached re	equire	ed plo	t plan:
2. Emission Point Des	scriptio	on							
Describe the emission point inc CAT C4.4 Tier 4 Diesel Engine (10	luding a		ed eq	uipment and control devices): 				
3. Emissions Schedul	le for tl	he Emiss	sion						
Continuous or Intermittent (C/	1)?	С		Seasonal Variation Check box if none: Oth	herwis	e estimate s	seaso	nal va	ariation:
Minutes per hour:		60		Winter Percent			10		
Hours per day:		16		Spring Percent			30		
Days per week:		5		Summer Percent			30		
Weeks per year:	4! -	37		Fall Percent			30		
4. Emission Point Info	ormatic		I			Longth			Width:
Height above ground (ft):		N/A		Length and width dimensio		Length			vvidiri.
Height above structures (ft):		N/A		at top of rectangular stack	` ′	N/A			N/A
Exit temperature (°F):		N/A		Inside diameter at top of ro		. ,			N/A
Exit velocity (ft/min):		N/A	1	Distance from emission po property line (ft):	int to	nearest			N/A
Exhaust gas volumetric flow ra (acfm):	ate	N/A	Building differsions if emission						Width N/A
5. Control Devices As	ecociat	od with t		·	9 (11)	IN/A	IN	/A	IN/A
Identify each control device as also required for each contr					numb	er of device	s. <u>A</u>	Fori	<u>n 6 is</u>
None			[☐ Thermal Oxidizer		No			
Baghouse	No			☐ Regenerative					
Cyclone	No		[Catalytic Oxidizer		No			
☐ Elec. Precipitator (ESP)	No		[☐ Nitrogen Oxides Reducti	ion	No			
☐ Dust Suppression System	No			☐ Selective ☐ Catalytic	[☐ Non-Sele☐ Non-Cata			
☐ Venturi Scrubber	No		Γ	Other	L	Non-Cata	•		
☐ Spray Tower/Packed Bed	No	<u></u>		Specify:		110			
Carbon Adsorber	No								
☐ Cartridge/Canister									
Regenerative									

6. Estimated Emissions from the Emission Point **At Projected Operations** At Design Capacity **Criteria Pollutants** (lb/hr) (lb/hr) (lb/day) (ton/yr) Particulate Matter (filterable as PM10) 0.2200 3.5200 0.4576 0.2200 Particulate Matter (filterable as PM2.5) N/A Particulate Matter (condensables) N/A Volatile Organic Compounds (VOC) N/A Oxides of Sulfur (SOx) 0.0005 0.0005 0.0072 0.4264 Oxides of Nitrogen (NOx) 0.0661 0.0661 1.0573 0.1376 Carbon Monoxide (CO) 0.8150 0.8150 13.0396 1.6967 Lead (Pb) N/A **At Projected Operations At Design Capacity Greenhouse Gases (GHG)** (lb/hr) (lb/hr) (lb/day) (ton/yr) Carbon Dioxide (CO₂) 0.2533 0.2533 4.0529 239.2000 Methane (CH₄) N/A Nitrous Oxide (N₂O) N/A Hydrofluorocarbons (HFCs) N/A Perfluorocarbons (PFCs) N/A Sulfur Hexafluoride (SF6) N/A Total GHG (as CO₂e) 0.2533 4.0529 239.2000 0.2533 **At Projected Operations** List individual federal Hazardous Air At Design Capacity Pollutants (HAP) below: (lb/hr) (lb/hr) (lb/day) (ton/yr) N/A

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

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

Applicant Name: Laurel Sand & Gravel, Inc. T/A S.W. Barrick & Sons - Legore Quarry

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.

of TAP	Premises Wide Total TAP Emissions	(lb/yr)	1500	400			
nissions	Premis Tota Emis	(lb/hr)	0.75	1.00			
Estimated Premises Wide Emissions of TAP	Projected TAP Emissions from Proposed Installation	(lb/hr)	0.15	0.75			
Estimated P	Actual Total Existing TAP Emissions	(lb/hr)	09:0	0.5			
	ид/ш ₃)	Annual	N/A	0.13			
	Screening Levels (µg/m³)	8-hour	3769	91			
	Screen	1-hour	18843	08			
	Class I or Class II?		11	1			
	CAS Number		64175	71432			
	Toxic Air Pollutant (TAP)		ex. ethanol	ex. benzene	Y/Z		

(attach additional sheets as necessary.)

Note: Screening levels can be obtained from the Department's website (<u>http://www.mde.maryland.gov</u>) 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 $200~
m{\mu g/m}^3$.

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

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. 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

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

Revised: 03/01/2016 Form Number MDE/ARMA/PER.05T TTY Users 1-800-735-2258

Recycled Paper Page 1 of 2

Page 2 of 2 Recycled Paper

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

<u>Step 3</u>: 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

i i	L	% Emission	Co	Costs	T-BACT Option
l arget Pollutants	Emission Control Option	Reduction	Capital	Annual Operating	Selected? (yes/no)
ex. ethanol and benzene	Thermal Oxidizer	66	\$50,000	\$100,000	ou
ex. ethanol and benzene	Low VOC materials	08	0	\$100.000	yes

(attach additional sheets as necessary)

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

The evaluation consists of a series of increasingly non-conservative (and increasingly rigorous) tests. Once a TAP passes a test in the evaluation, Pollutant (TAP) Regulations (COMAR 26.11.15.06)" provides guidance on conducting the evaluation. Summarize your results in the 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. no further analysis is required for that TAP. "Demonstrating Compliance with the Ambient Impact Requirement under the Toxic Air

