AIR AND RADIATION ADMINISTRATION APPLICATION FOR A PERMIT TO CONSTRUCT

DOCKET #07-23

- COMPANY: York Building Products Co., Inc.
- LOCATION: Principio Quarry 1079 Belvidere Road Port Deposit, MD 21904
- APPLICATION: Installation of one (1) crusher and one (1) screener, powered by electricity, to an existing quarry and an overall throughput increase for the entire plant to 800 tons per hour

ITEM	DESCRIPTION
1	Notice of Application and Opportunity to Request an Informational Meeting
2	Environmental Justice (EJ) Information - EJ Fact Sheet and MDE Score and Screening Report
3	Permit to Construct Application Forms – Forms 5, 5 EP, emissions calculations, site plans.
4	Modeling Report
5	Zoning Approval

MARYLAND 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 York Building Products, Co., Inc. on January 26, 2023 for the installation of one (1) crusher and one (1) screener, powered by electricity, to an existing quarry and an overall throughput increase for the entire plant to 800 tons per hour. The proposed modification is located at Principio Quarry, 1079 Belvidere Road, Port Deposit, MD 21904.

In accordance with HB 1200/Ch. 588 of 2022, the applicant provided an environmental justice (EJ) Score for the census tract in which the project is located using the Maryland EJ mapping tool. The EJ Score, expressed as a statewide percentile, was shown to be 5.76 which the Department has verified. This score considers three demographic indicators – minority population above 50%, poverty rate above 25% and limited English proficiency above 15%.

Copies of the application, the EJ mapping tool screening report (which includes the score), and other supporting documents are available for public inspection on the Department's website at https://mde.maryland.gov/programs/Permits/AirManagementPermits/Pages/index.aspx (click on Docket Number 07-23). Any applicant-provided information regarding a description of the environmental and socioeconomic indicators contributing to that EJ score can also be found at the listed website. Such information has not yet been reviewed by the Department. A review of the submitted information will be conducted when the Department undertakes its technical review of all documents included in the application.

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. A requested informational meeting will be held virtually using teleconference or internet-based conferencing technology unless a specific request for an inperson informational meeting is received. All requests for an informational meeting should be directed to the attention of Ms. Shannon Heafey, Air Quality Permits Program, Air and Radiation Administration, 1800 Washington Boulevard, Baltimore, Maryland 21230. Further information may be obtained by calling Ms. Shannon Heafey at 410-537-4433.

Christopher R. Hoagland, Director Air and Radiation Administration



The Applicant's Guide to Environmental Justice and Permitting What You Need to Know

This fact sheet is designed to provide guidance to applicants on incorporating environmental justice screening requirements pursuant to House Bill 1200, effective October 1, 2022.

What is Environmental Justice?

The concept behind the term environmental justice (EJ) is that regardless of race, color, national origin, or income, all Maryland residents and communities should have an equal opportunity to enjoy an enhanced quality of life. How to assess whether equal protection is being applied is the challenge.

Communities surrounded by a disproportionate number of polluting facilities puts residents at a higher risk for health problems from environmental exposures. It is important that residents who may be adversely affected by a proposed source be aware of the current environmental issues in their community in order to have meaningful involvement in the permitting process. Resources may be available from government and private entities to ensure that community health is not negatively impacted by a new source located in the community.

Extensive research has documented that health disparities exist between demographic groups in the United States, such as differences in mortality and morbidity associated with factors that include race/ethnicity, income, and educational attainment. House Bill 1200 adds to MDE's work incorporating diversity, equity and inclusion into our mission to help overburdened and underserved communities with environmental issues.

What is House Bill 1200 and what does it require?

Effective October 1, 2022, House Bill 1200 requires a person applying for a permit from the Department under §1-601 of the Environment Article of the Annotated Code of Maryland or any permit requiring public notice and participation to include in the application an EJ Score for the census tract where the applicant is seeking the permit; requiring the Department, on receiving a certain permit application to review the EJ Score; and requiring notices to include information related to EJ Scores and generally relating to environmental permits and environmental justice screenings.

What is a "Maryland EJ Tool"?

The term "Maryland EJ Tool" means a publicly available state mapping tool that allows users to: (1) explore layers of environmental justice concern; (2) determine an overall EJ score for census tracts in the state; and (3) view additional context layers relevant to an area.

www.mde.maryland.gov



The Applicant's Guide to Environmental Justice and Permitting What You Need to Know

What is an "EJ Score"?

The term "EJ Score" means an overall evaluation of an area's environment and environmental justice indicators, as defined by MDE in regulation, including: (1) pollution burden exposure; (2) pollution burden environmental effects; (3) sensitive populations; and (4) socioeconomic factors.

The Maryland EJ Screening Tool uses three demographic indicators – minority population above 50%, poverty rate above 25% and percent of the population having limited English proficiency above 15% - to calculate a score that can be used as an indicator of susceptibility to environmental exposure. It is that score, linked to the census tract where the project is to be located, that needs to be reported to MDE as part of your permit application.

What does the application require?

The link for the Maryland EJ Tool is located on the Department's website, <u>www.mde.maryland.gov</u>, under Quick Links as EJ Screening Tool. At the top right, please click the first button for the MDE Screening Report. Input the address of the proposed installation in the address bar. Click on the Report button. Once the report has been generated select the print icon.

The applicant needs to include the MDE Screening Report with the EJ Score from the Maryland EJ Tool as part of the permit application upon submission. An application will not be considered complete without the report.

The applicant is encouraged to provide the Department with a discussion about the environmental exposures in the community. This will provide pertinent information about how the applicant should proceed with engaging with the community. Residents of a community with a high indicator score and a high degree of environmental exposure should be afforded broader opportunities to participate in the permit process and understand the impacts a project seeking permit approval may have on them.

Questions

For air quality permits, please call 410-537-3230.
For water permits, please call 410-537-4145.
For land permits pertaining to Solid Waste, please call 410-537-3098.
For land permits pertaining to Oil Control, please call 410-537-3483.
For land permits pertaining to Animal Feeding Operations, please call 410-537-4423.
For land permits pertaining to Biosolids, please call 410-537-3403.



Area of Interest (AOI) Information

Feb 1 2023 6:35:52 Eastern Standard Time



Summary

Name	Count	Area(ft ²)	Length(ft)
EJ Scores as a Percent Distribution (Quantile Representation)	1	N/A	N/A
Active High Air Emission Facilities	0	N/A	N/A
LRP Facilities	0	N/A	N/A
Maryland Dam Locations	0	N/A	N/A
Maryland Pond Locations	0	N/A	N/A
Wastewater Discharge Facilities	0	N/A	N/A
Historic Mine Locations	0	N/A	N/A
Significant Wastewater Treatment Plants	0	N/A	N/A
Point Source Discharges	0	N/A	N/A
All Permitted Solid Waste Acceptance Facilities	0	N/A	N/A
Municipal Solid Waste Acceptance Facilities	0	N/A	N/A

EJ Scores as a Percent Distribution (Quantile Representation)

#	Geographic Area Name	Percent Minority	Percent Poverty	Percent_Limited_Engli sh_Proficiency	SocioScore Percent Tract Only
1	Census Tract 309.05, Cecil County, Maryland	1.60	15.42	0.00	5.67
#	Socio Percentile	(All MD)	Socio Percentile (All MD)%	Area(ft ²)
1	5.76 5.7595%			N/A	

© MDE



950 Smile Way, York, PA 17405 | Ph: 717.848.2831 | Fax: 717.854.9156 | www.yorkbuilding.com

January 26, 2023

Suna Yi Sariscak Air Quality Permits Program Maryland Department of Environment Air and Radiation Management Administration 1800 Washington Boulevard, Suite 720 Baltimore, MD 21230

REF: ARA No. 015-0286-6-0392 Permit Modification York Building Products Co., Inc. Principio Quarry Cecil County, Port Deposit, MD

Dear Suna,

Please find attached our application for the modification of ARA No. 015-0286-6-0392 to increase production capacity from 240 tons per hour to 800 tons per hour. We have increased the size of the plant and the hourly tonnage for a targeted production of 1.6 million tons/year instead of the 500,000 tons per year that we had requested previously.

As per Matthew Hafner's instruction, one new Form 5 and four new Form 5EP's have been included in this application. In addition, the following documents have been included that have changed since our previous application:

- An updated certificate of liability insurance,
- An updated site plan, plant layout, and emission point map, and
- Updated emissions calculations.

The remainder of this modification is the same as our original application.

Finally, in order to prove our compliance with crystalline silica emission regulations, we used air modeling to demonstrate that our crystalline silica emissions are within regulation. The results of the model are included as well.

Please feel free to contact me with any questions.

Best Regards,

Vice President, Engineering York Building Products Co., Inc. - A Stewart Company (443) 907-2406 jgawthrop@yorkbuilding.com www.yorkbuilding.com



AIR QUALITY PERMIT TO CONSTRUCT APPLICATION CHECKLIST

	OWNER OF EQUIPMENT/PROCESS			
COMPANY NAME:	York Building Products Co., Inc.			
COMPANY ADDRESS:	950 Smile Way, York PA 17404			
	LOCATION OF EQUIPMENT/PROCESS			
PREMISES NAME:	Principio Quarry			
PREMISES	1070 Polyidozo Pd. Port Doposit MD 21004			
ADDRESS:	1079 Belvidere Ru, Port Deposit MD 21904			
CONTACT	INFORMATION FOR THIS PERMIT APPLICATION			
CONTACT NAME:	Jim Gawthrop			
JOB TITLE:	Vice President of Engineering			
PHONE NUMBER:	443-907-2406			
EMAIL ADDRESS:	jgawthrop@yorkbuilding.com			
DESCRIPTION OF EQUIPMENT OR PROCESS				
stone quarry crushing, screening, and conveying system				

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

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

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

No.	1	Form 5	No	Form 11
No.		Form 5T	No	Form 41
No.	4	Form 5EP	No	Form 42
No.		Form 6	No	Form 44
N 1		E 40		

No. _____ Form 10

Vendor/manufacturer specifications/guarant	tees
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Evidence of Workman's Compensation Insurance

- Process flow diagrams with emission points
- Site plan including the location of the proposed source and property boundary
- Material balance data and all emissions calculations
- Material Safety Data Sheets (MSDS) or equivalent information for materials processed and manufactured.
- Certificate of Public Convenience and Necessity (CPCN) waiver documentation from the Public Service Commission ⁽¹⁾
- Documentation that the proposed installation complies with local zoning and land use requirements ⁽²⁾
 - (1) Required for emergency and non-emergency generators installed on or after October 1, 2001 and rated at 2001 kW or more.
 - ⁽²⁾ Required for applications subject to Expanded Public Participation Requirements.

MARYLAND DEPARTMENT OF THE ENVIRONMENT Air and Radiation Management Administration • Air Quality Permits Program 1800 Washington Blvd • Baltimore, Maryland 21230 (410) 537-3230 • 1-800-633-6101 • <u>www.mde.state.md.us</u>

APPLICATION FOR FUEL BURNING EQUIPMENT

Information Regarding Public Outreach

For Air Quality Permit to Construct applications subject to public review, applicants should consider the following information in the initial stages of preparing a permit application.

If you are not sure at the time you are applying for a permit whether public review of your application is required or for information on steps you can take to engage the surrounding community where your planned project will be located, please contact the Air Quality Permits Program at 410-537-3225 and seek their advice.

Communicating and engaging the local community as early as possible in your planning and development process is an important aspect of your project and should be considered a priority. Environmental Justice or "EJ" is a movement to inform, involve, and engage communities impacted by potential and planned environmental projects by affording citizens opportunities to learn about projects and discuss any concerns regarding impacts.

Although some permit applications are subject to a formal public review process prescribed by statute, the Department strongly encourages you to engage neighboring communities separate from and well ahead of the formal permitting process. Sharing your plans by way of community meetings, informational outreach at local gatherings or through local faith-based organizations can initiate a rewarding and productive dialogue that will reduce anxiety and establish a permanent link with your neighbors in the community.

All parties benefit when there is good communication. The Department can assist applicants in developing an outreach plan that fits the needs of both the company and the public.

MARYLAND DEPARTMENT OF THE ENVIR	RONMENT
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Air and Radiation Management Administration = Air Quality Permits Program

APPLICATION FOR PROCESSING/MANUFACTURING EQUIPMENT Permit to Construct D Registration Update D Initial Registration D

Permit to		Registration Update	Initial Regist	ration \Box
1A. Owner of Equipme	ent/Company Name		DO NOT WR	ITE IN THIS BLOCK
York Building Produ	ucts Co., Inc.		2. REGIST	RATION NUMBER
Mailing Address				
950 Smile Way			County No.	Premises No.
Street Address				
York	PA	17404	1-2	3-6
City	State	Zip	Registration Cla	ass Equipment No.
Telephone Number				
(443) 907-2	2406		7	8-11
			Data Year	
Signature				
			12-13	Application Date
James Gawthrop,	Vice President of Eng	ineering		
Print Name and Title			Date	
1B. Equipment Locati	on and Telephone	Number (if different fi	rom above)	
Street Number and Str	a eet Name			
Dert Denseit				
Port Deposit	MD	2	1904 (443	_)
City/ I own	State		Zip I	elephone Number
Premises Name (if diffe	erent from above)			
3. Status (A= New, B=	Modification to Exi	sting Equipment, C=	Existing Equipme	nt)
Ne	ew Construction	New Construction	n Exi	sting Initial
Status E	egun (MM/YY)	Completed (MM/Y	Y) Opera	tion (MM/YY)
B 1	2 2 1	1 0 2	2	
L15	16-19	20-23		20-23
1 Deceribe this Equip		F	/* NA	
4. Describe this Equip	equipment list	reatures, manufacture	r (Include Maximum	Hourly Input Rate, etc.)
picase see allached	equipitient list			
5. Workmen's Compe	nsation Coverage_	WC348639121	<u></u>	4/1/23
Company American	Furich Tas Co	Binder/Policy Number		Expiration Date
NOTE: Before a Permit to	Construct may be issue	d by the Department, the ap	plicant must provide the	e Department with proof of
worker's cor	mpensation coverage as	required under Section 1-20	2 of the Worker's Comp	ensation Act.
6A. Number of Pieces	of Identical Equipn	nent Units to be Regis	stered/Permitted a	t this Time2
6B. Number of Stack/E	Emission Points As	sociated with this Eq	uipment <u>34</u>	
orm Number: 5				
Rev 9/27/2002				Page 1 of 4

Rev. 9/27/2002 TTY Users 1-800-735-2258



7. Person Installing this Equipment (if diffender Name	rent from Number 1	on Page 1)
Company		
Mailing Address/Street		
City/Town	State	Telephone ()
8. Major Activity, Product or Service of Con Crushing and screening stone	npany at this Locati	on
9. Control Devices Associated with this Eq	uipment None	
Simple/MultipleSpray/AdsorbVenturiCCycloneTowerScrubberAd24-124-224-324-3	arbonElectrostaticsorberPrecipitator24-424-5	BaghouseThermal/CatalyticDryAfterburnerScrubber24-624-724-8
Other X Describe Wet Suppression 24-9 24-9		-
10. Annual Fuel Consumption for this Equi OIL-1000 GALLONS SULFUR % GRADE 26-31 32-33 34 COAL- TONS SULFUR %	pment NATURAL GAS-1000 35-41 ASH%	FT ³ LP GAS-100 GALLONS GRADE
46-52 53-55 OTHER FUELS ANNUAL AMOUNT CO	SUMED OTHER	59-63 64-65
(Specify Type) 66-1 (Specify Units of Me 1= Cok	easure) (Speci (Speci (Speci (Speci (Speci (Speci (Speci (Speci (Speci (Speci	fy Type) 66-2 (Specify Units of Measure) her
11. Operating Schedule (for this Equipmen Continuous Operation Batch Process Hours per Batch	t) tch Batch per Week H Summer Percent 3 0 81-82	Hours per DayDays Per WeekDays per Year952370-717273-75Fall Percent 3 3083-84

Form Number: 5 Rev. 9/27/2002 TTY Users 1-800-735-2258

Page 2 of 4 Recycled Paper

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12. Equivalent Stack Innformat	tion- is Exhaust through D	oors, Windows	s, etc. On	ly? (Y/N)	1				
If not then Height Avove Grou	nd (FT) Inside Diameter at To	n Evit Tompo	raturo (°E)	80 Exit Volocity (ET/SEC)				
86-88	89-91	92-	95	96-98	3				
NOTE:									
Attach a block diagram of pr	ocess/process line, indica	ting new equip	ment as	reported on this	s form				
and all existing equipment, including control devices and emission points.									
13. Input Materials (for this equ	upment only)								
Is any of this data to be co	nsidered confidential?	(Y or N)							
	<u>تا</u>		INPU	TRATE	1				
	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS				
2.		000	tons	1,050,000	lons				
3.					<u> </u>				
4.					1				
5.					<u> </u>				
6.									
7.									
8.									
9.									
IOTAL									
14. Output Materials (for this e	auipment)			16.9					
Process/Product Stream	· · · · · · · · · · · · · · · · · · ·								
				PUT RATE					
	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS				
2.		800	tons	1,656,000	tons				
3.									
4.					<u>├</u> ───				
5.					<u> </u>				
6.									
7.									
8.									
9. TOTAL									
15. Waste Streams- Solid and L	_iquid								
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NAME	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS				
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9.									