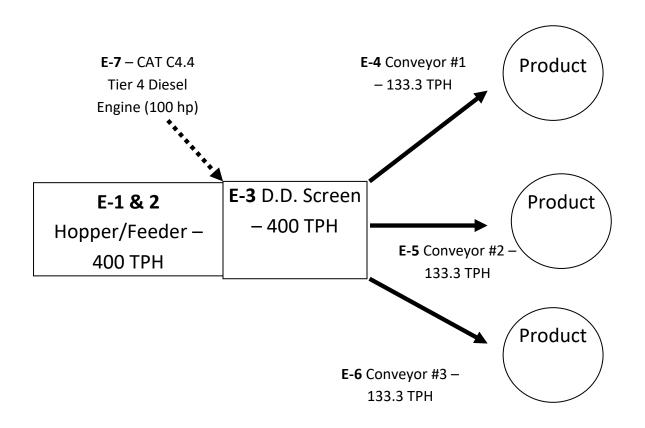
	Compliance Method Used?	AER or Screen	AER	Screen			
	ons per sis	Annual	N/A	0.12			
	Off-site Concentrations per Screening Analysis (µg/m³)	8-hour	N/A	1.05			
	Off-site C Scree	1-hour	N/A	1.5			
	Allowable Emissions Rate (AER) per COMAR 26.11.16.02A	(Ib/yr)	N/A	36.52			
	Allowable Rate (A COMAR 26	(lb/hr)	0.89	0.04			
ary.	Premises Wide Total TAP Emissions	(lb/yr)	1500	400			
as necessary.	Premiso Total Emis	(lb/hr)	92.0	1.00			
	evels	Annual	N/A	0.13			
docum	Screening Levels (µg/m³)	1-hour 8-hour	6928	91			
porting	Scre	1-hour	18843	80			
Attach sup	CAS		64175	71432			
Tollowing table. Attach supporting documentation	Toxic Air Pollutant (TAP)		ex. ethanol	ex. benzene			

(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.

Attachment #1

Metso Lokotrack ST2.8 Mobile Scalping Screen – Flow Diagram*



^{*}Screen is portable and will be used at more than one site. Is independent from any other plant on site.

Attachment #2 - Emissions Calculations

Metso Lokotrack ST22.8 Mobile Scalping Screen

			AP-42 Emissions Factors						Metso Scre	en Produc	tion										
	PM-10		PM- Filterable		P	M - 2.5		P	roduction D	ays:	260										
Crushers (controlled)	0.00054		0.0012			0.0001		-	ons Produc	ed:	1,664,00	00									
Screens (controlled)	0.00074		0.0022		C	.00005		Pi	oduction Ho	ours:	4,160										
Conveyors (controlled)	0.000046		0.00014		0.	.000013															
Truck Unloading	0.000016		0			0															
	Production		Emission Factor		Oper	ating Days		P	M-10 Emis	sions Prod	uced		PM-F	ilterable E	missions P	roduced		P	M-2.5 Emis	ssions Proc	luced
Dump Hopper (E-1)	1,664,000 tons/year	Х	Truck Unloading	÷	260	days/year	=	0.1024	lbs/day	0.0133	tons/year	=	0.0000	lbs/day	0.0000	tons/year	=	0.0000	lbs/day	0.0000	tons/year
Feeder (E-2)	1,664,000 tons/year	Х	Truck Unloading	÷	260	days/year	=	0.1024	lbs/day	0.0133	tons/year	=	0.0000	lbs/day	0.0000	tons/year	=	0.0000	lbs/day	0.0000	tons/year
Screen (E-3)	1,664,000 tons/year	Х	Screens (controlled)	÷	260	days/year	=	4.7360	lbs/day	0.6157	tons/year	=	14.0800	lbs/day	1.8304	tons/year	=	0.3200	lbs/day	0.0416	tons/year
Conveyor #1 (E-4)	554,667 tons/year	Х	Conveyors (controlled)	÷	260	days/year	=	0.0981	lbs/day	0.0128	tons/year	=	0.2987	lbs/day	0.0388	tons/year	=	0.0277	lbs/day	0.0036	tons/year
Conveyor #2 (E-5)	554,667 tons/year	Х	Conveyors (controlled)	÷	260	days/year	=	0.0981	lbs/day	0.0128	tons/year	=	0.2987	lbs/day	0.0388	tons/year	=	0.0277	lbs/day	0.0036	tons/year
Conveyor #3 (E-6)	554,667 tons/year	Х	Conveyors (controlled)	÷	260	days/year	=	0.0981	lbs/day	0.0128	tons/year	=	0.2987	lbs/day	0.0388	tons/year	=	0.0277	lbs/day	0.0036	tons/year
										tso 2.8 Scr				-Filterable						/letso Scre	_
								5.24	lbs/day	0.68	tons/year		14.98	lbs/day	1.95	tons/year		0.40	lbs/day	0.05	tons/year
Diesel Engine (E-7)	Emission Factor		Operating Hours			Power			Emission	ns Produce	d										
PM-10	0.0022	x	4,160 hours	x	100	hp	=	3.5200	lbs/day	0.4576	tons/year										
NOx	0.3 *	x	4,160 hours	х	100	hp	=	1.0573	lbs/day	0.1376	tons/year										

= **13.0396** lbs/day

= **0.0072** lbs/day

= **4.0529** lbs/day

1.6967 tons/year

0.4264 tons/year

239.2000 tons/year

3.7 *

0.00205

1.15

CO

SOx

CO2

* Tier 4 Emissions Standards (g/bhp*hr)

x 4,160 hours

x 4,160 hours

x 4,160 hours

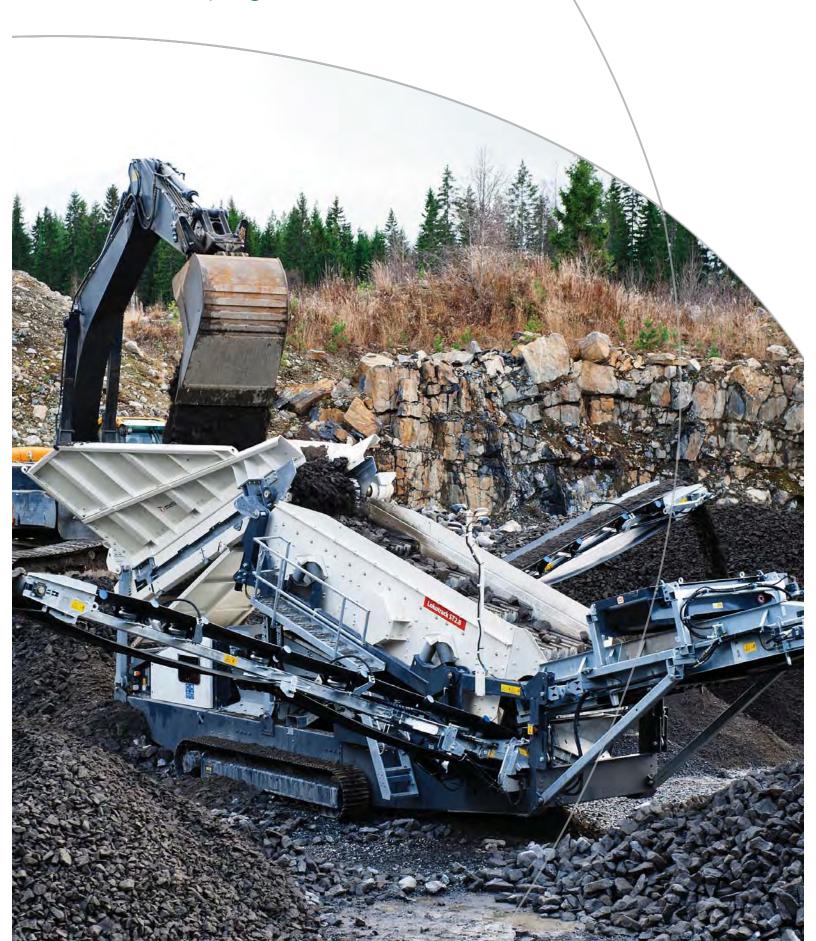
x 100 hp

x 100 hp

100 hp

Lokotrack® ST2.8™ Mobile scalping screen





Lokotrack ST2.8 Mobile scalping screen

Lokotrack ST2.8 makes the scalping of sticky recycling material look easy. The design principle has been simple: to optimize capacity in demanding scalping and to minimize unprofitable time on site.

The stickier the feed material the more throw needed in the scalping screen. Lokotrack 512.8 has the biggest exernic throw on the market to make it the best unit for the screening of top 50il, demolition waste and river gravel. Additionally, 512.8 can be fine tuned even for sand applications. The clearance under the screen has been increased by 20% and the bottom deck area is larger compared with 512.72".

In multi-stage crushing processes, the removal of fines is easy with a two-way split option. This feature combines material flow from the first and second deck to the main conveyor and maximizes the capacity and efficiency of the crushing process. Belfeeder and chervon

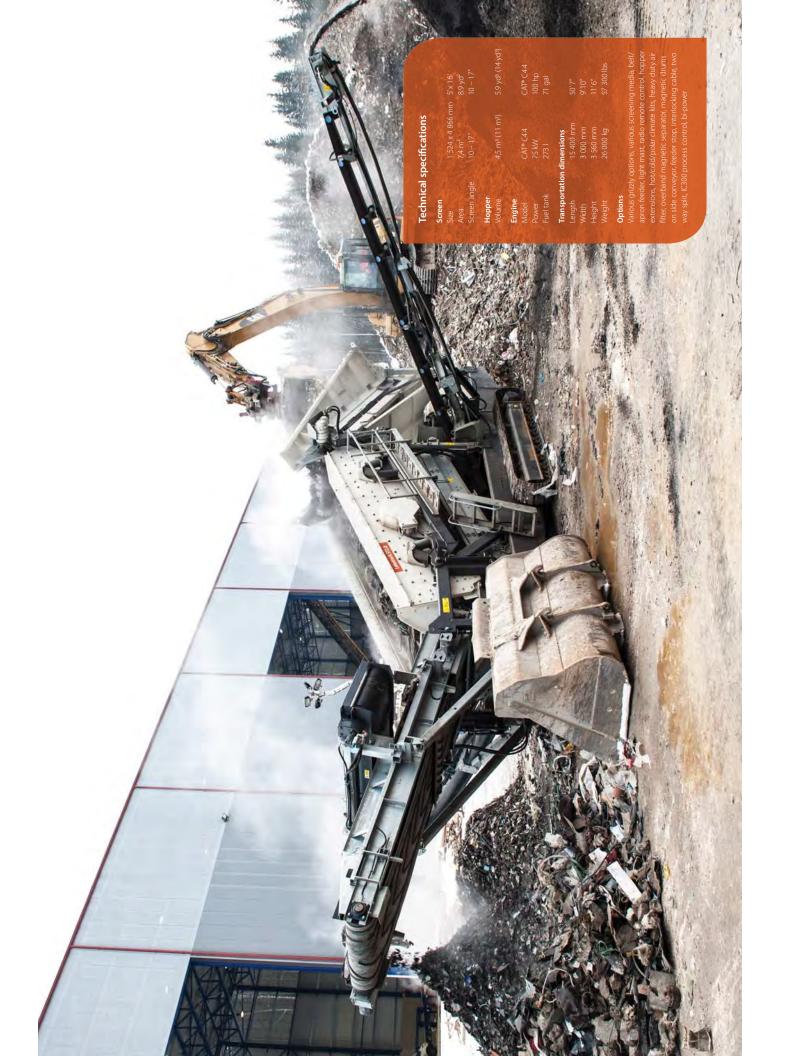
belts are standard features of Lokotrack ST2.8. In addition, apron feeder, hopper extension and magnetic separator can be selected to meet specific requirements.

Lokotrack ST2.8 is ready for screening in minutes thanks to hydraulically operated conveyors and screen including a patent pending feeder mechanism. Lokotrack ST2.8 is 25% lighter than similar machines. Because the weight is lower, transportation is easier.

The fuel-efficient scalping process can be started with safe push buttons or by the optional Metso IC300** process control system. IC300 includes features such as automatic feeder speed control and interlocking capability with Lokorrack cushing plants.