Form Number: 5 Rev. 9/27/2002 TTY Users 1-800-735-2258





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Page 4 of 4 Recycled Paper



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	I	FORM 5	EP:	Emission Point Data	a	· · · · · · · · · · · · · · · · · · ·			
Complete one (1) Form 5EP	for EACH	H emissio	n po	int (stack or fugitive emission	ns) re	lated to the	oropo	sed ir	nstallation.
Applicant Name: York Building Products Co., Inc.									
1. Emission Point Identification Name/Number									
List the applicant assigned name/number for this emission point and use this value on the attached required plot plan: VGF-1, SF-1, SF-2, SF-3, SF-4									
2. Emission Point Description									
Describe the emission point including all associated equipment and control devices: Feeder Discharge									
3. Emissions Schedu	le for tl	he Emiss	sion	Point	· · · ·				·····
Continuous or Intermittent (C/	1)?			Seasonal Variation					
		<u>_</u>		Check box if none: Ot	herwi	se estimate s	seaso	nal v	ariation:
Hours per day:		<u> </u>		Spring Percent		· · · · · · · · · · · · · · · · · · ·	30		
Days per week:		5		Summer Percent		With Bernie Market and Barnet and Barnet and Barnet	30		
Weeks per year:		46		Fall Percent			30		
4. Emission Point Inf	ormatic	on 🛛	r			and the short of the second		r	
Height above ground (ft):		20		Length and width dimensions		Length	:		Width:
Height above structures (ft): N/A at top of rectangular stack (ft): N/A N/A				N/A					
Exit temperature (°F): N/A Inside diameter at top of round stack (ft): N/A									
Exit velocity (ft/min):	Exit velocity (ft/min): N/A Distance from emission point to nearest property line (ft): 585						585		
Exhaust gas volumetric flow rate				Building dimensions if emission Height Length Widt			Width		
5. Control Devices As	sociate	ed with t	he E	Emission Point	3 ()	1	I		
Identify each control device as also required for each contr	ssociated ol devic	d with the <u>e</u> . If none	emis che	ssion point and indicate the ck none:	numt	per of device	es. <u>A</u>	For	<u>m 6 is</u>
None			[Thermal Oxidizer		No			
Baghouse	No			Regenerative					
Cyclone	No		[Catalytic Oxidizer		No			
Elec. Precipitator (ESP)	No		[🗌 Nitrogen Oxides Reducti	on	No			
Dust Suppression System	No				[Non-Sele	ctive		
Venturi Scrubber	No		ſ		L		arytic		
Spray Tower/Packed Bed	No		l	Specify: Wet Suppression	ו	NO			
Carbon Adsorber	No	<u> </u>							
Cartridge/Canister									
Regenerative									

FOF	RM 5EP: Emission P	Point Data			
6. Estimated Emissions from th	e Emission Point		······································		
	At Design Capacity	At P	rojected Opera	tions	
Criteria Pollutants	(lb/hr)	(lb/hr)	(lb/day)	(ton/yr)	
Particulate Matter (filterable as PM10)	0.005	0.005	0.045	0.005	
Particulate Matter (filterable as PM2.5)	0.017	0.017	0.153	0.017	
Particulate Matter (condensables)	0.011	0.011	0.099	0.011	
Volatile Organic Compounds (VOC)	0	0	0	0	
Oxides of Sulfur (SOx)	0	0	0	0	
Oxides of Nitrogen (NOx)	0	0	0	0	
Carbon Monoxide (CO)	0	0	0	0	
Lead (Pb)	0	0	0	0	
	At Design Capacity	At P	rojected Opera	tions	
Greennouse Gases (GHG)	(Ĭb/hr)	(lb/hr)	(lb/day)	(ton/yr)	
Carbon Dioxide (CO ₂)	0	0	0	0	
Methane (CH ₄)	0	0	0	0	
Nitrous Oxide (N ₂ O)	0	0	0	0	
Hydrofluorocarbons (HFCs)	0	0	0	0	
Perfluorocarbons (PFCs)	0	0	0	0	
Sulfur Hexafluoride (SF6)	0	0	0	0	
Total GHG (as CO ₂ e)	0	0	0	0	
List individual federal Hazardous Air	At Design Capacity	At Projected Operations			
Pollutants (HAP) below:	(ib/hr)	(lb/hr)	(lb/day)	(ton/yr)	
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				·····	
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				· · · · · · · · · · · · · · · · · · ·	
	<u> </u>	<u></u>			

(Attach additional sheets as necessary.)

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		ORM 5	EP: Emission Point Data				
Complete one (1) Form 5EP f	for EACH	l emissio	n point (stack or fugitive emission	s) related to the pr	oposed installation.		
Applicant Name: York Building	Products	Co., Inc.		, .			
1. Emission Point Ide	ntificat	ion Nam	e/Number		· · · ·		
List the applicant assigned nan CR-1, CR-2, CR-3, CR-4	ne/numb	er for this	emission point and use this value of	on the attached red	quired plot plan:		
2. Emission Point De	scriptic	on			an a		
Describe the emission point inc Crusher Feed	luding a	Il associate	ed equipment and control devices:				
3. Emissions Schedu	le for tl	ne Emiss	sion Point				
Continuous or Intermittent (C/	I)?	С	Seasonal Variation Check box if none:	erwise estimate se	asonal variation:		
Minutes per hour:		60	Winter Percent	1	0		
Hours per day:		9	Spring Percent	3	0		
Days per week:		5	Summer Percent	3	0		
Weeks per year:		46	Fall Percent	3	0		
4. Emission Formund	ormatic	n	n an	L opath:			
Height above structures (ft):		30 N/A	Length and width dimension at top of rectangular stack (ft): N/A	N/A		
Exit temperature (°F):		N/A	Inside diameter at top of rou	und stack (ft):	N/A		
Exit velocity (ft/min):		N/A	Distance from emission point to nearest				
Exhaust gas volumetric flow ra (acfm):	ate	N/A	Building dimensions if emise point is located on building	sion Height	Length Width		
5. Control Devices As	sociate	ed with t	he Emission Point				
Identify each control device as also required for each contr	ssociateo ol devic	d with the <u>e</u> . If none	emission point and indicate the n check none:	number of devices	. <u>A Form 6 is</u>		
🗌 None			Thermal Oxidizer	No			
Baghouse	No		Regenerative				
Cyclone	No		Catalytic Oxidizer	No			
Elec. Precipitator (ESP)	No		Nitrogen Oxides Reductio	n No			
Dust Suppression System	No		Selective	Non-Select	tive		
Venturi Scrubber	No				,uc		
Spray Tower/Packed Bed	No		Specify: Wet Suppression	NO			
Carbon Adsorber	No						
Cartridge/Canister							
Regenerative							

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

FOF	RM 5EP: Emission I	Point Data				
6. Estimated Emissions from th	e Emission Point					
	At Design Capacity	At	Projected Operat	ions		
Criteria Pollutants	(lb/hr)	(lb/hr)	(lb/day)	(ton/yr)		
Particulate Matter (filterable as PM10)	0.840	0.840	7.56	0.869		
Particulate Matter (filterable as PM2.5)	0.156	0.156	1.404	0.161		
Particulate Matter (condensables)	1.866	1.866	16.794	1.931		
Volatile Organic Compounds (VOC)	0	0	0	0		
Oxides of Sulfur (SOx)	0	0	0	0		
Oxides of Nitrogen (NOx)	0	0	0	0		
Carbon Monoxide (CO)	0 .	0	0	0		
Lead (Pb)	0	0	0	0		
	At Design Capacity	At	Projected Operat	ions		
Greenhouse Gases (GHG)	(lb/hr)	(lb/hr)	(lb/day)	(ton/yr)		
Carbon Dioxide (CO ₂)	0	0	0	0		
Methane (CH ₄)	0	0	0	0		
Nitrous Oxide (N ₂ O)	0	0	0	0		
Hydrofluorocarbons (HFCs)	0	0	0	0		
Perfluorocarbons (PFCs)	0	0	0	0		
Sulfur Hexafluoride (SF6)	0	0	0	0		
Total GHG (as CO ₂ e)	0	0	0	0		
List individual federal Hazardous Air	At Design Capacity	At Projected Operations				
Pollutants (HAP) below:	(lb/hr)	(lb/hr)	(lb/day)	(ton/yr)		
		an a				
				······································		
· · · · · · · · · · · · · · · · · · ·						

(Attach additional sheets as necessary.)

Air and Radiation Management Administration

Air Quality Permits Program
1800 Washington Boulevard

Baltimore, Maryland 21230
(410)537-3225

1-800-633-6101

www.mde.maryland.gov

FORM 5EP: Emission Point Data

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

Applicant Name: York Building Products Co., Inc.

1. Emission Point Identification Name/Number

List the applicant assigned name/number for this emission point and use this value on the attached required plot plan: S-1, S-2

2. Emission Point Description

Describe the emission point including all associated equipment and control devices: Crusher Discharge, Finishing Screen

ofor the	Emissio	on Point				
		Seasonal Variation		·····		······
?	С	Check box if none: 🗌 Ot	herwis	e estimate s	seasonal v	ariation:
	60	Winter Percent			10	
	9	Spring Percent			30	
	5	Summer Percent		<u>,,</u>	30	
	46	Fall Percent			30	
rmation			·····		1	167: -141
	25	Length and width dimensio	ons	Length		width:
	N/A	at top of rectangular stack	(ft):	N/A		N/A
	N/A	Inside diameter at top of ro	ound st	tack (ft):		N/A
	N/A	Distance from emission po property line (ft):	int to r	nearest		585
e		Building dimensions if emis	ssion	Height	Length	Width
		point is located on buildin	ig (ft)	N/A		
ociated	with the	e Emission Point				
ociated w <i>I device</i> .	rith the er If none c	nission point and indicate the heck none:	numb	er of device	es. <u>A For</u>	<u>m 6 is</u>
		Thermal Oxidizer		No		
No	_	Regenerative				
No	_	Catalytic Oxidizer		No		
No		🗌 Nitrogen Oxides Reduct	ion	No		
No	-		Ę] Non-Sele	ective	
No			L.		arytic	
No	-	Specify: Wet Suppression	n	NO		
No	_					
	a for the ? ? rmation rmation sociated sociated w device sociated w device No. No.	a for the Emission ? C 60 9 5 46 rmation 25 N/A N/A e N/A sociated with the end device If none c No.	a for the Emission Point ? C Seasonal Variation ? C Check box if none: □ Ot 9 Spring Percent 0 Other Percent 0 9 Spring Percent 5 Summer Percent 0 46 Fall Percent Frint Frint Frint 7 25 Length and width dimension at top of rectangular stack N/A Inside diameter at top of rectangular stack N/A Distance from emission po property line (ft): 8 Building dimensions if emispoint is located on buildir Sociated with the Emission Point Sociated with the emission point and indicate the I device. I Thermal Oxidizer No. □ Catalytic Oxidizer No. □ Catalytic Oxidizer No. □ Catalytic No. □ Specify: No. □ Specify: No. □ </td <td>a for the Emission Point ? C Seasonal Variation ? C Check box if none: □ Otherwis 60 Winter Percent □ 0 9 Spring Percent □ 0 46 Fall Percent □ 0 rmation 25 Length and width dimensions at top of rectangular stack (ft): 0 N/A Inside diameter at top of round s 0 0 N/A Inside diameter at top of round s 0 0 N/A Inside diameter at top of round s 0 0 N/A Inside diameter at top of round s 0 0 N/A Distance from emission point to top operty line (ft): 0 0 e N/A Distance from emission point to top opint is located on building (ft) 0 sociated with the Emission Point 0 0 0 sociated with the emission point and indicate the numb / device. If none check none: 0 No. Catalytic Oxidizer 0 No. Nitrogen Oxides Reduction 0 No.</td> <td>a for the Emission Point ? C Check box if none: Otherwise estimates 60 Winter Percent 9 Spring Percent 46 Fall Percent Image: Colspan="2">Colspan="2"Colspan</td> <td>a for the Emission Point ? C Seasonal Variation ? C. Check box if none: □ Otherwise estimate seasonal v 60 Winter Percent 30 9 Spring Percent 30 46 Fall Percent 30 rmation 25 Length and width dimensions at top of rectangular stack (ft): N/A N/A Inside diameter at top of round stack (ft): N/A N/A Inside diameter at top of round stack (ft): N/A N/A Distance from emission point to nearest property line (ft): N/A e N/A property line (ft): N/A sociated with the Emission Point N/A Ength and indicate the number of devices. A For I device. Mon</td>	a for the Emission Point ? C Seasonal Variation ? C Check box if none: □ Otherwis 60 Winter Percent □ 0 9 Spring Percent □ 0 46 Fall Percent □ 0 rmation 25 Length and width dimensions at top of rectangular stack (ft): 0 N/A Inside diameter at top of round s 0 0 N/A Inside diameter at top of round s 0 0 N/A Inside diameter at top of round s 0 0 N/A Inside diameter at top of round s 0 0 N/A Distance from emission point to top operty line (ft): 0 0 e N/A Distance from emission point to top opint is located on building (ft) 0 sociated with the Emission Point 0 0 0 sociated with the emission point and indicate the numb / device. If none check none: 0 No. Catalytic Oxidizer 0 No. Nitrogen Oxides Reduction 0 No.	a for the Emission Point ? C Check box if none: Otherwise estimates 60 Winter Percent 9 Spring Percent 46 Fall Percent Image: Colspan="2">Colspan="2"Colspan	a for the Emission Point ? C Seasonal Variation ? C. Check box if none: □ Otherwise estimate seasonal v 60 Winter Percent 30 9 Spring Percent 30 46 Fall Percent 30 rmation 25 Length and width dimensions at top of rectangular stack (ft): N/A N/A Inside diameter at top of round stack (ft): N/A N/A Inside diameter at top of round stack (ft): N/A N/A Distance from emission point to nearest property line (ft): N/A e N/A property line (ft): N/A sociated with the Emission Point N/A Ength and indicate the number of devices. A For I device. Mon

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

FOI	RM 5EP: Emission F	Point Data		
6. Estimated Emissions from th	e Emission Point			
Criterio Bellutente	At Design Capacity	At	Projected Opera	tions
	(lb/hr)	(lb/hr)	(lb/day)	(ton/yr)
Particulate Matter (filterable as PM10)	1.258	1.258	11.322	1.302
Particulate Matter (filterable as PM2.5)	0.085	0.085	0.765	0.088
Particulate Matter (condensables)	3.74	3.74	33.660	3.871
Volatile Organic Compounds (VOC)	0	0	0	0
Oxides of Sulfur (SOx)	0	0	0	0
Oxides of Nitrogen (NOx)	0	0	0	0
Carbon Monoxide (CO)	0	0	0	0
Lead (Pb)	0	0	0	0
	At Design Capacity	At	Projected Operat	tions
Greenhouse Gases (GHG)	(lb/hr)	(lb/hr)	(lb/day)	(ton/yr)
Carbon Dioxide (CO ₂)	0	0	0	0
Methane (CH₄)	0	0	0	0
Nitrous Oxide (N ₂ O)	0	0	0	0
Hydrofluorocarbons (HFCs)	0	0	0	0
Perfluorocarbons (PFCs)	0	0	0	0
Sulfur Hexafluoride (SF6)	0	0	0	0
Total GHG (as CO ₂ e)	0	0	0	0
List individual federal Hazardous Air	At Design Capacity	At	Projected Operat	ions
Pollutants (HAP) below:	(lb/hr)	(lb/hr)	(lb/day)	(ton/yr)
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		· · · · · · · · · · · · · · · · · · ·		
	-			
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(Attach additional sheets as necessary.)

Air and Radiation Management Administration
 Air Quality Permits Program
 1800 Washington Boulevard
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FORM 5EP: Emission Point Data

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

Applicant Name: York Building Products Co., Inc.

1. Emission Point Identification Name/Number

List the applicant assigned name/number for this emission point and use this value on the attached required plot plan: OVL-1 - OVL6, C-1 - C-22

2. Emission Point Description

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

3 Emissions Schedu	le for ti	ho Emise	ion I	Point			en en en	an tag Ata ina			
5. Emissions Schedu		IC CIIISS			nal Variatio	<u></u> 1					
Continuous or Intermittent (C/	I)?	С		Check	box if none:	D Otł	nerwise	e estimate	seasona	al va	ariation:
Minutes per hour:		60		Winter	Percent				10		
Hours per day:		9		Spring	Percent				30		
Days per week:		5		Summe	er Percent				30		
Weeks per year:		46		Fall Pe	rcent			4	30		
4. Emission Point Info	ormatic	on				·		<u></u>			
Height above ground (ft):		30	I	Length a	nd width dir	nensio	ns	Length	ו:		Width:
Height above structures (ft):		N/A	6	at top of	rectangular	stack	(ft):	N/A			N/A
Exit temperature (°F):		N/A		Inside di	ameter at to	p of ro	und st	tack (ft):			N/A
Exit velocity (ft/min):		N/A		Distance property	from emiss line (ft):	ion poi	int to r	nearest			585
Exhaust gas volumetric flow ra (acfm):	ate	N/A	l	Building point is	dimensions located on	if emis buildin	ssion g (ft)	Height N/A	Lengt	h	Width
5. Control Devices As	sociat	ed with th	he E	missio	1 Point	1977 - N. 197	1997 - 1997 -		.4		
Identify each control device as also required for each contr	ssociate ol devid	d with the e <u>e</u> . If none	emis: chec	sion poir k none:	nt and indica	ite the	numbe	er of devic	es. <u>A F</u>	orn	<u>n 6 is</u>
□ None			C] Therm	al Oxidizer			No			
Baghouse	No				Regenerati	ve					
Cyclone	No] Cataly	tic Oxidizer			No			
Elec. Precipitator (ESP)	No		E] Nitrog	en Oxides F	Reducti	on	No			
Dust Suppression System	No			日	Selective		Ę] Non-Sel	ective		
Venturi Scrubber	No		5		Catalytic		L		arytic		
Spray Tower/Packed Bed	No		S	Specify:	Wet Supp	ressior	ı	110			
Carbon Adsorber	No										
Cartridge/Canister											

Regenerative

FOI	RM 5EP: Emission P	Point Data	· · · · · · · · · · · · · · · · · · ·	*** *********************************
6. Estimated Emissions from th	e Emission Point			
Critoria Pollutanta	At Design Capacity	At	Projected Opera	tions
Criteria Poliutants	(lb/hr)	(lb/hr)	(lb/day)	(ton/yr)
Particulate Matter (filterable as PM10)	0.529	0.529	4.761	0.548
Particulate Matter (filterable as PM2.5)	0.150	0.150	1.35	0.155
Particulate Matter (condensables)	1.648	1.648	14.832	1.706
Volatile Organic Compounds (VOC)	0	0	0	0
Oxides of Sulfur (SOx)	0	0	0	0
Oxides of Nitrogen (NOx)	0	0	0	0
Carbon Monoxide (CO)	0	0	0	0
Lead (Pb)	0	0	0	0
	At Design Capacity	At	Projected Operat	tions
Greenhouse Gases (GHG)	(lb/hr)	(lb/hr)	(lb/day)	(ton/yr)
Carbon Dioxide (CO ₂)	0	0	0	0
Methane (CH₄)	0	0	0	0
Nitrous Oxide (N ₂ O)	0	0	0	0
Hydrofluorocarbons (HFCs)	0	0	0	0
Perfluorocarbons (PFCs)	0	0	0	0
Sulfur Hexafluoride (SF6)	0	0	0	0
Total GHG (as CO ₂ e)	0	0	0	0
List individual federal Hazardous Air	At Design Capacity	At	Projected Operat	ions
Pollutants (HAP) below:	(lb/hr)	(lb/hr)	(lb/day)	(ton/yr)
				······································
		·····		
				· · · · · · · · · · · · · · · · · · ·

(Attach additional sheets as necessary.)