Metso Corporation, Lokomonkatu 3, P.O.Box 306, FI-33101 Tampere, Finland, tel. +358 20 484 142, fax +358 20 484 143 www.metso.com

Client#: 32334 LAURSAN

$ACORD_{\scriptscriptstyle{\mathbb{M}}}$

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 12/23/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

ting pertinduce does not come, any rights to the certificate i	notice in fice of such chaof sement(s).					
PRODUCER	CONTACT Maria Mayles					
CBIZ Insurance Svcs., Inc.	PHONE (A/C, No, Ext): 301 777-1500 FAX (A/C, No):	855-288-6106				
44 Baltimore Street	E-MAIL ADDRESS: mmayles@cbiz.com					
Cumberland, MD 21502	INSURER(S) AFFORDING COVERAGE	NAIC#				
301 777-1500	INSURER A: Travelers Property Casualty Co of Am.	25674				
INSURED	INSURER B: Travelers Prop. Cas. Co. of America	25674				
Laurel Sand & Gravel, Inc.	INSURER C: Rockwood Casualty Insurance Company	35505				
PO Box 850	INSURER D: RSUI Indemnity Co.	22314				
Laurel, MD 20725	INSURER E :					
	INSURER F:					

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

ISR TR		TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s
A	Х	CLAIMS-MADE X OCCUR			Y6300152L504TIL20	12/31/2020	12/31/2021	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence)	\$1,000,000 \$100,000
	X	BI/PD Ded:10000						MED EXP (Any one person)	\$5,000
								PERSONAL & ADV INJURY	\$1,000,000
	GEN	'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$2,000,000
		POLICY X PRO- JECT LOC						PRODUCTS - COMP/OP AGG	\$2,000,000
		OTHER:							\$
В	AUT	OMOBILE LIABILITY			8101L5541222014G	12/31/2020	12/31/2021	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000
	X	ANY AUTO						BODILY INJURY (Per person)	\$
		OWNED SCHEDULED AUTOS ONLY						BODILY INJURY (Per accident)	\$
	X	HIRED AUTOS ONLY X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$
									\$
3	X	UMBRELLA LIAB X OCCUR			CUP400832014	12/31/2020	12/31/2021	EACH OCCURRENCE	\$15,000,000
		EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$15,000,000
		DED RETENTION \$							\$
C		KERS COMPENSATION EMPLOYERS' LIABILITY			WC695307	12/31/2020	12/31/2021	X PER OTH- STATUTE ER	
	ANY	PROPRIETOR/PARTNER/EXECUTIVE N	N/A					E.L. EACH ACCIDENT	\$1,000,000
	(Man	idatory in NH)	.,,,,					E.L. DISEASE - EA EMPLOYEE	\$1,000,000
	of yes	s, describe under CRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$1,000,000
4	Coı	ntr Equipment			Y6300152L504TIL20	12/31/2020	12/31/2021	\$100,000 leased/ren	ted
D	Fxc	ess Liability			NHA092475	12/31/2020	12/31/2021	\$5,000,000	

ESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER	CANCELLATION
--------------------	--------------

Maryland Department of the Environment 1800 Washington Blvd. Baltimore, MD 21230 SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Edward R. Sward

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SAFETY DATA SHEET (SDS) FOR LIMESTONE

SECTION I –	PRODUCT & COMPANY IDENTIFICATION
Manufacturer:	S. W. Barrick & Sons 14504 Greenview Drive, Suite 210 Laurel, Maryland 20708
	Information Telephone Number: 301-953-7650 Emergency Telephone Number: 301-953-7650
Product Chemical Name: Product Identification/Synonyms:	Crushed Stone (Limestone) Crushed Stone, Aggregate, Manufactured Sand

S	ECTION II – HAZARD IDENTIFICATION
Primary Routes of Entry:	Skin contact, eyes, Acute and Chronic inhalation, and ingestion.
Hazard Pictogram:	
Signal word:	Danger
Acute Exposure effects to Product	
Skin	Exposure to dust may cause dry and irritate the skin.
Eyes	Exposure may cause eye irritation.
Inhalation	Inhalation can irritate nose, throat, and lungs, causing coughing, sneezing, and shortness of breath.
Ingestion	Do not ingest aggregates. Ingestion of small quantities is not expected to be harmful. If ingested in large quantities, it may cause intestinal distress.

SECTION III – PRODUCT AND COMPONENT DATA					
Ingredient Name	CAS	Approximate	Exposure Limits	Exposure Limits	
	Registry Number	Percentage	ACGIH TLV (mg/m³)	OSHA PEL(mg/m ³)	
Limestone	1317-65-3	100	10 (nuisance dust)	15 total (dust)	
Quartz (Crystalline Silica)	14808-60-7	>1	.01 (respirable dust)	.01 (respirable dust)	

SECTION IV – FIRST AID MEASURES		
Skin Contact	Rinse the exposed area with cool water. Wash exposed area with mild liquid soap. Seek medical attention for a rash or continued irritation.	
Eye Contact	Irrigate exposed eye(s) with clean water or saline solution for at least 15 minutes while holding the eye lid(s) open. Seek medical attention for abrasions, embedded particles, or persistent irritation.	
Ingestion	If the victim is conscious, provide clean water to rinse the mouth. Provide large quantities water for the victim to drink. Seek medical attention immediately.	
Inhalation	Immediately move the person to fresh air. Dust should be cleared from the throat and nasal passages. Seek medical attention if irritation persists. Monitor vital signs and administer CPR if necessary.	

SECTION V – FIRE AND EXPLOSION HAZARD DATA				
Flash Point and Method	Non-combustible	Extinguishing Media	Use extinguishing media for surrounding fire conditions	
Combustion Products	Decomposes at 825° C	General Hazard	Avoid breathing dust	
Fire Fighting Procedures: Limestone poses no fire related hazard. Use appropriate personal protective clothing and equipment for surrounding fire conditions.				

SECTION VI – ACCIDENTAL RELEASE MEASURES

Place in stable containers for disposal. Avoid procedures that generate dust. If dust is generated wear appropriate protective equipment as described in section VIII

SECTION VII - STORAGE AND HANDLING PRECAUTIONS

Reparable crystalline silica-containing dust may be generated during the processing, handling and storage. The personal protective measures in Section VIII of this SDS should be followed. Use methods that will minimize dust generation.

Do not stand on stockpiles of this material, as it may be unstable.

This product is not intended for abrasive blasting use.

Do not store near food or beverage.

SECTION VIII – PERSONAL PROTECTIVE EQUIPMENT AND CONTROL MEASURES

Engineering Controls: Use exhaust, ventilation, or other effective suppression measures to maintain dust exposure levels below the established exposure limits.

Respiratory Protection: Respiratory protection is typically not required under normal conditions. If dust concentrations exceed OSHA/MSHA Personal Exposure Limits, wear appropriate NIOSH/MSHA-approved respiratory protection. Respirators should be properly fitted for maximum effectiveness.

Skin Protection: Long cuffless pants, long sleeve shirts, gauntlet-type gloves and appropriate boots should be used to prevent exposure. Dust exposed personal protective equipment should be cleaned after each use and exposed clothing should be laundered after each use.

Eye Protection: Safety glasses with side shields that comply with ANSI Standard Z87.1 should be worn as minimal protection when eye exposure to airborne particles exists. Dust goggles should be worn when excessive dust conditions exist or are anticipated.

SECTION IX – PHYSICAL and CHEMICAL PROPERTIES					
Boiling Point	N/A		Vapor Pressure (mm Hg)	N/A	
Specific Gravity (H ₂ 0=1)	2.6 - 2.8		Appearance and Odor	Angular to round, gray	
Vapor Density (Air=1)	N/A		Freezing Point	None, Solid	
Solubility in Water	Insoluble		Evaporation Rate	N/A	
Physical State	Solid		Odor	None	
PH in Water	Neutral		Viscosity	None, Solid	

SECTION X – STABILITY and REACTIVITY		
Stability	Product is Stable	
Incompatibility	Aggregate dissolves in hydrofluoric acid, and may produce corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.	
Hazardous Decomposition	Carbon Dioxide	
Hazardous Polymerization	None	

SECTION XI – TOXICOLOGICAL INFORMATION

Effects of Chronic Exposure

Proper use of Limestone Aggregates for construction purposes is not believed to cause acute toxic effects. This product contains crystalline silica, which has been classified as a human carcinogen by IRAC and NPT.

Repeated overexposures to high levels of respirable crystalline silica (cristobalite, quartz, and tridymite) can cause silicosis, serious and fatal lung disease, scleroderma (thickening of skin, systemic lupus erythematosus, rheumatoid arthritis) and disease affecting the kidneys.

SECTION XII - ECOLOGICAL INFORMATION

Ecotoxicity: Because of the elevated pH of this product, it might be expected to produce some ecotoxicity upon exposure to certain aquatic organisms and aquatic systems in high concentrations.

Environmental Fate: This material shows no bioaccumulation effect or food chain concentration toxicity.

SECTION XIII – SPILL AND DISPOSAL PRACTICES

The cleanup of spilled material may cause dusty conditions.

The personal protective measures in Section VIII of this SDS should be followed.

Wetting material will minimize dust generation. Materials should be disposed of according to all applicable federal, state, and local laws and regulations.

SECTION XIV - TRANSPORTATION

DOT Classification – None Placard Requirement: None

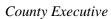
SECTION XV - REGULATORY INFORMATION

Limestone is not classified as a hazardous material by US DOT and is not regulated by the Transportation of Dangerous Goods (TDG) when shipped by any mode of transport.

SECTION XVI - DATE OF PREPARATION and DISCLAIMER

Revision Summary: Revised October 12, 2015

The information in this SDS is believed to be current and accurate. No warranty, expressed or implied, of merchantability, fitness or otherwise is made. Any party using this product should review all federal, state, or local laws and regulations prior to use. S. W. Barrick & Sons is not responsible for the condition, performance, handling, storage, or disposal of the aggregate after the buyer takes title by pickup at the plant or delivery to the buyer's jobsite by S. W. Barrick & Sons.





FREDERICK COUNTY GOVERNMENT

DIVISION OF PLANNING & PERMITTING

Department of Development Review

Steven C. Horn, Division Director Michael L. Wilkins, Director

July 2, 2021

Laurel Sand & Gravel, Inc. 6110 Frost Place Suite 150 Laurel, MD 20707

Re: 10325 Oak Hill Rd,

Keymar, MD 21757 Tax Map 34, Parcel 0294, Tax ID # 11289002,

Zoning Mineral Mining (MM)

V265273

To Whom It May Concern,

This letter is in response to your zoning verification application submitted on June 14, 2021. In your letter you requested the application process for the FTC requires that we include "confirmation from the local zoning authority that the proposed screening operation is a permitted use for the property on which it will be installed".

The above referenced property (Property) is currently zoned Mineral Mining (MM) under the Frederick County Zoning Ordinance (Ordinance).

Ordinance Section 1-19-5.250(D) Industrial Zoning Districts. The Mineral Mining District (MM) is a floating zone established for the purpose of providing for the development of needed mineral resources in areas where such resources exist subject to adequate safeguard for the conservation of the environment

Ordinance Section 1-19-10.400.6.Land Use. Mineral Mining as used herein, applies to the extraction and processing of crushed stone, building stone, sand, clay, limestone, gravel deposits, and other minerals mined in a quarry type operation. The standards set forth in this section do not regulate or permit the extraction of metallic minerals, fossil fuels or other minerals not specifically enumerated above.

- (A) The uses permitted in the mineral mining district shall be agricultural activities and forestry activities permitted in the agricultural zone over which the mineral mining designation was attached and the following:
 - (1) Mineral extraction and processing, including grinding, polishing, washing, mixing and sorting, stockpiling, and manufacture of finished products which contain at least 40% of material derived on site:
 - (2) Borrow pits and rubble fills; and
 - (3) Those accessory uses listed under § 1-19-8.251.

The description of the proposed use that is provided in your zoning verification request letter is consistent with Ordinance Section 1-19-10.400.6. Land Use.

A review of the records available to this office does not indicate any existing zoning violations at this Property at this time.

If you have any further questions, please contact me at 301-600-1491.