C		ERT	IFI	CATE OF L	IABIL		SURAN	CE	DATE(MM 03	/DD/YYYY) (17/2022
THIS CERT THIS REPF	CERTIFICATE IS ISSUED AS TIFICATE DOES NOT AFFIRMATI CERTIFICATE OF INSURAN RESENTATIVE OR PRODUCER, AND	A MA VELY (ICE [THE CE	TTER DR N DOES RTIFIC	OF INFORMATION EGATIVELY AMEND, NOT CONSTITUT CATE HOLDER.	ONLY AND EXTEND O E A CO	CONFERS R ALTER TH INTRACT BI	NO RIGHTS IE COVERAG ETWEEN TI	UPON THE CERTIF E AFFORDED BY T HE ISSUING INSUI	ICATE HOL HE POLICIE RER(S), A	der. This S Below. Uthorized
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n Ri	isk Services Central, Inc.				PHONE	(866)	283-7122	FAX (8	00) 363-010	15
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ncag	JO IL 60601 USA				ADDRE	<u>SS:</u>				
							NSURER(S) AFFC			NAIC #
rk E	Building Products Co., Inc.				INSURE	RA: ∠ur1 RB: Ammen	ican Zuric	h Ins Co		40142
0 Sn rk F	nile Way PA 17404 USA				INSURE	RC:				
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VER	AGES CE	RTIFIC	ATE N	UMBER: 5700920	44437		RI	EVISION NUMBER:		
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	TYPE OF INSURANCE	ADDI			ER	POLICY EFF	POLICY EXP		LIMITS	
X	COMMERCIAL GENERAL LIABILITY			GL0457856112		04/01/2022	04/01/2023	EACH OCCURRENCE		\$2,000,000
	CLAIMS-MADE X OCCUR							DAMAGE TO RENTED PREMISES (Ea occurrence)		\$500,000
		_						MED EXP (Any one person)		\$10,000
L		_						PERSONAL & ADV INJURY		\$2,000,000
GE								GENERAL AGGREGATE		\$4,000,000
ĥ								PRODUCTS - COMP/OP AGG		\$4,000,000
AU	TOMOBILE LIABILITY			BAP 4578562-12		04/01/2022	04/01/2023	COMBINED SINGLE LIMIT		\$2 000 000
L	٦			BAP 4578563-12		04/01/2022	04/01/2023	(Ea accident)		\$2,000,000
L								BODILY INJURY (Per person)		
÷	AUTOS ONLY AUTOS							PROPERTY DAMAGE		
Ê	ONLY AUTOS ONLY							(Per accident)		····
	UMBRELLA LIAB OCCUR							EACH OCCURRENCE		
┢─	EXCESS LIAB CLAIMS-MADE							AGGREGATE		
	DED RETENTION	-								
W	ORKERS COMPENSATION AND			WC348639121		04/01/2022	04/01/2023	X PER STATUTE C	тн	
AN	Y PROPRIETOR / PARTNER / EXECUTIVE							E.L. EACH ACCIDENT		\$1,000,000
	landatory in NH)							E.L. DISEASE-EA EMPLOYEE		\$1,000,000
Di	ESCRIPTION OF OPERATIONS below	_	[E.L. DISEASE-POLICY LIMIT		\$1,000,000
RIPTI den	ION OF OPERATIONS / LOCATIONS / VEHICLES ()	CORD 101	I, Additic	onal Remarks Schedule, may be	attached if more	space is required)				
	ce of coverage.									
TIF	ICATE HOLDER				CANCELLA	TION				
					SHOULD A EXPIRATION POLICY PRO	ANY OF THE DATE THEREC DVISIONS.	ABOVE DESCR DF, NOTICE WIL	NBED POLICIES BE CAN L BE DELIVERED IN AC	ICELLED BEFO CCORDANCE V	DRE THE /ITH THE
	Maryland Department of Env	/ironm	ent	F	AUTHORIZED RE	PRESENTATIVE				
				-						

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		Equipment List			
Plant ID	Permit Approved Equipment	February 21, 2022 Equipment Description	Emission Point	Equipment ID No.	Date of Manufactur
Primary C	rusher		1		1
	Primary Jaw	Metso C150 Jaw Crusher	2	CR-1	New
Secondary	Crushers				
	Secondary Cone Crusher	Sandvik CS660 Cone Crusher	14	CR-2	New
	Tertiary Cone Crusher	Sandvik CH660 Cone Crusher	14	CR-3	New
	Quaternary Cone Crusher	Sandvik CH660 Cone Crusher	14	CR-4	New
Fines Crus	hing				
NA					
Screens					
	Primary Screen	6'x16' TD Modular Scalping Screen	9	S-1	New
	Seconday Screen	6'x20' Deister Dual Finish Screen Station	16, 17	5-2	New
	Kinse Screen (Wet)	5'x12' Horizontal DD Deister Rinse Screen	20	5-3	New
	Kinse Screen (Wet)	5'X12' Horizontal DD Deister Rinse Screen	21	5-4	
Con					
OVI 1	42" Overland Converse	Quarland Converse			
	42 Overland Conveyor	Overland Conveyor	4		
011-2	42" Overland Conveyor	Overland Conveyor	5		
	42 Overland Conveyor	Overland Conveyor	6		
		170 Radial Stacking Conveyor	/	·····	
011-5		150 Plant Food Conveyor	8		ł
C-1	42 Conveyor	150 Plant Feed Conveyor	9	C 1	Maur
C 2		SU Rougher Belt	3	C-1	New
C-2			10	C-2	New
C 4		50 Reversing Conveyor	12	C-3	New
C-4	36" Conveyor	130 Radial Stacking Conveyor	12	C-4	New
C-6		120 Chamler Frame Conveyor	13	C-5	New
C-7		20' Linder Crusher Conveyor	15	C-0	New
C-8	42" Conveyor	155' Truss Frame Balt Conveyor	16 17	C-7	New
C-9	36" Conveyor	35' Channel Frame Collection Conveyor	10, 17	C-0	New
C-10	36" Conveyor	180' Truss Frame Conveyor	10	C-10	New
C-11	30" Conveyor	35' Truss Frame Conveyor	19	C-10	New
C-12	30" Conveyor	80' Truss Frame Conveyor	20	C-11	New
C-13	30" Conveyor (Wet)	150' Channel Frame Transfer Conveyor	20	C-13	New
C-14	30" Conveyor (Wet)	120' Truss Frame Stacking Conveyor		C-14	New
C-15	30" Conveyor (Wet)	100' Truss Frame Stacking Conveyor		C-15	New
C-16	30" Conveyor	120' Channel/Truss Frame Transfer Conveyor	21	C-16	New
C-17	30" Conveyor (Wet)	120' Radial Stacking Conveyor		C-17	New
C-18	36" Conveyor	35' Channel Frame Under Screen Conveyor	22	C-18	New
C-19	36" Conveyor	35' Channel Frame Under Screen Conveyor	23	C-19	New
C-20	30" Conveyor	150' Truss Frame Conveyor	24	C-20	New
C-21	30" Conveyor	45' Screw Bypass Conveyor	24	C-21	New
C-22	30" Conveyor (Wet)	120' Radial Stacking Conveyor		C-22	New
Generator	S				
NA					
Bins/Chute	25				
sinsy criate	Primary Grizzly Feeder	Deister 48"x24! Vibrating Grizzly Foodor	1	VGE-1	Now
	Syntron Feeder	Cloter to A24 VIDIating Grizzly reeder		SE-1	Now
	Syntron Feeder			SF-2	Now
	Syntron Feeder		+	SF-3	New
	Syntron Feeder			SF-4	New
100000			+	, ,	140.00
			1		
Other					
Other	Screw Washer	McLanahan Twin 44"x33'		SW-1	New

				Table 2	2						
1		٢	ork Building	Products Co.,	Inc Princip	io Quarry					
		Partic	ulate Matter Em	issions Estimate	e - Processing F	lant Equipn	nent				
				February 21,	2022				1000-0 - 00		
			Estimated			Hourly P	M Emissions		Annual PN	1 Emissions	
Plant ID	Per	nit Approved Equipment	Potential	PNIFa	ctor (a)	Maximu	in Potential	Maximum Potential	Estimated Actual	Maximum Potential	Estimated Actual
	, rui	in Approved Equipment	Capacity	Controlled	Uncontrolled	Controlled	Uncontrolled	Controlled	Controlled	Uncontrolled	Uncontrolled
			(Tons/Hour)	(lb/ton)	(lb/ton)	(lb/hr)	(lb/hr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Primary C	rusher										
	Primary Jaw	Metso C150 Jaw Crusher	548	0.0012	0.0054	0.658	2.959	2.880	0.681	12.961	3.063
Canada	Cauchan		i								
Secondary	Secondary Cone Crusher	Sandvik CS660 Cone Crusher	561	0.0012	0.0054	0.673	3,029	2.949	0.697	13,269	3,135
	Tertiary Cone Crusher	Sandvik CH660 Cone Crusher	223	0.0012	0.0054	0.268	1.204	1.172	0.277	5.274	1.246
	Quaternary Cone Crusher	Sandvik CH660 Cone Crusher	223	0.0012	0.0054	0.268	1.204	1.172	0.277	5.274	1.246
				Total for Form 5	EP Crushers	1.866			1.931		
Fines Crus	hing										
NA											
Screens											
Screens	Primary Screen	6'x16' TD Modular Scalping Screen	700	0.0022	0.0250	1.540	17.500	6.745	1.594	76.650	18.113
	Seconday Screen	8'x20' Deister Dual Finish Screen Station	1000	0.0022	0.0250	2.200	25.000	9.636	2.277	109.500	25.875
	Rinse Screen (Wet)	5'x12' Horizontal DD Deister Rinse Screen	243	0.0000	0.0000	0.000	0.000	0.000	0.000	0.000	0.000
	Rinse Screen (Wet)	5'x12' Horizontal DD Deister Rinse Screen	177	0.0000	0.0000	0.000	0.000	0.000	0.000	0.000	0.000
				Total for Form 5	EP Screens	3.740		100 A 30 1 1 1 1 1	3.871		
Conveyors	42" Quarland Conveyor	Custond Communit	800	0.00014	0.00300	0.112	2 400	0.401	0.116	10 512	2 494
OVL-1	42" Overland Conveyor	Overland Conveyor	800	0.00014	0.00300	0.112	2.400	0.491	0.116	10.512	2.484
OVL-3	42" Overland Conveyor	Overland Conveyor	800	0.00014	0.00300	0.112	2.400	0.491	0.116	10.512	2.484
OVL-4	42" Conveyor	170' Radial Stacking Conveyor	800	0.00014	0.00300	0.112	2.400	0.491	0.116	10.512	2.484
OVL-5	42" Conveyor	500' Tunnel Belt	800	0.00014	0.00300	0.112	2.400	0.491	0.116	10.512	2.484
OVL-6	42" Conveyor	150' Plant Feed Conveyor	800	0.00014	0.00300	0.112	2.400	0.491	0.116	10.512	2.484
C-1	48" Conveyor	50' Rougher Belt	800	0.00014	0.00300	0.112	2.400	0.491	0,116	10.512	2.484
C-2	36" Conveyor	50' Stacking Conveyor	800	0.00014	0.00300	0.112	2.400	0.491	0.116	10.512	2.484
C-4	36" Conveyor	150' Radial Stacking Conveyor	139	0.00014	0.00300	0.019	0.417	0.085	0.020	1.826	0.432
C-5	36" Conveyor	120' Channel Frame Transfer Conveyor	561	0.00014	0.00300	0.079	1.683	0.344	0.081	7.372	1.742
C-6	42" Conveyor	100' Truss Frame Conveyor	561	0.00014	0.00300	0.079	1.683	0.344	0.081	7.372	1.742
C-7	48" Conveyor	80' Under Crusher Conveyor	1000	0.00014	0.00300	0.140	3.000	0.613	0.145	13.140	3.105
C-8	42" Conveyor	155' Truss Frame Belt Conveyor	1000	0.00014	0.00300	0.140	3.000	0.613	0.145	13.140	3.105
C-9	36" Conveyor	35' Channel Frame Collection Conveyor	446	0.00014	0.00300	0.062	1.338	0.273	0.065	5.860	1.385
C-10	30" Conveyor	35' Truss Frame Conveyor	243	0.00014	0.00300	0.062	1.338	0.273	0.065	3.860	1.385
C-12	30" Conveyor	80' Truss Frame Conveyor	243	0.00014	0.00300	0.034	0.729	0.149	0.035	3.193	0.755
C-13	30" Conveyor (Wet)	150' Channel Frame Transfer Conveyor	121	0.00000	0.00000	0.000	0.000	0.000	0.000	0.000	0.000
C-14	30" Conveyor (Wet)	120' Truss Frame Stacking Conveyor	121	0.00000	0.00000	0.000	0,000	0.000	0.000	0.000	0.000
C-15	30" Conveyor (Wet)	100' Truss Frame Stacking Conveyor	121	0.00000	0.00000	0.000	0.000	0.000	0.000	0.000	0.000
C-16	30" Conveyor	120' Channel/Truss Frame Transfer Conveyor	177	0.00014	0.00300	0.025	0.531	0.109	0.026	2.326	0.550
C-17	30" Conveyor (wet)	120 Radial Stacking Conveyor	1//	0.00000	0.00000	0.000	0.000	0.000	0.000	0.000	0.000
C-19	36" Conveyor	35' Channel Frame Under Screen Conveyor	69	0.00014	0.00300	0.010	0.207	0.042	0.010	0.907	0.214
C-20	30" Conveyor	150' Truss Frame Conveyor	138	0.00014	0.00300	0.019	0.414	0.085	0.020	1.813	0,428
C-21	30" Conveyor	45' Screw Bypass Conveyor	138	0.00014	0.00300	0.019	0.414	0.085	0.020	1.813	0.428
C-22	30" Conveyor (Wet)	120' Radial Stacking Conveyor	138	0.00000	0.00000	0,000	0.000	0.000	0.000	0.000	0.000
				Total for Form Si	EP Conveyors	1.648			1.705		
Generator	s										
NA											
Bins/Chut	es										
	Primary Grizzly Feeder	Deister 48"x24' Vibrating Grizzly Feeder	800	0.00001	0.00003	0.006	0.026	0.025	0.006	0.116	0.027
	Syntron Feeder	Surge Pile Feeder	200	0.00001	0.00003	0.001	0.007	0.006	0.001	0.029	0.007
	Syntron Feeder	Surge Pile Feeder	200	0.00001	0.00003	0.001	0.007	0.006	0.001	0.029	0.007
	Syntron Feeder	Surge Pile Feeder	200	0.00001	0.00003	0.001	0.007	0.006	0.001	0.029	0.007
	Syntron Feeder	Surge Pile Feeder	200	0.00001	0.00003	0.001	0.007	0.006	0.001	0.029	0.007
				Total for Form 5	LF Feeders	0.011			0.012		and the second
				PM Totals		6.997	86.257	31.820	7.242	377.805	89.276
Plant Oper	ration Schedule	1									
800	Average Plant Processing Ra	te (TPH)		Notes: (a) PM E	mission Factors	are from AP-	42, Table 11.19	.2-2			
2070	Estimated Actual Operating	Hours									
	in the second second			the second se	the second se						

		Yor	k Building Prod	ducts Co., Inc.	- Principio C	Quarry					
		PM	-10 Emissions Est	timate - Process ebruary 21, 202	ing Plant Equip 22	oment					
			Estimated		-	Hourly PM	10 Emissions		Annual PM	10 Emissions	
			Potential	PM 10 F	actor (a)	Maximu	n Potential	Maximum Potential	Estimated Actual	Maximum Potential	Estimated
Plant ID	Permit A	pproved Equipment	Capacity	Controllad	Lincontrollad	Emissi	Uncentrelled	Emission Rates	Emission Rates	Emission Rates	Emission
			(Tons/Hour)	(lb/ton)	(lb/ton)	(lb/hr)	(lb/hr)	(tons/vr)	(tons/vr)	(tons/vr)	(tons/
rimary C	rusher										
	Primary Jaw	Metso C150 Jaw Crusher	548	0.000540	0.002400	0.296	1.315	1.296	0.306	5.761	
econdary	/ Crushers										
	Secondary Cone Crusher	Sandvik CS660 Cone Crusher	561	0.000540	0.002400	0.303	1.346	1.327	0.314	5.897	-
	Tertiary Cone Crusher	Sandvik CH660 Cone Crusher	223	0.000540	0.002400	0.120	0.535	0.527	0.125	2.344	-
	Quaternary Cone Crusher	Sandvik CH660 Cone Crusher	223	Total for Form 5	0,002400 EP Crushers	0.120	0.535	0.527	0.125	2.344	
ines Crus	hing										
A									·····		
creens											
	Primary Screen	6'x16' TD Modular Scalping Screen	700	0.000740	0.008700	0.518	6,090	2.269	0.536	26.674	
	Seconday Screen	6'x20' Deister Dual Finish Screen Station	1000	0.000740	0,008700	0.740	8,700	3.241	0.766	38.106	
	Rinse Screen (Wet)	5'x12' Horizontal DD Deister Rinse Screen	243	0.000000	0.000000	0.000	0.000	0.000	0.000	0.000	
	Kinse Screen (Wet)	5'x12' Horizontal DD Deister Rinse Screen	177	Total for Form 5	0.000000 EP Screens	0.000	0.000	0.000	0.000	0.000	
onveyors	1 1										
VL-1	42" Overland Conveyor	Overland Conveyor	800	0.000046	0.001100	0.037	0.880	0.161	0.038	3.854	
VL-2	42" Overland Conveyor	Overland Conveyor	800	0.000046	0.001100	0.037	0.880	0.161	0.038	3.854	
VI-3	42 Overland Conveyor	170' Badial Stacking Conveyor	800	0.000046	0.001100	0.037	0.880	0.161	0.038	3.854	
VL-5	42" Conveyor	500' Tunnel Belt	800	0.000046	0.001100	0.037	0.880	0.161	0.038	3.854	
IVL-6	42" Conveyor	150' Plant Feed Conveyor	800	0.000046	0.001100	0.037	0.880	0.161	0.038	3.854	
-1	48" Conveyor	50' Rougher Belt	700	0.000046	0.001100	0.032	0.770	0.141	0.033	3.373	
-2	36" Conveyor	50' Stacking Conveyor	700	0.000046	0.001100	0.032	0.770	0.141	0.033	3.373	
-3	36" Conveyor	50' Reversing Conveyor	139	0.000046	0.001100	0.006	0.153	0.028	0.007	0.670	
-4	36" Conveyor	120' Chappel Frame Transfer Conveyor	139	0.000046	0.001100	0.006	0.153	0.028	0.007	2 703	
-6	42" Conveyor	100' Truss Frame Conveyor	500	0.000046	0.001100	0.020	0.550	0.101	0.024	2.409	
-7	48" Conveyor	80' Under Crusher Conveyor	1000	0.000046	0,001100	0.046	1.100	0.201	0.048	4.818	
-8	42" Conveyor	155' Truss Frame Belt Conveyor	1000	0.000046	0.001100	0.046	1.100	0.201	0.048	4.818	
-9	36" Conveyor	35' Channel Frame Collection Conveyor	446	0.000046	0.001100	0.021	0.491	0.090	0.021	2.149	
-10	36" Conveyor	180' Truss Frame Conveyor	446	0.000046	0.001100	0.021	0.491	0.090	0.021	2.149	
-12	30" Conveyor	80' Truss Frame Conveyor	243	0.000046	0.001100	0.011	0.267	0.049	0.012	1.1/1	
-13	30" Conveyor (Wet)	150' Channel Frame Transfer Conveyor	121	0.000000	0.000000	0.000	0.000	0.000	0.000	0.000	
-14	30" Conveyor (Wet)	120' Truss Frame Stacking Conveyor	121	0.000000	0.000000	0.000	0.000	0.000	0.000	0.000	
-15	30" Conveyor (Wet)	100' Truss Frame Stacking Conveyor	121	0.000000	0.000000	0.000	0,000	0.000	0.000	0.000	
-16	30" Conveyor	120' Channel/Truss Frame Transfer Conveyor	177	0.000046	0.001100	0.008	0.195	0.036	0.008	0.853	
19	30" Conveyor (Wet)	120' Radial Stacking Conveyor	177	0.000000	0.000000	0.000	0.000	0.000	0.000	0.000	
19	36" Conveyor	35' Channel Frame Under Screen Conveyor	69	0.000046	0.001100	0.003	0.076	0.014	0.003	0.332	
-20	30" Conveyor	150' Truss Frame Conveyor	138	0.000046	0.001100	0.006	0.152	0.028	0.007	0.665	
-21	30" Conveyor	45' Screw Bypass Conveyor	137	0.000046	0.001100	0.006	0.151	0.028	0.007	0.660	
-22	30" Conveyor (Wet)	120' Radial Stacking Conveyor	137	0.000000	0.000000	0.000	0.000	0.000	0.000	0.000	
enerator	s			Total for Form 5	EP Conveyors	0.529			0.548		
A											
ins/Chut											
y snut	Primary Grizzly Feeder	Deister 48"x24' Vibrating Grizzly Feeder	875	0.000004	0.000016	0.004	0.014	0.015	0.004	0.061	
	Syntron Feeder		87	0.000004	0.000016	0.000	0.001	0.002	0.000	0.006	
	Syntron Feeder		87	0.000004	0.000016	0.000	0.001	0.002	0.000	0.006	
	Syntron Feeder		87	0.000004	0.000016	0.000	0.001	0.002	0.000	0.006	
	Syna Shi recuci		82	Total for Form 5	EP Feeders	0.005	0.001	0.001	0.005	0.006	
				PM Totals		2.511	31.199	11.528	2.599	136.652	
lant Oper	ration Schedule			N							
800	Average Plant Processing Rate (TPH) Potential Operating Hours	·		Notes: (a) PM 3	LU Emission Fact	ors are from	AP-42, Table 13	.,19,2-2			
5700	operating riours		1								