Sincerely,

Tolson DeSa

Zoning Administrator

ec: M. Wilkins K. Mitchell T. Sinton

MARYLAND DEPARTMENT OF THE ENVIRONMENT

AIR AND RADIATION ADMINISTRATION APPLICATION FOR A PERMIT TO CONSTRUCT

SUPPLEMENT TO DOCKET #11-21

COMPANY: Laurel Sand & Gravel, Inc. T/A S.W. Barrick & Sons - Legore Quarry

LOCATION: 11640 Woodsboro Pike, Keymar, MD 21757

APPLICATION: Installation of one (1) Metso Lokotrack ST2.8 Mobile Scalping Screen.

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

MARYLAND DEPARTMENT OF THE ENVIRONMENT AIR AND RADIATION ADMINISTRATION

NOTICE OF TENTATIVE DETERMINATION, OPPORTUNITY TO REQUEST A 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 Laurel Sand & Gravel, Inc. T/A S.W. Barrick & Sons - Legore Quarry on May 12, 2021 for the installation of one (1) Metso Lokotrack ST2.8 Mobile Scalping Screen. The proposed installation will be located at 11640 Woodsboro Pike, Keymar, MD 21757.

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 and is now ready to receive public comment on the application.

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. Look for Docket #11-21 at the following link:

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

Interested persons may request a public hearing and/or submit written comments on the tentative determination. Requests for a public hearing must be submitted in writing and must be received by the Department no later than 20 days from the date of this notice. Written comments must be received by the Department no later than 30 days from the date of this notice.

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 (if a hearing is requested), whichever is later. The public comment period may only be extended one time for a 60-day period.

All requests for a public hearing, requests for an extension to the public comment period, and all written comments should be emailed to Ms. Shannon Heafey at shannon.heafey@maryland.gov.

Further information may be obtained by contacting Ms. Shannon Heafey by email at shannon.heafey@maryland.gov or by phone at (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 LAUREL SAND & GRAVEL, INC. T/A S.W. BARRICK & SONS LEGORE QUARRY

PROPOSED INSTALLATION OF ONE (1) MOBILE SCALPING SCREEN POWERED BY ONE (1) DIESEL ENGINE

I. INTRODUCTION

The Maryland Department of the Environment (the "Department") received an application from Laurel Sand & Gravel, Inc. T/A S.W. Barrick & Sons on May 12, 2021 for a Permit to Construct for one (1) Metso Lokotrack ST2.8 mobile scalping screen powered by one (1) 100 hp diesel engine. The proposed installation will be located at Legore Quarry at 11640 Woodsboro Pike, Keymar, Maryland 21757.

A notice was placed in <u>The Frederick News-Post</u> and on July 12, 2021 and July 19, 2021 announcing an opportunity to request an informational meeting to discuss the application for a Permit to Construct. An informational meeting was not requested.

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 installation is expected to comply with all applicable air quality regulations. A notice will be published to provide the public with opportunities to request a public hearing and to comment on the application, the Department's tentative determination, the draft permit conditions, and other supporting documents. The Department will not schedule a public hearing unless a legitimate request is received.

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

S.W. Barrick & Sons Legore Quarry currently operates a 600 ton per hour, electric powered, crushing and screening plant originally installed in 1995. The existing facility is controlled by wet suppression systems, and consists of three (3) crushers, twenty-five (25) conveyors, one (1) stacker, and five (5) triple deck screens. There are two (2) baghouses associated with two (2) of the crushers.

B. Proposed Installation

S.W. Barrick & Sons Legore Quarry is proposing to install one (1) Metso Lokotrack ST2.8 mobile scalping screen powered by one (1) 100 horsepower diesel engine and operating up to 400 tons per hour to separate dirty shot rock at the facility.

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, Subpart A (General Provisions) and Subpart OOO for Nonmetallic Mineral Processing Plants.
- (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 the submittals.
- (c) COMAR 26.11.06.02C(1), which limits visible emissions other than uncombined water to not more than 20 percent opacity.
- (d) COMAR 26.11.06.03B(1), which limits the concentration of particulate matter in any exhaust gases to not more than 0.05 grains per standard cubic foot of dry exhaust gas.
- (e) COMAR 26.11.06.03C and 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.
- (f) COMAR 26.11.06.08 and .09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

- (g) COMAR 26.11.06.12, which prohibits the construction, modification, or operation of an NSPS source in a manner which results or will result in a violation of the provisions of 40 CFR, Part 60.
- (h) COMAR 26.11.09.05E, which limits visible emissions from the diesel engine associated with the mobile scalping screen to 10 percent opacity and 40 percent opacity during idle and operating mode, respectively. Exceptions to these opacity limits are as follows:
 - (i) engines that are idling continuously when not in service: 30 minutes; and
 - (ii) all other engines: 15 minutes.
- (i) COMAR 26.11.09.07A(2), which limits the sulfur content of distillate fuel oils to not more than 0.3 percent by weight.
- (j) 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.
- (k) 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 Frederick 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. Frederick 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

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 emission factors for crushing and screening plants and U.S. EPA engine tier emissions limits for diesel engines. The conservative U.S. EPA's SCREEN3 model was also used to project the maximum ground level concentrations from the proposed facility, which were 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 based on the emissions from the proposed installation are listed in column 2 of Table II. The combined impact of the projected contribution from the proposed 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.
- C. Compliance with Air Toxics Regulations The toxic air pollutants of concern that would be emitted from this installation are listed in column 1 of Table III. The predicted maximum off-site ambient concentrations of these toxic air pollutants are shown in column 4 of Table III, and in each case 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.

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 timeweight average.

TABLE I
PROJECTED MAXIMUM EMISSIONS FROM THE PROPOSED INSTALLATION

	PROJECTED MAXIMUM EMISSIONS FROM PROPOSED INSTALLATION	
POLLUTANT	(lbs/day)	(tons/year)
Nitrogen Dioxide (NO ₂)	50	6.4
Sulfur Dioxide (SO ₂)	3	0.4
Carbon Monoxide (CO)	11	1.4
Volatile Organic Compounds (VOC)	1	0.1
Particulate Matter (PM ₁₀)*	18.5	2.4

^{*}Includes some downstream equipment already permitted at the site.