		Tabl York Building Products Co	le 4 o., Inc Princip	io Quarry	i, et el s		
1 C		PM-2.5 Emissions Estimate - February	Processing Plant 21, 2022	Equipment			Sector Sector
			Estimated	PM 2.5 Factor	Hourly 2.5 Emissions	Annual 2.5	Emissions
Plant ID	Permit A	Approved Equipment	Potential	(a)	Maximun Potential	Maximum Potential	Estimated Actual
			(Tons/Hour)	Controlled (lb/ton)	Controlled (lb/hr)	Controlled (tons/yr)	Controlled (tons/yr)
Primary C	rusher						
	Primary Jaw	Metso C150 Jaw Crusher	548	0.000100	0.055	0.240	0.057
Secondary	Crushers						
_	Secondary Cone Crusher	Sandvik CS660 Cone Crusher	561	0.000100	0.056	0.246	0.058
	Tertiary Cone Crusher	Sandvik CH660 Cone Crusher	223	0.000100	0.022	0.098	0.023
	Quaternary cone crusher	Sandvik Chood Cone Crusher	Total for Form 5E	P Crushers	0.022	0.098	0.023
Fines Crus	hing						
NA							
Screens							
	Primary Screen	6'x16' TD Modular Scalping Screen	700	0.000050	0.035	0.153	0.036
	Seconday Screen	6'x20' Deister Dual Finish Screen Station	1000	0.000050	0.050	0.219	0.052
	Rinse Screen (Wet)	5'x12' Horizontal DD Deister Rinse Screen	243	0.000000	0.000	0.000	0.000
		5 X12 Horizontal DD Deister Kinse Screen	Total for Form 5E	P Screens	0.085	0.000	0.088
Conveyors							
OVL-1	42" Overland Conveyor	Overland Conveyor	800	0.000013	0.010	0.046	0.011
OVL-2	42" Overland Conveyor	Overland Conveyor	800	0.000013	0.010	0.046	0.011
OVL-3 OVL-4	42" Conveyor	170' Radial Stacking Conveyor	800	0.000013	0.010	0.048	0.011
OVL-5	42" Conveyor	500' Tunnel Belt	800	0.000013	0.010	0.046	0.011
OVL-6	42" Conveyor	150' Plant Feed Conveyor	800	0.000013	0.010	0.046	0.011
C-1	48" Conveyor	50' Rougher Belt	700	0.000013	0.009	0.040	0.009
C-2	36" Conveyor	50' Stacking Conveyor	700	0.000013	0.009	0.040	0.009
C-4	36 Conveyor	150' Reversing Conveyor	139	0.000013	0.002	0.008	0.002
C-5	36" Conveyor	120' Channel Frame Transfer Conveyor	561	0.000013	0.002	0.008	0.002
C-6	42" Conveyor	100' Truss Frame Conveyor	500	0.000013	0.007	0.028	0.007
C-7	48" Conveyor	80' Under Crusher Conveyor	1000	0.000013	0.013	0.057	0.013
C-8	42" Conveyor	155' Truss Frame Belt Conveyor	1000	0.000013	0.013	0.057	0.013
C-9	36" Conveyor	35' Channel Frame Collection Conveyor	446	0.000013	0.006	0.025	0.006
C-10	30" Conveyor	35' Truss Frame Conveyor	243	0.000013	0.006	0.025	0.006
C-12	30" Conveyor	80' Truss Frame Conveyor	243	0.000013	0.003	0.014	0.003
C-13	30" Conveyor (Wet)	150' Channel Frame Transfer Conveyor	121	0.000000	0.000	0.000	0.000
C-14	30" Conveyor (Wet)	120' Truss Frame Stacking Conveyor	121	0.000000	0.000	0.000	0.000
C-15	30" Conveyor (Wet)	100' Truss Frame Stacking Conveyor	121	0.000000	0.000	0,000	0.000
C-16	30" Conveyor	120' Channel/Truss Frame Transfer Conveyor	177	0.000013	0.002	0.010	0.002
C-17	36" Conveyor	35' Channel Frame Under Screen Conveyor	69	0.000013	0.000	0.000	0.000
C-19	36" Conveyor	35' Channel Frame Under Screen Conveyor	69	0.000013	0.001	0.004	0.001
C-20	30" Conveyor	150' Truss Frame Conveyor	138	0.000013	0.002	0.008	0.002
C-21	30" Conveyor	45' Screw Bypass Conveyor	137	0.000013	0.002	0.008	0.002
C-22	30" Conveyor (Wet)	120' Radial Stacking Conveyor	137	0.000000	0.000	0.000	0.000
Generator	s		Total for Form SER	Conveyors	0.150		0.155
NA							
Bins/Chute	25						
	Syntron Feeder	Deister 48"x24" Vibrating Grizzly Feeder	1000	0.000013	0.013	0.057	0.013
	Syntron Feeder		87	0.000013	0.001	0.005	0.001
	Syntron Feeder		87	0.000013	0.001	0.005	0.001
	Syntron Feeder		82	0.000013	0.001	0.005	0.001
			Total for Form 5EF	P Feeders	0.017		0.018
Diant C-	atian Cabadula			PM Totals	0.408	1.785	0.422
Ron Ron	Average Plant Processing Rate (TOU))		Notes: (a) DM 3	5 Emission Factors are	from AP-42 Table	11 19 2-2
8760	Potential Operating Hours			No data availabl	e for Uncontrolled PM	2.5 emissions	
2070	Estimated Actual Operating Hours						

	T	February 21, 2022					
		Potential Cont Emissi	rolled Plant ons	Estimated Actual Controlled Plan Emissions			
Item	Pollutant	Pounds Per Hour of Operation (lb/hr)	Tons Per year of Operation (tons/year)	Pounds Per Hour of Operation (Ib/hr)	Tons Per yea of Operatio (tons/year		
1	РМ	7.00	31.82	7.00	7.		
2	PM-10	2.51	11.53	2.51	2.		
3	PM-2.5	0.41	1.79	0.41	0.		
4	NOX						
5	со						
6	SOX						
7	Total Organic Compounds (TOC)						
8	Benzene*						
9	Toluene*						
10	Xylenes*						
11	Propylene*						
12	1,3-Butadiene*						
13	Formaldehyde*						
14	Acetaldehyde*						
15	Acrolein*						
16	Napthalene*						
	HAP Total						
	Hazardous Air Pollutant (HAP) listed	d in Clean Air Act.					
	TOC includes VOC's						
tes:							
See table	e 2 though 5 for detailed Calculation	15					

To: Jim Gawthrop, P.E., York Building Products

From: Susan Barnes, Trinity Consultants

Date: May 11, 2022

Where:

RE: Toxic Air Pollutants (TAPs) Analysis for Principio Quarry

Trinity Consultants (Trinity) is pleased to present the following Toxic Air Pollutant (TAPs) analysis for York Building Products' (York's) Principio Quarry. As described in the following sections, the Principio Quarry complies with the Code of Maryland Regulations (COMAR) regarding TAPs, specifically for crystalline silica, at the listed worst-case throughputs described in this report.

Background

York is planning to construct and operate a quarry facility (SIC Code 1411) in Port Deposit, Maryland. The facility will mine and process stone for building purposes. Throughout the mining and processing stages, there will be fugitive crystalline silica emissions from crushers, screens, conveyor transfers, truck loading/unloading, and storage piles. The facility is permitted under a MDE Permit to Construct and looking to increase production and accordingly, emissions. This TAPs analysis will verify compliance for the increased production at the quarry. This analysis, as described in the following sections, was based on projected maximum throughputs for stone at the facility. This methodology ensures that York can expect continued compliance with the TAPs program by simply verifying usage rates are below those utilized in this analysis.

TAP Emission Calculations

The Principio Quarry contains multiple pieces of equipment and operations that process stone. Maximum throughput rates of stone are used to calculate associated crystalline silica emission rates.

Crystalline silica is a particulate matter (PM) TAP. Levels for PM TAPs are for the respirable portion only. The respirable portion is assumed to be 1% of PM_{10} . Further, based on site-specific chemical composition of the throughput material, PM_{10} is 20.55% crystalline silica. Modeled emission rates were calculated using the following formula:

 $T \times EF \times RESP \times CS = lb/hr$

Т	=	Hourly throughput of material	(tons/hr)
EF	=	AP-42 emission factor for PM ₁₀ ¹	(lb PM10/ton throughput)
RESP	=	Respirable fraction of PM ₁₀	(1% of PM_{10} is respirable)
CS	=	PM ₁₀ crystalline silica fraction	(20.55% of PM10 is crystalline silica)
lb/hr	=	Potential emissions	(lb/hr)

TAP Screening Evaluation

As described in COMAR 26.11.15, demonstrating compliance with TAP regulations is a multi-step process in which TAP emission rates are compared to certain thresholds. If a TAP falls below a particular threshold, it

¹ AP-42 Table 11.19.2-2 Emission Factors for Crushed Stone Processing Operations

is no longer considered for evaluation. Crystalline silica emissions from the Principio Quarry exceed the thresholds for the small emitter exemption and the allowable emission rate. Accordingly, refined air dispersion modeling is needed to demonstrate compliance with the 8-hour allowable ambient level (AAL) for crystalline silica.

Air Dispersion Modeling

An air dispersion modeling analysis was performed using U.S. EPA's AERMOD for crystalline silica. The model input and output files as well as associated files (meteorology, etc.) are provided on an enclosed flash drive.

Model Selection

Dispersion models predict ambient pollutant concentrations by simulating the evolution of the pollutant plume over time and space given data inputs including the quantity of emissions, stack exhaust parameters (e.g., velocity, flowrate, and temperature) and weather data.

The latest version (v21112) of the AERMOD model was used to estimate maximum ground-level concentrations in all air pollutant analyses conducted for this application. AERMOD is a refined, steady-state, multiple source dispersion model that was promulgated in December 2005 as the EPA-preferred model to use for industrial sources in this type of air dispersion modeling analysis.²

Following procedures outlined in the Guideline, the AERMOD modeling was performed using regulatory default options except as otherwise noted in this report.

Meteorological Data

Site-specific dispersion models require a sequential hourly record of dispersion meteorology representative of the region within which the source is located. In the absence of site-specific measurements, readily available data are commonly used from the closest and most representative National Weather Service (NWS) station. Regulatory air dispersion modeling using AERMOD requires five years of quality-assured meteorological data that includes hourly records of the following parameters:

- Wind speed;
- Wind direction;
- Air temperature;
- Micrometeorological parameters (e.g., friction velocity, Monin-Obukhov length);
- Mechanical mixing height; and
- Connective mixing height.

The first three of these parameters are directly measured by monitoring equipment located at typical surface observation stations. The friction velocity, Monin-Obukhov length, and mixing heights are derived from characteristic micrometeorological parameters and from observed and correlated values of cloud cover, solar insulation, time of day and year, and latitude of the surface observation station. Surface observation stations form a relatively dense network, are almost always found at airports, and are typically operated by the NWS. Upper air stations are fewer in number than surface observation points since the upper atmosphere is less vulnerable to local effects caused by terrain or other land influences and is therefore less variable. The NWS operates virtually all available upper air measurement stations in the United States.

² 40 CFR 51, Appendix W Guideline on Air Quality Models, Appendix A.1 AMS/EPA Regulatory Model (AERMOD), November 9, 2005.
Meteorological data for 2016 to 2020 was processed through AERMET (v19191) to include upper air measurements from Dulles Airport in Sterling, Virginia and surface data from the Baltimore-Washington International Thurgood Marshall Airport (BWI).

Coordinate System

In all modeling analysis data files, the location of emission sources, structures, and receptors, are represented in the Universal Transverse Mercator (UTM) coordinate system. The UTM grid divides the world into coordinates that are measured in north meters (measured from the equator) and east meters (measured from the central meridian of a particular zone, which is set at 500 km). The datum for this modeling analysis is based on the North American Datum of 1983 (NAD83). UTM coordinates for this analysis all reside within UTM Zone 18.

Source Types, Parameters and Emission Rates

The AERMOD dispersion model allows for emission units to be represented as point, area, or volume sources. Emissions from the crushers, screens, conveyor transfer points, loading/unloading operations, and storage piles are all fugitive emissions. To appropriately model the fugitive emissions for all equipment and transfers, it is estimated that pollutants are emitted from a volume source at the location where the equipment exists or the transfer occurs. The volume source parameters are based on the equipment or conveyor dimensions and height above the ground. For the loading/unloading and storage piles, these operations could take place at a variety of locations throughout the facility. As such, these emissions are estimated based on an area source covering the extent of the facility. All equipment dimensions and locations are based on the emissions inventory and site plan.

Figure 1 shows the overall layout of the facility and sources. Source parameters are outlined in Table 1 and Table 2 below.



Figure 1. AERMOD Layout

Source ID	Source Description	X- Coordinate (meters)	Y- Coordinate (meters)	Elevation (meters)	Emission Rate (lb/hr)	Release Height (m) ª	Initial Lateral Dimension (m) ^b	Initial Vertical Dimension (m) ^c
P02	Primary Jaw Crusher	412507	4386534	111.12	6.08E-04	6.1	0.23	0.23
P03	C-1 Transfer Point	412528	4386541	111.23	6.62E-05	9.1	0.28	0.23
P04	OVL-1 Transfer Point	412546	4386078	95.31	7.56E-05	9.1	0.25	0.23
P05	OVL-2 Transfer Point	412879	4385930	112.64	7.56E-05	9.1	0.25	0.23
P06	OVL-3 Transfer Point	412833	4385509	113.77	7.56E-05	9.1	0.25	0.23
P07	OVL-4 Transfer Point	412831	4385453	106.03	7.56E-05	9.1	0.25	0.23
P08	OVL-5 Transfer Point	412908	4385453	105.69	7.56E-05	9.1	0.25	0.23
P09	OVL-6 Transfer Point and Primary Screen	412907	4385375	106.26	1.14E-03	6.1	0.25	0.23
P10	C-2 Transfer Point	412882	4385397	106.48	6.62E-05	9.1	0.21	0.23
P11	C-3 Transfer Point	412933	4385375	105.95	1.31E-05	9.1	0.21	0.23
P12	C-4 Transfer Point	412967	4385374	105.63	1.31E-05	9.1	0.21	0.23
P13	C-5 and C-6 Transfer Point	412898	4385342	106.28	1.06E-04	9.1	0.21	0.23
P14	C-10 Transfer Point and 3 Crushers	412890	4385342	106.16	1.16E-03	6.1	0.21	0.23
P15	C-7 Transfer Point	412855	4385342	105.81	9.45E-05	9.1	0.28	0.23
P16	C-8_1 Transfer Point	412863	4385309	105.08	8.10E-04	6.1	0.25	0.23
P17	C-8_2 Transfer Point	412867	4385309	105.17	8.10E-04	6.1	0.25	0.23
P18	C-9 Transfer Point	412872	4385298	105.29	4.21E-05	9.1	0.21	0.23
P19	C-11 Transfer Point	412846	4385298	104.51	2.29E-05	9.1	0.18	0.23
P20	C-12 Transfer Point	412846	4385276	104.60	2.29E-05	6.1	0.18	0.23
P21	C-16 Transfer Point	412830	4385297	104.07	1.67E-05	6.1	0.18	0,23
P22	C-18 Transfer Point	412863	4385309	105.08	6.52E-06	9.1	0.21	0.23
P23	C-19 Transfer Point	412863	4385309	105.08	6.52E-06	9.1	0.21	0.23
P24	C-20 and C-21 Transfer Point	412898	4385308	105.60	2.61E-05	9.1	0.18	0.23

Table 1. Volume Source Parameters

a. Release height is set to the height of the emission point above ground level.

b. Initial lateral dimension is calculated as the width of the emission point (e.g., conveyor width) divided by 4.3.

c. Initial vertical dimension is calculated as the height of the emission point divided by 4.3.

lable	2.	Area	Source	Parameters	

Source ID	X-Coordinate (meters)	Y-Coordinate (meters)	Elevation (meters)	Emission Rate (g/s-m ²)	Release Height (m)	Initial Vertical Dimension (m)
FS0011	412277.9	4387403.5	130.66	1.85E-11	1.5	0

Receptor Grids

For this air dispersion modeling analysis, ground-level concentrations were calculated along the facility property line and within a Cartesian receptor grid. The Cartesian grid used the following receptor spacing:

- 50 meter-spaced receptors along the property boundary;
- 50 meter-spaced receptors from the edge of the property boundary out to 1 kilometer;
- 100 meter-spaced receptors from 1 to 5 kilometers; and
- 500 meter-spaced receptors from 5 to 10 kilometers.

In general, the receptors covered a region extending from all edges of the proposed project site boundary to the point where impacts from the project are no longer expected to be significant. Figure 2 depicts the receptor grid used in the modeling analysis.





Modeling Results

The AERMOD model was used to determine potential ground-level pollutant concentrations throughout the receptor grid for each of the five meteorological data years modeled. The results of the modeling are summarized in Table 3.

Model Year	Maximum Modeled Concentration (µg/m ³)	AAL (µg/m³)	Below AAL?
2016	0.187		Yes
2017	0.195		Yes
2018	0.172	0.25	Yes
2019 0.247			Yes
2020	0.205		Yes

Table 3. 8-hour Average Crystalline Silica Modeling Results

As shown in Table 3, the modeled results are below the AAL. Therefore, this air dispersion modeling analysis demonstrates that the crystalline silica emissions from the equipment and operations at the Principio Quarry are not expected to adversely impact public health, and therefore meet the requirements of COMAR 26.11.15.06.

TAPS AIR DISPERSION MODELING REPORT

York Building Products / Principio Quarry

Prepared By:

TRINITY CONSULTANTS

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July 2022



TABLE OF CONTENTS

INTRODUCTION	1-1
1.1 Background	1-1
1.2 Facility Description	1-1
	2.1
AIR DISPERSION MODELING METHODOLOGY	2-1
2.1 Air Dispersion Model Selection	2-1
2.2 Building Downwash	2-1
2.3 Treatment of Terrain	2-1
2.4 Urban/Rural Option	2-2
2.5 Meteorological Data	2-3
2.6 Coordinate System	2-3
2.7 Receptor Grids	2-3
2.7.1 Cartesian Receptor Grid	.2-4
2.7.2 Property Line Receptors	.2-4
2.8 Source Types and Stack Parameters	2-5
MODELING RESULTS	2_1
	2-1
ENDIX A. FACILITY SITE LAYOUT & BUILDING DIMENSIONS	A-1
PENDIX B. SOURCE PARAMETERS	B-1
	INTRODUCTION 1.1 Background 1.2 Facility Description AIR DISPERSION MODELING METHODOLOGY 2.1 Air Dispersion Model Selection

York Building Products Co., Inc. (York) operates its Principio Quarry located in Port Deposit, Maryland. This modeling report is being submitted for modeling related to Maryland's Toxic Air Pollutants (TAPs) regulations, specifically to demonstrate that the quarry at an increased throughput will be in compliance with ambient air quality thresholds for respirable crystalline silica.

1.1 Background

York operates a quarry (SIC Code 1411) where stone is mined and processed for building purposes. Throughout the mining and processing stages, there are fugitive crystalline silica emissions from crushers, screens, conveyor transfers, truck loading/unloading, and storage piles. The facility is permitted under a Permit to Construct issued by the Maryland Department of the Environment (MDE) and is looking to increase production and accordingly, emissions. This TAPs analysis verified compliance for the increased production at the quarry. This analysis, as described in the following sections, was based on projected maximum throughputs for stone at the facility. To verify compliance, the high first high (H1H) concentrations for each year were compared to the Allowable Ambient Limit (AAL) for respirable crystalline silica. This methodology ensures that York can expect continued compliance with the TAPs program by simply verifying usage rates are below those utilized in this analysis.

The air dispersion modeling was completed in a manner that conforms to the applicable rules, guidance, and requirements in the following documents:

- The United States Environmental Protection Agency's (U.S. EPA's) user's guides for the EPA Regulatory AERMOD Modeling System available from U.S. EPA's Support Center for Regulatory Atmospheric Modeling (SCRAM) website,¹ and
- U.S. EPA's Guideline on Air Quality Models, 40 CFR Part 51 Appendix W (latest rule update, effective February 2017).

In addition, the modeling was conducted following the modeling protocol submitted to MDE and subsequent comments and approval from MDE.

1.2 Facility Description

York's Principio Facility is located at 1079 Belvidere Road, Port Deposit, MD 21904. Appendix A includes an aerial map of the facility.

¹ SCRAM website: <u>https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models#aermod</u>

2. AIR DISPERSION MODELING METHODOLOGY

This air dispersion modeling analysis was performed using U.S. EPA's AERMOD for crystalline silica emissions. The techniques in this air dispersion modeling analysis are consistent with the current U.S. EPA guidance. Model input and output files as well as the associated files (meteorology, etc.) are provided on an enclosed flash drive.

2.1 Air Dispersion Model Selection

The latest version (version 22112) of the AERMOD model was used to estimate maximum ground-level concentrations in the air dispersion analysis. AERMOD is a refined, steady-state, multiple source, air dispersion model to be used for industrial sources.² The AERMOD modeling was performed using regulatory default options.

2.2 Building Downwash

Building structures that obstruct wind flow near emission points may cause discharges to become caught in the turbulent wakes of these structures leading to downwash of the plumes. Wind blowing around a building creates zones of turbulence that are greater than if the building did not exist. These effects generally cause higher ground-level pollutant concentrations since building downwash inhibits dispersion from elevated stack discharges. For this reason, building downwash algorithms are considered an integral component of the selected air dispersion model.

The AERMOD model has the Plume Rise Modeling Enhancements (PRIME) algorithm incorporated in the regulatory version, and building downwash dimensions will be determined by the Building Profile Input Program (BPIP PRIME), version 04274.³ BPIP PRIME is designed to incorporate the concepts and procedures expressed in the Good Engineering Practices (GEP) Technical Support Document, the Building Downwash Guidance document, and other related documents,⁴ while incorporating the PRIME enhancements to improve prediction of ambient impacts in building cavities and wake regions.

The only building at the Principio Quarry is a control building which is included in the model. The building parameters are listed in Table A-1 of Appendix A. There are no other structures or nearby buildings that are expected to impact building downwash. BPIP PRIME was run as a part of this modeling analysis. All point sources meet GEP requirements and BPIP files are included on the enclosed flash drive.

2.3 Treatment of Terrain

Through the use of the AERMOD terrain preprocessor (AERMAP, version 18081), AERMOD incorporates not only the receptor heights, but also an effective height (hill height scale) that represents the significant terrain features surrounding a given receptor.⁵

² 40 CFR 51, Appendix W-Guideline on Air Quality Models, Appendix A.1- AMS/EPA Regulatory Model (AERMOD).

³ Earth Tech, Inc., Addendum to the ISC3 User's Guide, The PRIME Plume Rise and Building Downwash Model, Concord, MA. ⁴ U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Guidelines for Determination of Good

Engineering Practice Stack Height (Technical Support Document for the Stack Height Regulations) (Revised), Research Triangle Park, North Carolina, EPA 450/4-80-023R, June 1985.

⁵ EPA, Users Guide for the AERMOD Terrain Preprocessor (AERMAP), EPA-454/B-18-004, Research Triangle Park, NC.

Receptor, building, and emission source terrain elevations input to the model were those interpolated from 1/3 arc-second National Elevation Dataset (NED) data obtained from the U.S. Geological Survey (USGS) from datum year 1983. The array elevations were interpolated using AERMAP.

2.4 Urban/Rural Option

The default rural dispersion coefficients were utilized within AERMOD based on a review of aerial imagery and an AERSURFACE run executed with a 10-kilometer radius. The results of the AERSURFACE run are included in Table 2-1 below and indicate an urban percentage less than 50%.

Code	Description	Code Count
0	Missing, Out-of-Bounds, or Undefined	0
11	Open Water	404
12	Perennial Ice/Snow	0
21	Developed, Open Space	18887
22	Developed, Low Intensity	30214
23	Developed, Medium Intensity	24615
24	Developed, High Intensity	13103
31	Barren Land (Rock/Sand/Clay)	122
32	Unconsolidated Shore	0
41	Deciduous Forest	14280
42	Evergreen Forest	533
43	Mixed Forest	4880
51	Dwarf Scrub	0
52	Shrub/Scrub	300
71	Grasslands/Herbaceous	695
72	Sedge/Herbaceous	0
73	Lichens	0
74	Moss	0
81	Pasture/Hay	653
82	Cultivated Crops	20
90	Woody Wetlands	4702
91	Palustrine Forested Wetland	0
92	Palustrine Scrub/Shrub Wetland	0
93	Estuarine Forested Wetland	0
94	Estuarine Scrub/Shrub Wetland	0
95	Emergent Herbaceous Wetland	161
96	Palustrine Emergent Wetland	0
97	Estuarine Emergent Wetland	0
98	Palustrine Aquatic Bed	0
99	Estuarine Aquatic Bed	0
	Total	113,569
	Total Urban (Category 23 and 24)	37,718
	% Urban	33%

Table 2-1. Land Use Procedure for Rural / Urban Selection in Air Quality Models

2.5 Meteorological Data

Site-specific dispersion models require a sequential hourly record of dispersion meteorology representative of the region within which the source is located. In the absence of site-specific measurements, the U.S. EPA guidelines recommend the use of readily available data from the closest and most representative National Weather Service (NWS) station. Regulatory air dispersion modeling using AERMOD requires five years of quality-assured meteorological data that includes hourly records of the following parameters:

- Wind speed;
- Wind direction;
- Air temperature;
- Micrometeorological Parameters (e.g., friction velocity, Monin-Obukhov length);
- Mechanical mixing height; and
- Convective mixing height.

The first three of these parameters are directly measured by monitoring equipment located at typical surface observation stations. The friction velocity, Monin-Obukhov length, and mixing heights are derived from characteristic micrometeorological parameters and from observed and correlated values of cloud cover, solar insulation, time of day and year, and latitude of the surface observation station. Surface observation stations form a relatively dense network, are almost always found at airports, and are typically operated by the NWS. Upper air stations are fewer in number than surface observing points since the upper atmosphere is less vulnerable to local effects caused by terrain or other land influences and is therefore less variable. The NWS operates virtually all available upper air measurement stations in the United States.

York utilized data for the Baltimore/Washington International Airport (KBWI) and Dulles International Airport (KIAD) weather stations as they are the most representative source of meteorological data for the Principio Quarry for surface data and upper air data, respectively. MDE provided 2017 to 2021 meteorological data for these airports which were used in the analysis.

2.6 Coordinate System

In all modeling analysis data files, the location of the emission source, structures, and receptors were represented in the Universal Transverse Mercator (UTM) coordinate system. The UTM grid divides the world into coordinates that are measured in north meters (measured from the equator) and east meters (measured from the central meridian of a particular zone, which is set at 500 km). The datum for this modeling analysis is based on North American Datum 1983 (NAD 83). UTM coordinates for this analysis all reside within UTM Zone 18.

2.7 Receptor Grids

For this air dispersion modeling analysis, ground-level concentrations were calculated along the facility property line and within a variable density square receptor grid. As mentioned in Section 2.3, receptor elevations and hill height scales required by AERMOD were determined using the AERMAP terrain preprocessor.

2.7.1 Cartesian Receptor Grid

- 50-meter (m) spaced receptors covering a region that extends to 2.5 kilometers (km) from the property center point,
- > 100-m spaced receptors covering a region from 2.5 km to 5 km from the property center point, and
- ▶ 500-m spaced receptors covering a region from 5 km to 10 km from the property center point.

The receptor grid is shown in Figure 2-1 below.

2.7.2 Property Line Receptors

Receptors were placed along the length of the property line spaced at 50-m intervals. The property line is defined as the green line in the site layout provided in Appendix A.

The Principio Quarry does not have a continuous fenceline around the property boundary. There is a fence on the southern boundary near I-95 and on the eastern side. To account for the lack of a physical boundary, York has included onsite receptors in this modeling analysis despite the AALs only applying to ambient air. As discussed in the results, modeled concentrations only exceeded the AALs near process equipment where the public would not be allowed access during operations.



Figure 2-1. Cartesian Receptor Grid

2.8 Source Types and Stack Parameters

The AERMOD dispersion model allows for emissions units to be represented as point, area, or volume sources. The emissions sources in question involve crushing, screening, transferring, and loading/unloading emissions. As such, most of the sources were modeled as either volume or area sources (Table B-1 and Table B-2). Only four dust collectors were modeled as point sources (Table B-3).

The site layout in Appendix A depicts the approximate location of the sources included in this analysis. The location, elevation, and preliminary source parameters are included in Appendix B.

Table 3-1 below shows the results of this modeling analysis. These results exclude 58 receptors within the industrial area which showed elevated concentrations as discussed below.

Averaging Period	Screening Level (ug/m ³)	Run Scenario	High 1 st High (ug/m ³)	Below Screening Level?
		2017	0.24875	Yes
		2018	0.24545	Yes
8-Hour	0.25	2019	0.24898	Yes
		2020	0.24365	Yes
		2021	0.24939	Yes

Table 3-1. 8-Hour Average Crystalline Silica Modeling Results

In total, there were 58 receptors with at least one 8-hour modeled average crystalline silica concentration that was above the listed screening level. Figure 3-1 shows the 58 elevated receptor locations (each receptor is marked with a yellow "+").

Figure 3-1. Elevated Receptors



All receptors which exceed the applicable screening level are located within the property boundary and generally near industrial sources. The elevated receptors are also towards the southern end of the property near the fence between the property and the I-95 rest stop. Between the fence and plant operators in this

location, it is not reasonable to expect anyone from the public to be in these locations at all and certainly not for an 8-hour period.

In addition, the AAL for crystalline silica could also be interpreted as 1.0 micrograms per cubic meter $(\mu g/m^3)$.⁶ Modeled concentrations at all locations are below this less conservative threshold. Finally, the AALs are conservatively calculated as a fraction of published health and safety thresholds. There are no other known sources of crystalline silica near these locations that would be expected to have a significant impact.

Accordingly, this air dispersion modeling analysis demonstrates that the crystalline silica emissions from the Principio Quarry are not expected to adversely impact public health and therefore meet the requirements of COMAR 26.11.15.06.

⁶ 1991/1992 American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV) per COMAR 26.11.15.01B(18)

APPENDIX A. FACILITY SITE LAYOUT & BUILDING DIMENSIONS



Figure A-1. Facility Site Layout

AERMOD ID	Description	X Coordinate	Y Coordinate	Elevation	Height
		(m)	(m)	(m)	(m)
BLDG	Control Building	412521.9	4385074.5	101.64	4.28

Table A-1. Building Dimensions

APPENDIX B. SOURCE PARAMETERS

Source ID	Source Description	X- Coordinate (meters)	Y- Coordinate (meters)	Elevation (meters)	Emission Rate (lb/hr)	Release Height (m) ^a	Initial Lateral Dimension (m) ^b	Initial Vertical Dimension (m) °
P02	Primary Jaw Crusher	412507	4386534	111.12	6.08E-04	6.1	0.23	0.23
P03	C-1 Transfer Point	412528	4386541	111.23	6.62E-05	9.1	0.28	0.23
P04	OVL-1 Transfer Point	412546	4386078	95.31	7.56E-05	9.1	0.25	0.23
P05	OVL-2 Transfer Point	412879	4385930	112.64	7.56E-05	9.1	0.25	0.23
P06	OVL-3 Transfer Point	412833	4385509	113.77	7.56E-05	9.1	0.25	0.23
P07	OVL-4 Transfer Point	412831	4385453	106.03	7.56E-05	9.1	0.25	0.23
P08	OVL-5 Transfer Point	412908	4385453	105.69	7.56E-05	9.1	0.25	0.23
P09	OVL-6 Transfer Point and Primary Screen	412907	4385375	106.26	1.14E-03	6.1	0.25	0.23
P10	C-2 Transfer Point	412882	4385397	106.48	6.62E-05	9.1	0.21	0.23
P11	C-3 Transfer Point	412933	4385375	105.95	1.31E-05	9.1	0.21	0.23
P12	C-4 Transfer Point	412967	4385374	105.63	1.31E-05	9.1	0.21	0.23
P13	C-5 and C-6 Transfer Point	412898	4385342	106.28	1.06E-04	9.1	0.21	0.23
P14	C-10 Transfer Point and 3 Crushers	412890	4385342	106.16	1.16E-03	6.1	0.21	0.23
P15	C-7 Transfer Point	412855	4385342	105.81	9.45E-05	9.1	0.28	0.23
P16	C-8_1 Transfer Point	412863	4385309	105.08	8.10E-04	6.1	0.25	0.23
P17	C-8_2 Transfer Point	412867	4385309	105.17	8.10E-04	6.1	0.25	0.23
P18	C-9 Transfer Point	412872	4385298	105.29	4.21E-05	9.1	0.21	0.23
P19	C-11 Transfer Point	412846	4385298	104.51	2.29E-05	9.1	0.18	0.23
P20	C-12 Transfer Point	412846	4385276	104.60	2.29E-05	6.1	0.18	0.23
P21	C-16 Transfer Point	412830	4385297	104.07	1.67E-05	6.1	0.18	0.23
P22	C-18 Transfer Point	412863	4385309	105.08	6.52E-06	9.1	0.21	0.23
P23	C-19 Transfer Point	412863	4385309	105.08	6.52E-06	9.1	0.21	0.23
P24	C-20 and C-21 Transfer Point	412898	4385308	105.60	2.61E-05	9.1	0.18	0.23
RAP_1	Primary Crusher	412527	4385118	100.95	1.11E-04	3.8	0.23	0.23
RAP_2	Primary Screen	412527	4385118	100.95	1.52E-04	1.8	0.23	0.23
RAP_3	Return Belt	412527	4385118	100.95	2.36E-06	6.4	0.23	0.23

Table B-1. Volu	me Source F	Parameters a	and Emissi	on Rates
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Source ID	Source Description	X- Coordinate (meters)	Y- Coordinate (meters)	Elevation (meters)	Emission Rate (lb/hr)	Release Height (m) ^a	Release Height (m) ^a Initial Lateral Dimension (m) ^b	
RAP_4	Product Stacker	412527	4385118	100.95	7.09E-06	6.4	0.28	0.23
CR_1	Primary VSI Crusher	411978.4	4385045.9	82.30	6.46E-04	3.0	0.18	0.23
C_1	Conveyor	411977	4385051	82.28	1.20E-06	3.0	0.18	0.23
SF_1	Syntron Feeder	411976.1	4385056	82.17	7.98E-10	1.8	0.18	0.23

a. Release height is set to the height of the emission point above ground level.b. Initial lateral dimension is calculated as the width of the emission point (e.g., conveyor width) divided by 4.3.

c. Initial vertical dimension is calculated as the height of the emission point divided by 4.3.