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/m³)	BACKGROUND AMBIENT AIR CONCENTRATIONS (µg/m³)*	NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) (µg/m³)
Nitrogen Dioxide (NO ₂)	annual avg.→ 6.0	annual avg.→ 27.0	annual avg.→ 100
Carbon Monoxide (CO)	8-hour max→ 11.3 1-hour max → 16.1	8-hr max.→ 802 1-hr max.→ 916	8-hr max.→ 10,000 1-hr max.→ 40,000
Sulfur Dioxide (SO ₂)	24-hour max. → 2.0 annual avg. → 0.4	24-hour max.→ 5.8 annual avg.→ 1.1	24-hour max.→ 366 annual avg.→ 78.5
Particulate Matter (PM ₁₀)	24-hr max → 46.6	24-hr max.→ 36	24-hr max.→ 150

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

 NO_2 , CO and $SO_2 \rightarrow HU$ -Beltsville Monitoring Station in Prince George's County $PM_{10} \rightarrow Glen$ Burnie Monitoring Station in Anne Arundel County

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

TOXIC AIR POLLUTANTS	SCREENING LEVELS (μg/m³)	PROJECTED WORST-CASE FACILITY-WIDE EMISSIONS (lbs/hr)	PREDICTED MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS (µg/m³)
Crystalline Silica	1-hour→ None 8-hour→ 0.25 Annual→ None	0.00014	1-hour→ None 8-hour→ 0.021 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 PERMIT

Larry Hogan Governor Ben Grumbles Secretary

Air and Radiation Administration

1800 Washington Boulevard, Suite 720 Baltimore, MD 21230

Baltimore	e, MD 21230
☐ Construction Permit	Operating Permit
PERMIT NO.: As listed on Page 2	DATE ISSUED: [Date Issued]
PERMIT FEE: \$2,000 (Paid)	EXPIRATION DATE: <u>In accordance with COMAR 26.11.02.04B</u>
LEGAL OWNER & ADDRESS Laurel Sand & Gravel, Inc. T/A S.W. Barrick & Sons PO Box 850 Laurel, MD 20725 Attention: Mr. Collin Sumpter, Resource Manager	SITE S.W. Barrick & Sons Legore Quarry 11640 Woodsboro Pike Keymar, MD 21757 Premises # 021-0129 AI # 3085
SOURCE DESCRIPTION This permit authorizes the installation of one (1) powered by one (1) 100 hp diesel engine.	Metso Lokotrack ST2.8 mobile scalping screen
This permit supersedes all previous permits to co	onstruct issued to ARA Premises No. 021-0129.
This source is subject to the condi	tions described on the attached pages.
Pag	e 1 of 13
Program Manager D	Director, Air and Radiation Administration

INDEX

Part A – General Provisions

Part B – Applicable Regulations

Part C – Construction and Operating Conditions

Part D – Notifications and Testing

Part E – Record Keeping and Reporting

Part F – Temporary Permit-To-Operate Conditions

This permit-to-construct incorporates requirements for the following registered installations:

installations:			
ARA Registration Number	Description	Date of Installation	
021-0129-6- 0526	One (1) 600 ton per hour, electric powered, crushing and screening plant, comprised of the following:	1995	
	• Equipment ID No. 2: One (1) 600 tph, 5348 Cedar Rapids crusher.		
	 Equipment ID No. 4: One (1) 48" conveyor #25. Equipment ID No. 5: One (1) 5'x16' triple deck screen. Equipment ID No. 7: One (1) 36" conveyor #29. 		
	Equipment ID No. 8: One (1) 36" conveyor #26.Equipment ID No. 10: One (1) 36" conveyor #28.		
	 Equipment ID No. 12: One (1) 36" conveyor #1. Equipment ID No. 13: One (1) 36" conveyor #2. Equipment ID No. 14: One (1) 6'x20' triple deck screen. 		
	• Equipment ID No. 15: One (1) 350 tph, Eljay 66" STD cone crusher controlled by one (1) baghouse		
	 associated with the plant. Equipment ID No. 16: One (1) 36" conveyor #10. Equipment ID No. 17: One (1) 36" conveyor #11. 		
	• Equipment ID No. 18: One (1) 36" conveyor #8. • Equipment ID No. 19: One (1) 36" conveyor #9.		
	 Equipment ID No. 20: One (1) 42" conveyor #4. Equipment ID No. 21: One (1) 8'x20' triple deck screen. 		
	 Equipment ID No. 22: One (1) 8'x20' triple deck screen. Equipment ID No. 23: One (1) 36" conveyor #5. Equipment ID No. 24: One (1) 36" conveyor #6. 		
	• Equipment ID No. 24: One (1) 30 conveyor #6. • Equipment ID No. 25: One (1) 200 tph, Spokane VSI crusher controlled by one (1) baghouse associated with the plant.		
	• Equipment ID No. 26: One (1) 48" conveyor #7.		

	 Equipment ID No. 27: One (1) 36" conveyor #12. Equipment ID No. 28: One (1) 36" conveyor #13. Equipment ID No. 29: One (1) 36" conveyor #14. Equipment ID No. 30: One (1) 36" conveyor #15. Equipment ID No. 31: One (1) 6'x20' triple deck screen Equipment ID No. 32: One (1) 36" stacker #16. Equipment ID No. 33: One (1) 36" conveyor #17. Equipment ID No. 34 One (1) 36" conveyor #18. Equipment ID No. 35 One (1) 36" conveyor #20. Equipment ID No. 37 One (1) 36" conveyor #21. Equipment ID No. 38 One (1) 36" conveyor #23. 	
	 Equipment ID No. 38 One (1) 36" conveyor #23. Equipment ID No. 40 One (1) 36" conveyor #19. 	
021-0129-6- 0699	One (1) Metso Lokotrack ST2.8 mobile scalping screen powered by one (1) Tier 4 100 hp diesel engine and operating up to 400 tons per hour to separate dirty shot rock.	2021

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) All valid applications for Processing or Manufacturing Equipment (Form 5) received at the Department prior to issuance of this permit. This includes the Form 5 application received May 12, 2021 for the installation of one (1) mobile scalping screen powered by one (1) Tier 4 100 hp diesel engine.
 - (b) All valid Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstrations (Form 5T) received at the Department prior to issuance of this permit. This includes the Form 5T application received May 12, 2021.
 - (c) All valid Emission Point Data (Form 5EP) received at the Department prior to issuance of this permit. This includes the Form 5EP application received May 12, 2021.
 - (d) Supplemental Information including site maps, zoning approval, and emissions calculations received at the Department on May 12, 2021 and July 6, 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 Frederick 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;
 - 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) Nothing in this permit authorizes the violation of any rule or regulation or the creation of a nuisance or air pollution.
- (5) If any provision of this permit is declared by proper authority to be invalid, the remaining provisions of the permit shall remain in effect.
- (6) This permit supersedes all previous permits-to-construct issued to ARA Premises No. 021-0129.