Table B-2. Area Source Parameters and Emission Rates

Source ID	X-Coordinate (meters)	Y-Coordinate (meters)	Elevation (meters)	Emission Rate (g/s-m ²)	Release Height (m)	Initial Vertical Dimension (m)
FS0011	412277.9	4387403.5	130.66	2.55E-11	1.5	0

Table B-3. Point Source Parameters and Emission Rates

Source ID	Source Description	X-Coordinate (meters)	Y-Coordinate (meters)	Elevation (meters)	Emission Rate (lb/hr)	Stack Height (m)	Stack Temp (F)	Stack Velocity (m/s)	Stack Diameter (m)
BH_1	Baghouse 1	411954.6	4385031.1	82.26	3.99E-04	21.3	160	9.14	0.51
BH_2	Baghouse 2	411971	4385024.5	82.26	1.52E-05	21.3	160	14.22	0.46
DC_1	Truck Loadout Silo	411978.9	4385023.4	82.41	3.20E-04	15.2	Ambient	0.01	0.96
DC_2	Truck Loadout Silo	411978.8	4385019	82.50	3.20E-04	15.2	Ambient	0.01	0.96

Office of the County Executive

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Department of Land Use & Development Services

Eric Sennstrom, AICP, Director Office: 410.996.5220 Fax: 800.430.3829

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CECIL COUNTY, MARYLAND Office of the Director 200 Chesapeake Boulevard, Suite 2300, Elkton, MD 21921

January 28, 2019

Jim Gawthrop, Vice President Aggregate Division, MD Operations York Building Products 950 Smile Way York, PA 17404

RE: Tax Map 24 Parcels 8, 26, 90, 91, 94 & 241

Dear Mr. Gawthrop:

I am writing in response to your e-mail of January 25, 2019 regarding the zoning designation of the above referenced parcels. Specifically, you are interested in receiving verification that mineral extraction and mineral processing are permitted on these parcels.

Please be advised that the above referenced parcels are presently zoned Mineral Extraction – A (MEA). The MEA zoning district, pursuant to Article V, Part III, Section 67 of the Cecil County Zoning Ordinance, permits mineral extraction activity by right with conditions. Additionally, pursuant to Article V, Part III, Section 68 of the Cecil County Zoning Ordinance, mineral processing is permitted by right with conditions in the MEA zoning district. Enclosed for your information are copies of Sections 67 & 68.

If you have any questions or desire additional information, please contact me at your earliest convenience.

Sincerely Eric S. Senastrom, Director

Land Use & Development Services

Enclosures

www.ccgov.org

8. Prior to the renewal of a kennel license, the operator of the kennel shall schedule inspections by each agency named in Section 66.5 to ensure compliance with all applicable regulations. Violations will need to be corrected prior to license renewal.

Part II Mineral Extraction Uses

Section 67. Mineral Extraction (2.00.100)

- 1. Mineral extraction shall be permitted in the MEA zone provided that any mineral extraction activity in the MEA zone shall only be permitted in accordance with a site plan and shall meet the following requirements:
 - a. No excavation shall take place within 100 feet from any right of way line of any road.
 - b. No excavation shall take place, nor shall the slope of the natural land surface be altered as a result of said excavation, nor shall the storage of materials take place nearer than 100 feet to any property line. This setback shall not apply where the adjoining property is used for mineral extraction.
 - c. All of the Environmental Performance Standards, except the regulations pertaining to steep slopes of this Ordinance are met.
 - **d.** Operation structures shall not be erected within 200 feet of any property line or within 100 feet of any road. The setback to adjoining property lines shall not apply where the adjoining property is used for mineral extraction or heavy industry.
 - e. A bufferyard meeting the D standard shall be required between any operation structures and the right of way of any road.
 - f. Mineral extraction may be permitted in the MEA zone within the Chesapeake Bay Critical Area provided:
 - (1) No mineral extraction activity takes place within the Buffer.
 - (2) The mineral extraction activity is consistent with the Habitat Protection Program Element of the Cecil County Critical Area Program.
 - (3) The mineral extraction activity is consistent with the Mineral Resources Program Element of the Cecil County Critical Area Program.
 - (4) The requirements of the applicable Critical Area land use management area are met.
 - (5) The applicable requirements of Article XI, Part I are met.
- 2. Mineral Extraction may be permitted as a special exception in any zoning district in the MEB overlay zone provided:
 - Excavation shall not take place within 100 feet from any right of way line of any road or 300 feet from any lawfully permitted residential or institutional building.

- b. Excavation shall not take place, nor the slope of the natural land surface be altered as a result of such excavation, nor shall the storage of materials take place nearer than 100 feet to any property line.
- c. Operation structures shall not be erected nor storage of materials take place within 200 feet of any property line or 100 feet to the right of way line of any road.
- d. All Environmental Performance Standards, except the regulations pertaining to steep slopes, are met.
- e. A bufferyard meeting the D standard shall be required between any operation structures and the right of way of any road.
- f. The use of heavy machinery for refining or processing other than for extracting, crushing, moving, washing, and screening shall be permitted only with a Heavy Industrial (M2) base zone.
- g. New wash plants shall not be located within the Buffer of the Chesapeake Bay Critical Area.
- h. No mineral extraction activity shall take place within the Buffer of the Chesapeake Bay Critical Area.
- i. The mineral extraction activity is consistent with the Habitat Protection Program Element of the Cecil County Critical Area Program.
- j. The mineral extraction activity is consistent with the Mineral Resources Program Element of the Cecil County Critical Area Program.
- k. The requirements of the applicable Critical Area land use management area are met.

Section 68. Mineral Processing (2.00.200)

Mineral processing shall be permitted in the MEA and M2 zone provided that:

- 1. Operation structures shall not be erected and storage of materials shall not take place within 200 feet of any property line or 100 feet to the right of way of any road.
- 2. The setback from the property line shall not apply if the adjoining lot is being used for heavy industry or mineral extraction.
- 3. A bufferyard meeting the D standard shall be required between any operation structure and the right of way of any road.

Part III Residential Uses

Section 69. Dwelling – Detached (3.01.100)

Dwelling – detached shall be permitted in the BL, BG, BI, MB, M1 and M2 zones provided that the dwelling is for the owner, operator, or employee of an on site business.

Section 70. Dwelling – Manufactured Home – Double Wide (3.01.200)



Cecil County - Recommended Native Plant List

Canopy Trees

Persimmon -- Diospyros virginiana American Holly - Ilex opoca Shagbark Hickory - Carya ovata Mockernut Hickory – Carya alba Sassafras – Sassafras albidum White Pine – Pinus strobus Eastern Red Cedar - Juniperus virginiana Eastern Arborvitae – Thuja occidentalis White Oak – Quercus alba Swamp White Oak - Quercus bicolor Northern Red Oak - Quercus rubra Pin Oak - Quercus palustris Willow Oak - Quercus phellos Black Gum – Nyssa sylvatica River Birch - Betula nigra, good for sandy soils and streamsides, will tolerate sun or shade Bald Cypress - Taxodium distichum - tolerates wet or dry soils, stabilizes saturated soils

Understory Trees

Paw Paw – Asimina triloba American Plum – Prunus americana American Crabapple – Malus coronaria Serviceberry – Amelanchier canadensis Staghorn Sumac – Rhus hirta Eastern Redbud – Cercis canadensis Hackberry – Celtis occidentalis Sweetbay magnolia – Magnolla virginlana

<u>Shrubs</u> Highbush Blueberry – Vaccinium corymbosum

Ostrich Fern - Matteuccia struthiopteris Cinnamon Fern - Osmunda cinnamomea, (full sun & shade) Maidenhair Fern – Adiantum pedatum Foamflower - Tiarella cordifolia, (ground cover) Bushy St. John's Wort - Hypericum densifiorum, (ground cover) Cardinal flower - Lobelia cardinalis Great Blue Lobelia - Lobelia siphilitica Mountain Mint - Pycnanthemum muticum Wild Blue Indigo - Baptisia australis Blazing Star - Liatris Spicata Creeping Phlox - Phlox subulata (ground cover) Alumroot - Heuchera Americana, (full shade) (ground cover) Wild Ginger - Asarum canadense (ground cover) White turtlehead - Chelone glabra Summer Phlox - Phlox paniculata New York Ironweed - Vernonia noveboracensis

Herbaceous grasses

Switchgrass – Panicum virgatum Bottlebrush grass – Elymus Canadensis, (full shade) Broomsedge – Andropogon virginicus Little Bluestem - Schizachyrium scoparium Northern Sea Oats - Chasmanthium latifolium, (ground cover) Indiangrass - Sorghastrum nutans

	SOILS LEGENI	כ		
TYPE	SOIL NAME & DESCRIPTION		HYDROLOGIC GROUP	K FACTOR
AqA	Aquasco silt loam, 0 to 2 percent slopes	Partially Hydric	D	0.49
AqB	Aquasco silt loam, 2 to 5 percent slopes	Partially Hydric	D	0.49
AuB	Aura gravelly sandy loam, 2 to 5 percent slopes	Not Hydric	В	0.20
AuC	Aura gravelly sandy loam, 5 to 10 percent slopes	Not Hydric	В	0.20
AuD	Aura gravelly sandy loam, 10 to 15 percent slopes	Not Hydric	В	0.20
BbB	Baile-Glenville complex, 3 to 8 percent slopes	Partially Hydric	D	0.37
BuB	Butlertown silt loam, 2 to 5 percent slopes	Partially Hydric	D	0.43
CaB	Chillum loam, 2 to 5 percent slopes	Not Hydric	С	0.32
CaC	Chillum loam, 5 to 10 percent slopes	Not Hydric	C	0.32
CbB	Chillum silt loam, 2 to 5 percent slopes	Not Hydric	c	0.37
CbC	Chillum silt loam, 5 to 10 percent slopes	Not Hydric	С	0.37
CbD	Chillum silt loam, 10 to 15 percent slopes	Not Hydric	С	0.37
CcB	Chillum-Urban land complex, 0 to 5 percent slopes	Not Hydric	C	0.37
CgB	Chrome silt loam, 3 to 8 percent slopes	Partially Hydric	D	0.32
Ch	Codorus silt loam, 0 to 3 percent slopes, occasionally flooded	Partially Hydric	С	0.32
EmA	Elkton silt loam, 0 to 2 percent slopes	Partially Hydric	D	0.37
EvD	Evesboro loamy sand, 5 to 15 percent slopes	Not Hydric	A	0.05
FaaA	Fallsington sandy loam, 0 to 2 percent slopes	Partially Hydric	D	0.24
Hw	Hatboro-Codorus complex, 0 to 3 percent slopes, flooded	Partially Hydric	D	0.37
КрС	Keyport silt loam, 5 to 10 percent slopes	Partially Hydric	D	0.49
LaE	Legore silt loam, 25 to 45 percent slopes	Not Hydric	В	0.37
McA	Marshyhope loam, 0 to 2 percent slopes	Not Hydric	D	0.37
McB	Marshyhope loam, 2 to 5 percent slopes	Partially Hydric	D	0.37
MkB	Matapeake silt loam, 2 to 5 percent slopes	Not Hydric	С	0.49
MtaB	Mattapex silt loam, 2 to 5 percent slopes	Partially Hydric	С	0.49
MxB	Montalto silt loam, 3 to 8 percent slopes	Not Hydric	В	0.37
MyD	Montalto silty clay loam, 15 to 25 percent slopes	Not Hydric	В	0.37
MzB	Mount Lucas silt loam, 3 to 8 percent slopes	Partially Hydric	D	0.37
NtB	Neshaminy silt loam, 3 to 8 percent slopes	Not Hydric	В	0.37
NtC	Neshaminy silt loam, 8 to 15 percent slopes	Not Hydric	В	0.37
SaaB	Sassafras sandy loam, 2 to 5 percent slopes	Not Hydric	В	0.20
SgB	Sassafras gravelly loam, 2 to 5 percent slopes	Not Hydric	В	0.37
SgD	Sassafras gravelly loam, 10 to 15 percent slopes	Not Hydric	В	0.37
SME	Sassafras and Croom soils, 15 to 25 percent slopes	Partially Hydric	8	0.37
UbB	Udorthents, borrow area, 0 to 5 percent slopes	Partially Hydric	C	0.37
Up	Urban land	Not Hydric	D	
W	Water	Unknown Hydric		
WoaB	Woodstown loam, 2 to 5 percent slopes	Partially Hydric	C	0.32
WoC	Woodstown loam, 5 to 10 percent slopes	Partially Hydric	c	0.32
SOUR	CE: Latest available data from the USDA Digital Soil Survey			

BELVEDERE MINÉ

EX. PLANT

`BUILDINGS^{*}>

PARCEL 241

N/F LANDS OF

NDS 65/783

MS 2988

P.C. 1115/47

ZONE: MEA

7.298

BUFFFR

	LEGEND	
	EXISTING	PROPOSED
CONTOUR	65 ·	145
SPOT ELEVATION		143x5
FLOW ARROW		
SOIL BOUNDARY	MtB MuB	
PROPERTY LINE		
EASEMENT		
FENCELINE	X	
GAS LINE		
TELEPHONE LINE		
ELECTRIC LINE	<u>_</u>	
LIGHT POLE	*	
WETLANDS	\//	
WETLAND BUFFER		
STREAM		
STREAM BUFFER		
STORM DRAIN		SD
PAVEMENT		
TREELINE		
LIMITS OF DISTURBA	NCE	LOD

SITE PLAN NOTES

- 1. TAX MAP 24, PARCEL 241 TOTAL LOT AREA = 815.974 AC±
- ZONING: MEA
- DEED REFERENCE: N.D.S. 65/783 ADDRESS: 1079 BELVEDERE ROAD, PORT DEPOSIT, MD 21904
- TOTAL MINING PERMIT AREA = 718.65 ACRES
- 2. EXISTING USE: SAND & GRAVEL SURFACE MINING OPERATION PROPOSED USE: SAND & GRAVEL SURFACE MINING OPERATION WITH THE ADDITION OF A ROCK QUARRY AND AGGREGATE CRUSHING OPERATION AND A GRAVEL DRIVE
- ACCESSING BELVEDERE ROAD. 3. THIS PLAN IS AN UPDATE OF THE MINING PERMIT PLAN PREPARED BY CNA DATED JAN. 2017.
- 4. NO EXCAVATION SHALL TAKE PLACE WITHIN 100 FEET FROM ANY RIGHT OF WAY LINE OF ANY ROAD.
- 5. NO EXCAVATION SHALL TAKE PLACE, NOR SHALL THE SLOPE OF THE NATURAL LAND SURFACE BE ALTERED AS A RESULT OF SAID EXCAVATION, NOR SHALL THE STORAGE OF MATERIALS TAKE PLACE NEARER THAN 100 FEET TO ANY PROPERTY LINE. THIS SETBACK SHALL NOT APPLY WHERE THE ADJOINING PROPERTY IS USED FOR MINERAL EXTRACTION.
- 6. ALL OF THE ENVIRONMENTAL PERFORMANCE STANDARDS, EXCEPT THE REGULATIONS PERTAINING TO STEEP SLOPES OF THIS ORDINANCE ARE MET.
- 7. OPERATION STRUCTURES SHALL NOT BE ERECTED WITHIN 200 FEET OF ANY PROPERTY LINE OR WITHIN 100 FEET OF ANY ROAD. THE SETBACK TO ADJOINING PROPERTY LINES SHALL NOT APPLY WHERE THE ADJOINING PROPERTY IS USED FOR MINERAL EXTRACTION OR HEAVY INDUSTRY.
- 8. A BUFFERYARD MEETING THE D STANDARD SHALL BE REQUIRED BETWEEN ANY OPERATION STRUCTURES AND THE RIGHT OF WAY OF ANY ROAD. 9. THE PROPERTY SHOWN HEREON APPEARS TO BE LOCATED IN ZONE 'X' (AREAS TO BE OUTSIDE THE 0.2% ANNUAL CHANCE) AS SHOWN ON F.I.R.M. COMMUNITY PANEL
- NOS. 24015C0135E DATED MAY 4, 2015 AND 24015C0050D DATED JULY 8, 2013. 10. THIS PROJECT IS NOT WITHIN THE CHESAPEAKE BAY CRITICAL AREA. 11. EXISTING TOPOGRAPHY TAKEN FROM CECIL COUNTY COMPREHENSIVE MAPPING
- PROGRAM ON 1927 N.A. DATUM, DATED SPRING 1986 AND AERIAL PHOTOGRAPHY DATED NOVEMBER 2010 AND JULY 2016.
- 12. COORDINATES BASED ON MARYLAND COORDINATE SYSTEM (MCS), NAD 83 DATUM 13. PROPERTY BOUNDARY INCLUDED IN THIS PLAN: TAX MAP 24, PARCEL 241
- 14. SOIL BOUNDARIES WERE TAKEN FROM THE 2009 CECIL COUNTY DIGITAL SOIL SURVEY DATA. 15. THE ON-SITE STORM DRAINAGE AND STORMWATER MANAGEMENT SYSTEM WILL
- BE PRIVATELY OWNED AND MAINTAINED. 16. OWNER/DEVELOPER: YORK BUILDING PRODUCTS, INC.
 - YORK CITY INDUSTRIAL PARK 950 SMILE WAY, YORK, PA 17404-1798
 - (443) 907-2406 ATTN: JAMES GAWTHROP
- 17. PROPERTY BOUNDARIES ARE BASED UPON ACTUAL TAX MAPS ON FILE WITH CECIL COUNTY, MARYLAND. NO RESPONSIBILITY IS ASSUMED FOR THEIR ACCURACY. 18. THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY.
- 19. REGULATORY APPROVALS REQUIRED: MAJOR SITE PLAN
- CECIL SOIL CONSERVATION DISTRICT E&S PLAN
- MDE MINING PERMIT CECIL CO. LUDPR - ENTRANCE PLAN
- UPDATE MDE 15mm DISCHARGE PERMIT
- 13. NON-TIDAL WETLAND PREVIOUSLY DELINEATED ON SITE. PROPOSED MINING AND CONSTRUCTION ARE OUTSIDE OF LIMITS OF WETLANDS AND BUFFERS. 14. THIS SITE IS EXEMPT FROM FOREST CONSERVATION REGULATIONS FOR NONCOAL SURFACE MINING (SECTION 3.2J)
- 15. VARIANCES REQUESTED: ROAD CODE VARIANCE FOR NO ACCELERATION OR DECELERATION
- LANES FROM CECIL CO. LUDPR. 16. NO WASTE PRODUCTS ARE PROPOSED WITH THIS MINING OPERATION.
- 17. LIMIT OF DISTURBANCE TAKEN FROM E&S PLAN BY MCCRONE DATED AUG. 2019. 18. EXISTING PRIVATE WATER WELL AND SEWAGE SEPTIC FACILITIES ARE LOCATED AT EXISTING PLANT BUILDINGS ON THE WEST SIDE OF BELVEDERE ROAD. NO