(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, record keeping, and reporting requirements included in federal New Source Performance Standards (NSPS) promulgated under 40 CFR 60, Subparts A and 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:
 - (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 26.11.06.02C(1), which limits visible emissions other than uncombined water to not more than 20 percent opacity.
- (e) COMAR 26.11.06.03B(1), which limits the concentration of particulate matter in any exhaust gases to not more than 0.05 grains per standard cubic foot of dry exhaust gas.
- (f) COMAR 26.11.06.03C and 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.
- (g) COMAR 26.11.06.12, which prohibits the construction, modification, or operation of an NSPS source in a manner which results or will result in a violation of the provisions of 40 CFR, Part 60.
- (h) COMAR 26.11.09.05E, which limits visible emissions from the diesel engine associated with the mobile scalping screen to 10% and 40% opacity during idle and operating modes, respectively. Exceptions to these opacity limits are as follows:
 - (i) engines that are idling continuously when not in service: 30 minutes; and
 - (ii) all other engines: 15 minutes.

- (i) 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 26.11.02.14D, which requires that the Permittee submit to the Department not later than 60 days prior to initiating operation of the installation for which this permit is issued a completed application for a State permit-to-operate.
 - (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 such submittals.
 - (d) 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.
 - (e) 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.
 - (f) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions would unreasonably endanger human health.

Part C – Construction and Operating Conditions

(1) Except as otherwise provided in this part, all registered equipment shall be constructed and 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) The Permittee shall maintain and operate all air pollution control equipment so as to assure full and continuous compliance with all applicable air pollution control regulations and permit conditions.
- (3) The exhaust gases from the one (1) 350 ton per hour, Eljay 66" STD cone crusher and the one (1) 200 ton per hour, Spokane VSI crusher shall vent through a baghouse prior to discharging to the atmosphere to comply with the visible emissions and particulate matter requirements of COMAR 26.11.06.02C(1) and .03B(1) and the following particulate matter and opacity limits specified in 40 CFR 60, Subpart OOO for nonmetallic mineral processing plants equipped with capture systems constructed before April 22, 2008:
 - (a) No more than 0.022 gr/dscf from the baghouse stack; and
 - (b) No more than 7 percent opacity from the baghouse stack. [Reference: 40 CFR §60.672(a) and Table 2 to 40 CFR 60, Subpart OOO]
- (4) Wet suppression systems shall be used whenever needed to comply with the particulate matter handling requirements of COMAR 26.11.06.03C and D and the following opacity limits specified in 40 CFR 60, Subpart OOO for nonmetallic mineral processing plants constructed before April 22, 2008:
 - (a) No more than 15 percent opacity from the one (1) 600 ton per hour, 5348 Cedar Rapids crusher; and
 - (b) No more than 10 percent opacity from all other fugitive sources. [Reference: 40 CFR §60.672(b) and Table 3 to 40 CFR 60, Subpart OOO]
- (5) Wet suppression systems shall be used whenever needed to comply with the particulate matter handling requirements of COMAR 26.11.06.03C and D and the following opacity limits for affected facilities at nonmetallic mineral processing plants constructed, modified, or reconstructed on or after April 22, 2008 as specified in 40 CFR 60, Subpart OOO:
 - (a) No more than 12 percent opacity from crushers; 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]
- (6) The Permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression systems for affected facilities at nonmetallic mineral processing plants constructed, modified, or reconstructed on or after April 22, 2008. 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.

<u>Note</u>: This requirement is applicable to the mobile scalping screen (ARA Registration No. 021-0129-6-0699).

- (7) Fugitive dust from plant roads and stockpiles shall be controlled, as necessary, by using water or approved chemical dust suppressants or a combination, thereof.
- (8) The engine associated with the mobile scalping screen (ARA Registration No. 021-0129-0699) shall be a nonroad engine, as defined in 40 CFR §1068.3, unless the Permittee complies with the stationary engine requirements of 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ, as applicable.

Part D - Notifications and Testing

- (1) The Permittee shall submit written or electronic notification to the Department of the initial startup date of the mobile scalping screen.
- (2) Not later than 180 days after initial startup of the mobile scalping screen, the Permittee shall demonstrate compliance with all applicable opacity standards. [Reference: 40 CFR §60.11(b) and §60.672(b)]
- (3) 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)]

- (4) 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)]
- (5) 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.
- (6) Within 45 days following the required Method 9 observations, the Permittee shall submit the results to the Department.

Part E – 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) The types and amount of material processed each month in the crushing and screening plant;
 - (b) Records of all equipment located at the site, including a description of the equipment, the rated capacity, and the installation date;
 - (c) The hours of operation for the engine for each operating day;
 - (d) The amount of diesel fuel burned in the diesel engine each month;
 - (e) All opacity observation test results for the mobile scalping screen;
 - (f) A copy of the notification of initial start-up for the mobile scalping screen; and
 - (g) A log of each periodic inspection of the wet suppression systems including dates and 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:

- (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

- (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.

(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 F – 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 mobile scalping screen for a period of up to 180 days after initiating operation.
- (2) The Permittee shall provide the Department with written or electronic notification of the date on which operation of the [new installation] is initiated. Such notification shall be provided within 10 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 permitto-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/naags-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