Date

- ADDITIONAL FACILITIES ARE PROPOSED. 19. EXISTING NUMBER OF EMPLOYEES = 12
- PROPOSED NUMBER OF EMPLOYEES = 26

Approved

Zoning Administrator: Cecil County Department of Land Use & Development Services





-		· · · · · · · · · · · · · · · · · · ·	
91	 YORK BUILDING PRODUCTS CO., INC.	RED TOAD ROAD, PORT DEPOSIT, MD 21904	NDS 515/
90	 YORK BUILDING PRODUCTS CO., INC.	RED TOAD ROAD, RISING SUN, MD 21911	NDS 343
94	 YORK BUILDING PRODUCTS CO., INC.	1548 RED TOAD ROAD, PORT DEPOSIT, MD 21904	NDS 515
31	 YORK BUILDING PRODUCTS CO., INC.	EBENEZER CHURCH ROAD, RISING SUN, MD 21911	NDS 515/
81	 YORK BUILDING PRODUCTS CO., INC.	RED TOAD ROAD, RISING SUN, MD 21911	NDS 515/
125	 YORK BUILDING PRODUCTS CO., INC.	RED TOAD ROAD, RISING SUN, MD 21911	NDS 515/
8	 YORK BUILDING PRODUCTS CO., INC.	BELVIDERE RD, PORT DEPOSIT, MD 21904	NDS 81/
95	 MASON DIXON SAND AND GRAVEL CO. OF PA	BELVIDERE RD, PORT DEPOSIT, MD 21904	106/6

ARCEL NO.	LOT NO.	OWNERS	ADDRESS	DEED REF.	PLAT REF.	MINOR SUB NO.
359	Sector and	JAMES C. JOHNSON	1832 RED TOAD ROAD, PORT DEPOSIT, MD 21904	3848/253	1107/35	10 H H H H
22		YORK BUILDING PRODUCTS CO., INC.	RED TOAD ROAD, RISING SUN, MD 21911	NDS 515/970		ππ π
133		MARY M. WAGNER	25 BRACKEN LANE, RISING SUN, MD 21911	215/67		3273
286		NEIL LLOYD AND MARY M. RAMSEY	90 COTTONWOOD LANE, RISING SUN, MD 21911	NDS 267/267		3273
138		DAVID A. BUTLER	81 COTTONWOOD LANE, RISING SUN, MD 21911	WLB 1892/130		
93		YORK BUILDING PRODUCTS CO., INC.	RED TOAD ROAD, PORT DEPOSIT, MD 21904	NDS 515/970		3273
288	2	DONALD JEFFREY AND MARLANA LYNN WHITE	25 EBENEZER CHURCH ROAD, RISING SUN, MD 21911	4052/456	1109/45	10.10.005
288	1	GREG L. AND BRENDA S. MULLINS	95 EBENEZER CHURCH ROAD, RISING SUN, MD 21911	NDS 248/485	1109/45	3273
27	2	NOVO REALTY, LLC	EBENEZER CHURCH ROAD, NORTH EAST, MD 21901	3083/217	1109/38	
P/O 241		YORK BUILDING PRODUCTS, INC.	1079 BELVIDERE RD, PORT DEPOSIT, MD 21904	NDS 65/783	1115/47	2988
31		YORK BUILDING PRODUCTS CO., INC.	EBENEZER CHURCH ROAD, RISING SUN, MD 21911	NDS 515/970		2767
314	1	NOVO REALTY, LLC	REGEL REGENCY CT, RISING SUN, MD 21911	3109/355	1103/52	
314	2	NOVO REALTY, LLC	REGEL REGENCY CT, RISING SUN, MD 21911	3109/346	1103/52	
314	6	NOVO REALTY, LLC	REGEL REGENCY CT, RISING SUN, MD 21911	3109/352	1103/52	
314	3	PHILIP J. AND KELLY A. SNYDER	27 REGEL REGENCY CT, RISING SUN, MD 21911	4276/51	1103/52	
314	4	JEREMY K. AND BRIANNA WILLIAMS	28 REGEL REGENCY CT. RISING SUN. MD 21911	4014/418	1103/52	
314	5	NOVO REALTY, LLC	REGEL REGENCY CT, RISING SUN, MD 21911	3109/349	1103/52	
32	300.101.300	YORK BUILDING PRODUCTS CO., INC.	RED TOAD ROAD, RISING SUN, MD 21911	NDS 515/970	***	
P/0 241		YORK BUILDING PRODUCTS, INC.	1079 BELVIDERE RD, PORT DEPOSIT, MD 21904	NDS 65/783	1115/47	2988
2	att 311.700	STATE OF MARYLAND DEPT. OF TRANSPORTATION	JFK MEMORIAL HIGHWAY, NORTH EAST, MD 21901	1/297	num m	
1		PRINCIPIO IRON COMPANY	WINCH ROAD, PORT DEPOSIT, MD 21904	NDS 65/792	1109/50	лжж.
113	secon m	YORK BUILDING PRODUCTS CO., INC.	WINCH ROAD, PORT DEPOSIT, MD 21905	NDS 168/214	urone m	m max
295	1A	RICHARD E. BINES JR. & SHEILA R. BINES	1227 BELVIDERE RD, PORT DEPOSIT, MD 21904	WLB 885/555	1114/66	1876
296	3D	RICHARD E. BINES & SHEILA R. BINES	1207 BELVIDERE RD, PORT DEPOSIT, MD 21904	DWL 2976/242	1114/66	2149
69		MICHELLE SAVIDGE	1223 BELVIDERE RD, PORT DEPOSIT, MD 21904	NDS 472/452		1876
162	10011011100	GERALD E. COOK, JR. AND DEBORAH J. COOK	1231 BELVIDERE RD, PORT DEPOSIT, MD 21904	NDS 224/389	an an an	1876
166	***	JONATHON AND FRANKIE B. TENNANT	1247 BELVIDERE RD, PORT DEPOSIT, MD 21904	WLB 597/123		ян#
172	second on	EMILY B. CHICOSKY	1257 BELVIDERE RD, PORT DEPOSIT, MD 21904	NDS 283/788	1977-005 FT	ππα
157		DUANE H. AND ALMA D. TAYLOR	1265 BELVIDERE RD, PORT DEPOSIT, MD 21904	WAS 353/680		
154		RONALD E. AND JENNIFER G. KIDD	1281 BELVIDERE RD, PORT DEPOSIT, MD 21904	WLB 1187/406		
170	-20-24-24	CHARLES A. AND ANNELIESE CASTRENZE	1291 BELVIDERE RD, PORT DEPOSIT, MD 21904	NDS 12/581		
210	30130.00	BRYAN G. FORD	1305 BELVIDERE RD, PORT DEPOSIT, MD 21904	4151/385	matu	u uus
350	1	LAURA HOWELL LINTON	BELVIDERE RD, PORT DEPOSIT, MD 21904	WLB 1144/255	18-26-18	3045
105	302301-000	LAURA H. LINTON	1338 BELVIDERE RD, PORT DEPOSIT, MD 21904	WLB 1979/425	10FC 200 201	3045
176		JOHN STEVEN AND SHERON ROWENA NEWTON	1368 BELVIDERE RD, PORT DEPOSIT, MD 21904	4170/398		
156		RENEE G. LONG AND LISA J. GOULD	BELVIDERE RD, PORT DEPOSIT, MD 21904	WLB 833/77		
174		RENEE LONG AND LISA J. GOULD	1380 BELVIDERE RD, PORT DEPOSIT, MD 21904	WLB 525/150		
180		DEBORAH A. AND NICKOLAS D. OTTE	1388 BELVIDERE RD, PORT DEPOSIT, MD 21904	4266/1	nam	
175	100-100	THOMAS R. AND MARY L. BURLIN	BELVIDERE RD, PORT DEPOSIT, MD 21904	300/376		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
298	STREET OF MALE	FRANK B. KARWACKI, JR. AND MARY PATRICIA KARWACKI	1430 BELVIDERE RD, PORT DEPOSIT, MD 21904	WLB 1016/1	3473001.000	2098
7	9	HAROLD L. MATTHEWS	MATTHEWS LANE, PORT DEPOSIT. MD 21904	WLB 1276/136	1116/16	
7	8	DONNA R. MATTHEWS	47 MATTHEWS LANE, PORT DEPOSIT, MD 21904	WLB 2439/11	813/472	
96		JOSHUA BRADLEY	1843 RED TOAD ROAD, PORT DEPOSIT, MD 21904	WLB 1400/700	1115/41	
- 90	ational and	ROGER D AND JENNYS HIPPS	1831 RED TOAD ROAD PORT DEPOSIT MD 21004	NDS 167/15		



MARYLAND DEPARTMENT OF THE ENVIRONMENT

AIR AND RADIATION ADMINISTRATION APPLICATION FOR A PERMIT TO CONSTRUCT

SUPPLEMENT TO DOCKET #07-23

- COMPANY: York Building Products Co., Inc.
- LOCATION: Principio Quarry 1079 Belvidere Road Port Deposit, MD 21904
- APPLICATION: Installation of one (1) quaternary cone crusher, three (3) conveyors, one (1) secondary screen, powered by electricity, to an existing crushing and screening plant and an overall throughput increase for the entire plant to 800 tons per hour

<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 York Building Products, Inc. on January 26, 2023 for the installation of one (1) quaternary cone crusher, three (3) conveyors, one (1) secondary screen, powered by electricity, to an existing crushing and screening plant and an overall throughput increase for the entire plant to 800 tons per hour. The proposed modification will be located at 1079 Belvidere Road, Port Deposit, MD 21904.

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 #07-23 at the following link:

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

In accordance with HB 1200/Ch. 588 of 2022, the applicant provided an environmental justice (EJ) Score for the census tract in which the project is located using the Maryland EJ mapping tool. The EJ Score, expressed as a statewide percentile, was shown to be 5.76, which the Department has verified. This score considers three demographic indicators – minority population above 50%, poverty rate above 25% and limited English proficiency above 15%. The Department's review of the environmental and socioeconomic indicators contributing to that EJ score is included in the tentative determination that is available for public inspection.

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. A requested public hearing will be held virtually using teleconference or internet-based conferencing technology unless a specific request for an in-person public hearing is received. 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 directed to the attention of Ms. Shannon Heafey, Air Quality Permits Program, Air and Radiation Administration, 1800 Washington Boulevard, Baltimore, Maryland 21230. Further information may be obtained by calling Ms. Shannon Heafey at 410-537-4433.

Christopher R. Hoagland, Director Air and Radiation Administration

MARYLAND DEPARTMENT OF ENVIRONMENT AIR AND RADIATION ADMINISTRATION

FACT SHEET AND TENTATIVE DETERMINATION YORK BUILDING PRODUCTS, INC.

PROPOSED INSTALLATION OF EQUIPMENT TO INCREASE THROUGHPUT OF THE EXISTING CRUSHING AND SCREENING PLANT

I. INTRODUCTION

The Maryland Department of the Environment (the "Department") received an application from York Building Products, Inc. on January 26, 2023 for a Permit to Construct for the modification of an existing crushing and screening plant by the installation of one (1) quaternary cone crusher, three (3) conveyors, one (1) secondary screen, powered by electricity, to increase overall throughput to 800 tons per hour. The proposed modification is be located at 1907 Belvidere Road, Port Deposit, MD 21904.

A notice was placed in The Cecil Whig on March 31, 2023 and April 7, 2023 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

York Building Products, Inc currently conducts several operations at the Principio Quarry location. They have a quartz processing plant and a hot mix asphalt plant on the property that are not a part of this modification.

The crushing and screening plant at the facility is permitted for the following equipment:

One (1) Jaw Crusher; One (1) Secondary Cone Crusher; One (1) Tertiary Cone Crusher; One (1) 7' x 16', Primary Screen; One (1) 8' x 20', Secondary Screen; Twenty (20) conveyors; and Six (6) feeders.

The plant is limited to processing a maximum of 350 tons per hour, but maintain a monthly average of 240 tons per hour. Wet suppression systems are used to control fugitive dust.

B. Proposed Installation

York Building Products has proposed to increase the overall throughput of production at the facility to 800 tons per hour. In addition, they have proposed to add one (1) quaternary cone crusher, three (3) conveyors, one (1) secondary screen. The final configuration of equipment at the crushing and screening plant will be:

One (1) Jaw Crusher;

One (1) Secondary Cone Crusher;

One (1) Tertiary Cone Crusher;

One (1) Quaternary Cone Crusher;

One (1) 6' x 16', Primary Screen;

Two (2) 8' x 20', Secondary Screens (stacked tower);

Two (2) 5' x 12' Rinse Screens (wet);

Twenty-four (23) dry conveyors;

Four (4) wet conveyors;

Five (5) feeders;

One (1) Screw Washer; and

One (1) Rock Breaker

Wet suppression systems will be used to control fugitive dust.

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) 40 CFR 60, Subparts A and OOO, which establish New Source Performance Standards 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 26.11.06.03C 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.
- (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 26.11.06.12, 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.
- (f) 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.
- (g) 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 Cecil 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 Philadelphia-Wilmington 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. Cecil 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. ENVIRONMENTAL JUSTICE ANALYSIS

The concept behind the term environmental justice (EJ) is that regardless of race, color, national origin, or income, all Maryland residents and communities should have an equal opportunity to enjoy an enhanced quality of life. How to assess whether equal protection is being applied is the challenge.

Communities surrounded by a disproportionate number of polluting facilities puts residents at a higher risk for health problems from environmental exposures. It is important that residents who may be adversely affected by a proposed source be aware of the current environmental issues in their community in order to have meaningful involvement in the permitting process. Resources may be available from government and private entities to ensure that community health is not negatively impacted by a new source located in the community.

Extensive research has documented that health disparities exist between demographic groups in the United States, such as differences in mortality and morbidity associated with factors that include race/ethnicity, income, and educational attainment.

The Maryland General Assembly passed HB 1200, effective October 1, 2022, that adds to MDE's work incorporating diversity, equity and inclusion into our mission to help overburdened and underserved communities with environmental issues. In accordance with HB 1200/Ch. 588 of 2022, the applicant provided an environmental justice (EJ) Score for the census tract in which the proposed source is located using the Maryland EJ mapping tool. The EJ Score, expressed as a statewide percentile, was shown to be 5.76 which the Department has verified. This score considers three demographic indicators – minority population above 50%, poverty rate above 25%

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

and limited English proficiency above 15%. To account for other sources of pollution surrounding the proposed source, the Department conducted an additional EJ Score analysis to evaluate the impact of other sources located within 1 mile of the proposed source. The highest EJ Score for census tracts located within 1 mile of the facility, expressed as a statewide percentile, was shown to be 34.20.

An EJ Score of 34.20 indicates that the proposed installation is located in an area that is not disproportionately impacted by sources of pollution or at a higher risk of health problems from environmental exposures than other areas in Maryland. The Department has reviewed the air quality impacts from this proposed installation and has determined that the proposed installation will meet all applicable air quality standards.

VI. 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 AP-42 emission factors. The conservative U.S. EPA's AERMOD dispersion model was 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 particulate matter from the proposed modification are listed in Table I. The emissions are based on the overall production increase at the existing facility.
- **B.** Compliance with National Ambient Air Quality Standards The maximum ground level concentrations for particulate matter based on the emissions from the proposed modification are listed in column 2 of Table II. The combined impact of the projected contribution from the proposed modification and the ambient background concentration for particulate matter shown in column 3 of Table II is less than the NAAQS for particulate matter shown in column 4.
- **C. Compliance with Air Toxics Regulations** Crystalline silica is the toxic air pollutant of concern from the proposed modification and is listed in column 1 of Table III. The predicted maximum off-site ambient concentration of crystalline silica is shown in column 4 of Table III, and the maximum concentration is less than the corresponding screening level for the crystalline silica shown in column 2.

VII. TENTATIVE DETERMINATION

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

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

TABLE I PROJECTED MAXIMUM EMISSIONS FROM THE PROPOSED MODIFICATION

	PROJECTED MAXIMUM EMISSIONS FROM PROPOSED MODIFICATION			
POLLUTANT	(lbs/day)	(tons/year)		
Particulate Matter (PM ₁₀)	11	1.2		

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

POLLUTANTS	MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS CAUSED BY EMISSIONS FROM PROPOSED MODIFICATION (μg/m ³)	BACKGROUND AMBIENT AIR CONCENTRATIONS (μg/m ³)*	NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) (µg/m ³)
Particulate Matter (PM ₁₀)	24-hr max \rightarrow 14	24-hr max. \rightarrow 23	24-hr max.→ 150

*Background concentrations were obtained from Maryland air monitoring stations as follows: $PM_{10} \rightarrow 3900$ Hillen Road in Baltimore City

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

TOXIC AIR POLLUTANTS	SCREENING LEVELS (μg/m³)	PROJECTED WORST-CASE FACILITY-WIDE EMISSIONS (lbs/hr)	PREDICTED MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS (µg/m ³)
Crystalline Silica	1-hour→ None 8-hour→ 0.25 Annual→ None	0.006	1-hour→ None 8-hour→ 0.249 Annual→ None

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

The values are based on worst-case emissions from the proposed facility and were predicted by EPA's AERMOD dispersion model.
DRAFT PERMIT

Wes Moore

Serena McElwain

Air and Radiation Administration

1800 Washington Boulevard, Suite 720

Baltimore, MD 21230

⊠ C	onstruction Permit	Operating Permit		
PERMIT NO.: As listed on Pag	e 2	DATE ISSUED: <u>TBD</u>		
PERMIT FEE: <u>\$2,000.00</u>		EXPIRATION DATE: In accordance with COMAR 26.11.02.04B		
LEGAL OWNER & York Building Produ 950 Smile Way, York, PA 17404 Attention: Mr. Jim Engineering	ADDRESS acts Co., Inc. Gawthrop, VP	SITE York Building Products Co., Inc Principio Quarry 1079 Belvidere Road Port Deposit, MD 21904 AI # 164346		

SOURCE DESCRIPTION

This permit authorizes the installation of one (1) quaternary cone crusher, three (3) conveyoers, one (1) secondary screen, and an overall throughput increase to 800 tph at an existing crushing and screening plant.

This permit includes premises-wide limitations on the emissions of NO_x , CO, and VOC to preclude applicability of Part 70 Operating Permit requirements.

This permit serves as a temporary permit to operate for a period of 180 days after increasing throughput of the existing crushing and screening plant.

This permit supersedes all previous permits to construct issued to ARA Premises No. 015-0286.

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

Page 1 of 19

Program Manager

Director, Air and Radiation Administration

<u>INDEX</u>

- Part A General Provisions
- Part B Applicable Regulations
- Part C Construction Conditions
- Parts D1-D4 Operating and Monitoring Conditions
- Part E Notifications and Testing
- Part F Record Keeping and Reporting
- Part G Crushing and Screening Plant Equipment List and Specifications
- Part H Temporary Permit-To-Operate Conditions

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ARA Registration Number	Description	Date of Installation
015-0286-6- 0392	One (1) Crushing and Screening Plant rated at 800 tons/hr consisting of the following: One (1) Jaw Crusher; One (1) Secondary Cone Crusher; One (1) Tertiary Cone Crusher; One (1) Quaternary Cone Crusher; One (1) 6' x 16', Primary Screen; Two (2) 8' x 20', Secondary Screens (stacked tower); Two (2) 5' x 12' Rinse Screens (wet); Twenty-four (23) dry conveyors; Four (4) wet conveyors; Five (5) feeders; One (1) Screw Washer; and One (1) Rock Breaker.	2021 Modified in 2023
015-0286-6- 0393	One (1) Quartz Processing Plant Process A rated at 120 tph and consisting of the following: One (1) Primary VSI Crusher; One (1) Primary Screen (wet); Five (5) conveyors (four (4) wet); One (1) feeder; Two (2) Screw Washers; Two (2) Hydrocyclones; and One (1) Classifier. Process B rated at 20 tph and consisting of the following: One (1) Scalping Screen; Nine (9) belts/elevators;	2021

ARA Registration Number	Description	Date of Installation	
	Two (2) baghouses;		
	One (1) feeder;		
	Four (4) Truck Loadout Silos with dust		
	collectors; and		
	One (1) Sand Dryer.		
	One (1) 400 tph Hot Mix Asphalt Plant consisting		
	of the following:		
	8'x40' Double Barrel Dryer Drum Mixer		
015-0286-6-	controlled by a pulse jet baghouse	2022	
0399	100 MMBTU burner fired by propane or natural	2022	
	gas		
	Four (4) asphalt storage silos		
	Three (3) vertical asphalt storage tanks		
015-0286-5-	One (1) Propane/natural gas-fired Hot Oil Heater	2022	
0209	rated at 2.7 MMBTU/hr	2022	

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, and pertaining to registered equipment associated with York Building Products Co., Inc. – Principio Quarry (ARA Premises No. 015-0286). This includes the Form 5 application for one (1) quaternary cone crusher, three (3) conveyors, one (1) secondary screen, and an overall throughput increase to an existing crushing and screening plant received January 26, 2023.
 - (b) All valid Summary of Demonstrations for Meeting the Ambient Impact Requirement and T-BACT Requirements (5T) received at the Department prior to issuance of this permit, and pertaining to premises-wide emissions of any toxic air pollutants (TAPs) associated with York Building Products Co., Inc. – Principio Quarry (ARA Premises No. 015-0286).

- (c) All valid Emissions Data (5EP) received at the Department prior to issuance of this permit, and pertaining to premises-wide emissions of any TAP associated with York Building Products Co., Inc. – Principio Quarry (ARA Premises No. 015-0286). This includes the four (4) Form 5EP applications received January 26, 2023.
- (d) All valid applications for Gas Cleaning or Emission Control Equipment (Form 6) received at the Department prior to issuance of this permit, and pertaining to registered equipment associated with York Building Products Co., Inc. – Principio Quarry (ARA Premises No. 015-0286).
- (e) All valid applications for Fuel Burning Equipment (Form 11) received at the Department prior to issuance of this permit, and pertaining to registered equipment associated with York Building Products Co., Inc. – Principio Quarry (ARA Premises No. 015-0286).
- (f) Supplemental Information: Process Flow Diagrams, Site Plans, Emissions Calculations, Safety Data Sheets, Modeling Report, and Zoning Approval received January 26, 2023.

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 Cecil County Health Department shall at any reasonable time be granted, without delay and without prior notification, access to the Permittee's property and permitted to:
 - (a) inspect any construction authorized by this permit;
 - (b) sample, as necessary to determine compliance with requirements of this permit, any materials stored or processed on-site, any waste materials, and any discharge into the environment;
 - (c) inspect any monitoring equipment required by this permit;

- (d) review and copy any records, including all documents required to be maintained by this permit, relevant to a determination of compliance with requirements of this permit; and
- (e) obtain any photographic documentation or evidence necessary to determine compliance with the requirements of this permit.
- (3) The Permittee shall notify the Department prior to increasing quantities and/or changing the types of any materials referenced in the application or limited by this permit. If the Department determines that such increases or changes constitute a modification, the Permittee shall obtain a permit-to-construct prior to implementing the modification.
- (4) 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 permit to construct issued to ARA Premises No. 015-0286.
- (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:

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, I for Hot Mix Asphalt Plants, and OOO for Nonmetallic Mineral Processing Plants.

All notifications required under 40 CFR 60, Subparts A, I, 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

United States Environmental Protection Agency Region III, Enforcement & Compliance Assurance Division Air, RCRA and Toxics Branch (3ED21) Four Penn Center 1600 John F. Kennedy Boulevard Philadelphia, PA 19103-2852

- (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 prohibits visible emissions, other than uncombined water, greater than 20 percent opacity.

Exceptions. The visible emissions standard in COMAR 26.11.06.02C(2) does not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: (i) the visible emissions are not greater than 40 percent opacity; and (ii) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period.

- (e) COMAR 26.11.06.03B(1)(a), 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 26.11.09.05A(1), which limits visible emissions other than uncombined water to not more than 20 percent opacity from fuel burning equipment.
- (i) COMAR 26.11.09.07A(1), which limits the sulfur content of distillate fuel oils to not more than 0.3 percent by weight.
- (j) COMAR 26.11.11.02B and C, which prohibit the use of cutback asphalt except:
 - (i) where long-life stock pile storage is necessary;
 - (ii) where the use or application from October 15 through April 15 is necessary; and
 - (iii) where cutback asphalt is used solely as a penetrating prime coat.
- (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(9,16,56), which requires that the Permittee obtain from the Department, and maintain and renew as required, a valid State permit-to-operate.
- (b) COMAR 26.11.02.19C & D, which require that the Permittee submit to the Department annual certifications of emissions, and that the Permittee maintain sufficient records to support the emissions information presented in such submittals.
- (c) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.
- (d) COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.
- (e) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions would unreasonably endanger human health.

Part C – Construction Conditions

- (1) Except as otherwise provided in this part, the installation of one (1) quaternary cone crusher, three (3) conveyors, and one (1) secondary screen shall be constructed in accordance with specifications included in the incorporated applications.
- (2) The crushing and screening equipment shall be equipped with wet suppression systems as necessary to meet the fugitive particulate matter regulations of COMAR 26.11.06.03C & D and the opacity requirements of 40 CFR 60, Subpart OOO.

Part D1 – General Operating Conditions

(1) Except as otherwise provided in this part, all registered installations shall be operated in accordance with specifications included in the application and any operating procedures recommended by equipment vendors unless the Permittee obtains from the Department written authorization for alternative operating procedures.

- (2) Premises wide emissions shall be less than following limits in any rolling 12month period:
 - (a) 25 tons of oxides of nitrogen (NO_X); and
 - (b) 25 tons of volatile organic compounds (VOC); and
 - (c) 100 tons of carbon monoxide (CO).
- (3) No engines shall be used to power the registered installations unless prior approval is received from the Department.
- (4) The Permittee shall control fugitive dust on-site by using water, chemical dust suppressants, or a combination of both.

Part D2 –Operating and Monitoring Conditions for the Crushing and Screening Plant

- (1) The crushing and screening plant shall operate at an average throughput rate of 800 tons per hour or less on a monthly basis unless the Permittee can demonstrate, to the satisfaction of the Department, compliance with the ambient impact requirements of COMAR 26.11.15 at higher average throughput rates.
- (2) The equipment of the crushing and screening plant shall operate, on a monthly basis, at the average throughput rates listed in Part G of this permit unless the Permittee can demonstrate, to the satisfaction of the Department, compliance with the ambient impact requirements of COMAR 26.11.15 at higher average throughput rates.
- (3) The Permittee shall only process material mined at the site in the crushing and screening plant unless prior approval is received from the Department.
- (4) Wet suppression systems shall be used for the portable crushing and screening plant whenever needed to comply with the fugitive particulate matter handling requirements of COMAR 26.11.06.03C and COMAR 26.11.06.03D 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 the crusher; and

(b) No more than 7 percent opacity from all other fugitive sources. [Reference: 40 CFR §60.672(b) and Table 3 to 40 CFR 60, Subpart OOO]

(5) The Permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in all wet suppression systems. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. [Reference: 40 CFR §60.674(b)]

Part D3 – Operating and Monitoring Conditions for the Quartz Processing Plant

- (1) Process A of the Quartz Processing Plant shall be limited to a maximum processing rate of 120 tons per hour and Process B shall be limited to a maximum processing rate of 20 tons per hour.
- (2) Only propane shall be used as fuel in the sand dryer unless the Permittee receives approval from the Department to burn alternate fuels.
- (3) Wet suppression systems shall be used as necessary to meet the fugitive particulate matter regulations of COMAR 26.11.06.03C & D.
- (4) The sand dryer associated with process B of the quartz processing plant shall exhaust through a baghouse prior to discharging to the atmosphere to meet the visible emission and particulate matter standards of COMAR 26.11.06.02C(1) and COMAR 26.11.06.03B(1)(a).
- (5) The materials handling equipment associated with process B of the quartz processing plant shall exhaust through a baghouse prior to discharging to the atmosphere to meet the visible emission and particulate matter standards of COMAR 26.11.06.02C(1) and COMAR 26.11.06.03B(1)(a).
- (6) The Permittee shall perform at least one (1) leak detection test, using methods approved by the Department, per calendar year on each baghouse associated with the quartz processing plant.
- (7) The four (4) truck loadout silos associated with process B of the quartz processing plant shall be operated with dust collectors to meet the visible emission and particulate matter standards of COMAR 26.11.06.02C(1) and COMAR 26.11.06.03B(1)(a).

Part D4 – Operating and Monitoring Conditions for the Hot Mix Asphalt Plant

- (1) The Permittee shall not process more than 1,500,000 tons of hot mix asphalt in the hot mix asphalt plant in any rolling 12-month period unless the Permittee can demonstrate that total premises wide emissions of NO_x and VOC are less than 25 tons and total premises wide emissions of CO are less than 100 tons per year at other operating limits.
- (2) The exhaust gases from the hot mix asphalt plant shall vent through a baghouse to meet the visible emissions and particulate matter limitations of COMAR 26.11.06.02C(1) and COMAR 26.11.06.03B(1) and the following particulate matter and opacity limits specified in 40 CFR, Part 60, Subpart I for the hot mix asphalt plant:
 - (a) No more than 0.04 grains per standard cubic foot of exhaust gas; and
 - (b) Less than 20 percent opacity.
- (3) The Permittee shall not produce any asphalt paving materials containing RAP (RAP) in concentrations greater than 50 percent by weight in the hot mix asphalt plant unless the Permittee obtains written approval from the Department and demonstrates compliance with applicable visible emissions standards and the nuisance and odor requirements at a higher RAP concentration.
- (4) When producing hot mix asphalt containing RAP, the mix temperature shall not exceed 360 °F unless the Permittee obtains written approval from the Department and demonstrates compliance with the visible emissions requirements of COMAR 26.11.06.02C(1), the opacity limits specified in 40 CFR, Part 60, Subpart I, and the nuisance and odor requirements of COMAR 26.11.06.08 and .09 at a higher temperature.
- (5) The Permittee shall burn only natural gas or propane in the drum dryer of the hot mix asphalt plant unless the Permittee obtains an approval from the Department to burn alternate fuels.
- (6) The Permittee shall burn only natural gas or propane in the hot oil heater unless the Permittee obtains an approval from the Department to burn alternate fuels.
- (7) The Permittee shall perform a leak detection test at least once per calendar year on the baghouse associated with the hot mix asphalt plant.
- (8) The Permittee shall continuously monitor the mix temperature of the hot mix asphalt plant when using RAP.

- (9) The Permittee shall continuously monitor the pressure drop across the baghouse when the hot mix asphalt plant is operating.
- (10) Soils contaminated with petroleum based fuels, metals, or other volatile organic compounds shall not be processed in the hot mix asphalt plant.

Part E – Notifications and Testing

- (1) The Permittee shall submit written or electronic notification to the Department of the initial startup date of the increased throughput for the crushing and screening plant and the initial startup date of each subsequent, equivalent replacement equipment within 15 days after such date. [Reference: 40 CFR §60.7(a)(3) and §60.676(i)]
- For the throughput increase for the crushing and screening plant and each subsequent, equivalent replacement equipment (if required), the Permittee shall demonstrate compliance with all applicable opacity standards within the applicable timeframes in accordance with 40 CFR 60, Subpart OOO. Except for the seasonal shutdown provision under 40 CFR §60.675(i), under no circumstance shall the demonstration for compliance with opacity standards occur later than 180 days after initial startup of the portable crushing and screening plant.
 [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 7 days prior to that date unless an alternate date is mutually agreed with the Department. [Reference: 40 CFR §60.675(g)]
- (6) Within 45 days following the required Method 9 observations, the Permittee shall submit the results to the Department.
- (1) The Permittee may use the results of the Method 9 opacity observations for the portable crushing and screening plant conducted at one site to satisfy the compliance demonstration required at each additional site where the equipment will be located.

Part F – Record Keeping and Reporting

- (1) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information associated with the crushing and screening plant:
 - (a) The amount of material processed and total hours of operation each month in the crushing and screening plant;
 - (b) Calculations of the average throughput rating at the crushing and screening plant on a monthly basis;
 - A log, kept onsite, of each periodic inspection of the wet suppression systems associated with the crushing and screening plant including the dates and any corrective actions taken [Reference: 40 CFR §60.674(b) and §60.676(b)(1)];
 - (d) Copies of all notifications of initial start-up of the portable crushing and screening plant and each subsequent, equivalent replacement equipment;
 - (e) Copies of all required opacity observation test results for the initial portable crushing and screening plant and each subsequent, equivalent replacement equipment; and

- (f) Sufficient equipment information or vendor literature for all initial equipment associated with the portable crushing and screening plant and each subsequent, equivalent replacement equipment to substantiate equivalency and emissions.
- (2) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information associated with the quartz processing plant:
 - (a) The amount of material processed and total hours of operation each month for each process of the quartz processing plant;
 - (b) Calculations of the average throughput rating at each process of the quartz processing plant on a monthly basis;
 - (c) The date, time, and results of all leak detection tests performed on the two (2) baghouses associated with the quartz processing plant.
 - (d) Monthly records of maintenance performed on the two (2) baghouses and four (4) dust collectors associated with the quartz processing plant.
- (3) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information associated with the hot mix asphalt plant:
 - (a) The amount of asphalt produced and total hours of operations each month;
 - (b) Rolling 12-month totals of asphalt of production;
 - (c) The amount and type of fuel burned in the asphalt drum dryer each month;
 - (d) The amount and type of fuel burned in the hot oil heater each month;
 - (e) The RAP percentage for each mix in the hot mix asphalt plant;
 - (f) Temperature readings in the hot mix asphalt plant for each mix using RAP;
 - (g) The pressure drop readings across the baghouse associated with the hot mix asphalt plant;

- (h) The date, time, and results of all leak detection tests performed on the baghouse associated with the hot mix asphalt plant;
- (i) Monthly records of maintenance performed on the baghouse associated with the hot mix asphalt plant; and
- (j) Copies of all required opacity observation results and particulate matter performance test results.
- (4) 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.
- (5) 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."

- (6) 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.
- (7) 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.

Equipment ID No.	Equipment Type	Description	Maximum Average Throughput (tons/hr)
CR-1	Primary Jaw Crusher	Metso C150 Jaw Crusher	548
CR-2	Secondary Cone Crusher	Sandvik CS660 Cone Crusher	561
CR-3	Tertiary Cone Crusher	Sandvik CH660 Cone Crusher	223
CR-4	Quaternary Cone Crusher	Sandvik CH660 Cone Crusher	223
S-1	Primary Screen	6'x16' TD Modular Scalping Screen	700
S-2	Secondary Screens	Two (2) 8'x20' Deister Finish Screens (stacked tower)	500/500
S-3	Rinse Screen (wet)	5'x12' Horizontal DD Deister Rinse Screen	243
S-4	Rinse Screen (wet)	5'x12' Horizontal DD Deister Rinse Screen	177
C-1	48" Conveyor	50' Rougher Belt	800
C-2	42" Overland Conveyor	Overland Conveyor	800
C-3	42" Overland Conveyor	Overland Conveyor	800
C-4	42" Overland Conveyor	Overland Conveyor	800

Part G – Crushing and Screening Plant Equipment List and Specifications

Equipment ID No.	Equipment Type	Description	Maximum Average Throughput (tons/hr)
C-5	42" Conveyor	170' Radial Stacking Conveyor	800
C-6	42" Conveyor	500' Tunnel Bel	800
C-7	42" Conveyor	150' Plant Feed Conveyor	800
C-8	36" Conveyor	50' Stacking Conveyor	800
C-9	36" Conveyor	50' Reversing Conveyor	139
C-10	36" Conveyor	150' Radial Stacking Conveyor	139
C-11	36" Conveyor	120' Channel Frame Transfer	561
C-12	42" Conveyor	100' Truss Frame Conveyor	561
C-13	48" Conveyor	80' Under Crusher Conveyor	1000
C-14/C-15	42" Conveyor	155' Truss Frame Belt Conveyor	500/500
C-16	36" Conveyor	35' Channel Frame Collection Conveyor	446
C-17	36" Conveyor	180' Truss Frame Conveyor	446
C-18	30" Conveyor	35' Truss Frame Conveyor	243
C-19	30" Conveyor	80' Truss Frame Conveyor	243
C-20	30" Conveyor (wet)	150' Channel Frame Transfer Conveyor	121
C-21	30" Conveyor (wet)	120' Truss Frame Stacking Conveyor	121
C-22	30" Conveyor	120' Channel/Truss Frame Transfer Conveyor	177
C-23	30" Conveyor (wet)	120' Radial Stacking Conveyor	177
C-24	36" Conveyor	35' Channel Frame Under Screen Conveyor	69
C-25	36" Conveyor	35' Channel Frame Under Screen Conveyor	69
C-26	30" Conveyor	150' Truss Frame Conveyor	138
C-27	30" Conveyor	45' Screw Bypass Conveyor	138
C-28	30" Conveyor (wet)	120' Radial Stacking Conveyor	138
VGF-1	Primary Grizzly Feeder	Deister 48"x24' Vibrating Grizzly Feeder	800
SF-1	Syntron Feeder	Surge Pile Feeder	200
SF-2	Syntron Feeder	Surge Pile Feeder	200
SF-3	Syntron Feeder	Surge Pile Feeder	200
SF-4	Syntron Feeder	Surge Pile Feeder	200
SW-1	Screw Washer	McLanahan Twin 44"x33'	N/A
B-1	Rock Breaker	BTI NT16E Breaker System	N/A

Part H – 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 crushing and screening at 800 tons per hour for a period of up to 180 days after increasing throughput of the crushing and screening plant.
- (2) The Permittee shall provide the Department with written or electronic notification of the date on which operation of the throughput increase 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/naaqs-table

Information on Maryland's Ambient Air Monitoring Program is located at the following Maryland Department of the Environment website: http://mde.maryland.gov/programs/Air/AirQualityMonitoring/Pages/index.aspx

Information on the U.S. EPA's Screen3 computer model and other EPA-approved air dispersion models is located at the following U.S. EPA website: <u>http://www.epa.gov/scram001/dispersion_screening.htm</u>

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-airemission-factors