

Hayes, Alyson

From: Singleton, Mareesa
Sent: Tuesday, October 10, 2017 2:10 PM
To: Hayes, Alyson
Subject: FW: Revision Construction Permit Application Documents (October 2017 Revision 1)
Attachments: October 2017 Revision 1 Update.pdf

Additional updated pages.

From: Matthew Wike [mailto:matthew.wike@gel.com]
Sent: Monday, October 09, 2017 2:27 PM
To: Singleton, Mareesa <singlemj@dhec.sc.gov>
Cc: Clark Wooten <cwooten@buysod.com>; Craig Kennedy <craigkennedy.kcs@gmail.com>; Rich Moses <Rich.Moses@americanmaterialsco.com>
Subject: RE: Revision Construction Permit Application Documents (October 2017 Revision 1)

Maressa

Please find enclosed the requested updates to the October 2017 Revision 1.

Thanks,

Matt

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Matthew W. Wike, P.E.



2040 Savage Road, Charleston, SC 29407 | P.O. Box 30712, Charleston, SC 29417
Cell: 843.697.2205 | Office: 843.769.7378 x4489
Environmental | Engineering | Surveying

From: Singleton, Mareesa [<mailto:singlemj@dhec.sc.gov>]
Sent: Monday, October 9, 2017 2:10 PM
To: Matthew Wike <matthew.wike@gel.com>
Cc: Clark Wooten <cwooten@buysod.com>; Craig Kennedy <craigkennedy.kcs@gmail.com>; Rich Moses <Rich.Moses@americanmaterialsco.com>
Subject: Re: Revision Construction Permit Application Documents (October 2017 Revision 1)

Matt, please update the following and resubmit:

Original Permit Application

Summary Section, page 3, Section 3.2 and Permit Applications Section, Regulatory Review Form, page 1 of 2, St. 2- For consistency, add same language that was added to the rest of the application in the October 2017 revision about the voluntary modeling of PM_{2.5}

Revised (October 2017, Rev. 1) Permit Application Emissions Form, page 1 of 1 - PM emissions are regulated by PSD (it is not a Title V pollutant) and the PSD avoidance limit is <250 TPY since it is not one of the 28 source categories with 100 TPY limit. Therefore, the limited emission rate for PM should be 250 TPY and not 100 TPY.

Let me know if you have any questions. Thanks

Mareesa Singleton
SCDHEC BAQ Engineering
803-898-4113

From: Matthew Wike <matthew.wike@gel.com>
Sent: Friday, October 6, 2017 9:43 AM
To: Singleton, Mareesa
Cc: Clark Wooten; Craig Kennedy; Rich Moses; Price, Tracy
Subject: Revision Construction Permit Application Documents (October 2017 Revision 1)

Mareesa

Per our discussions, please find enclosed revisions to the June 2017 Construction Permit Application for the RDA Facility. The October 2017 revisions were needed for the following reasons:

- RDA relocated the proposed primary crusher (CR1) and Conveyor #1 (C1) to the north;
- RDA is proposing to split Conveyor #1 (C1) into two conveyors (C1a and C1b); and
- RDA has voluntarily (PM_{2.5} emissions are below de minimis modeling levels) agreed to conduct air dispersion modeling for PM_{2.5} with this submittal.

The enclosed October 2017 revision sections (changes from the June 2017 Construction Permit Application are highlighted in yellow) are as follows:

- Revised Summary of Emissions Table 1;
- Revised DHEC BAQ Emissions Form D-2569;
- Revised EA&C I (Crushed Stone Mine and Processing) Text;
- Revised EA&C I (Crushed Stone Mine and Processing) Tables 1, 2, and 3;
- Revised Air Dispersion Modeling Results Text;
- Revised Air Dispersion Modeling Tables 1 and 2; and
- Revised Figure 3 Process Flow Diagram (Material Handling and Storage).

The air dispersion modeling files will be emailed to DHEC BAQ in a separate email. We appreciate your assistance with the construction permit application and the October 2017 revisions. Please call me with any questions.

Thanks,

Matt

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Matthew W. Wike, P.E.



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Cell: 843.697.2205 | Office: 843.769.7378 x4489

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- National Emission Standards for Hazardous Air Pollutants for Source Categories (40 CFR Part 63)
- Compliance Assurance Monitoring (40 CFR Part 64)
- Greenhouse Gas Tailoring Rule (June 3, 2010 Federal Register)

3.1 South Carolina Emissions from Fuel Burning Operations (Standard No. 1)

The South Carolina Emissions from Fuel Burning Operations Standard (R.61-62.5, Standard No. 1) establishes standards for fuel burning operations including limitations on visible emissions, PM emissions, and sulfur dioxide (SO₂) emissions (Sections I, II, and III, respectively). There are no fuel burning operations associated with the proposed crushed stone mining and processing operations at RDA. Therefore, the crushed stone mine and processing operations are not subject to this standard.

3.2 South Carolina Ambient Air Quality Standards (Standard No. 2)

The South Carolina Ambient Air Quality Standards (SCAAQS - R.61-62.5, Standard No. 2) establish ambient air quality standards for PM₁₀, PM_{2.5}, carbon monoxide (CO), SO₂, nitrogen dioxide (NO₂), ozone, gaseous fluorides as hydrogen fluoride, and lead. Emissions from the RDA facility will include PM₁₀ and PM_{2.5}. Compliance with Standard No. 2 is demonstrated using air dispersion modeling.

As shown in EA&C, PM_{2.5} emissions from all emission sources associated with the crushed stone mine and processing facility are below the 1.14 pound per hour (lb/hr) per emission source de minimis levels established in the DHEC BAQ Guidance document "Facilities/Sources Exempt or Deferred from Modeling - Standard No. 2 and Standard No. 7." While no modeling is required for PM_{2.5}, RDA has voluntarily agreed to conduct air dispersion modeling for PM_{2.5} with this submittal.

PM₁₀ emissions from all emissions sources associated with the crushed stone mine and processing facility are below the 1.14 lb/hr de minimis level, except the mining and material handling emission source. Therefore, an air dispersion modeling demonstration for PM₁₀ emissions is required for the mining and material handling operation. As shown in the Air Dispersion Modeling Results section of this application, PM₁₀ emissions have demonstrated compliance with Standard No. 2.

3.3 South Carolina Waste Combustion and Reduction (Standard No. 3) and South Carolina Hospital, Medical, Infectious Waste Incinerators (Standard No. 3.1)

Both the South Carolina Waste Combustion and Reduction Standard (Standard No. 3) and South Carolina Hospital, Medical, Infectious Waste Incinerators Standard (Standard No.



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APPLICATION IDENTIFICATION

(Please ensure that the information list in this table is the same on all of the forms and required information submitted in this construction permit application package.)

Facility Name <i>(This should be the name used to identify the facility)</i> RDA, LLC	SC Air Permit Number (8-digits only) <i>(Leave blank if one has never been assigned)</i> -	Application Date June 2017 Original Oct. 2017 Revision 1
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ATTACHMENTS

(Check all the appropriate checkboxes if included as an attachment)

<input checked="" type="checkbox"/> Sample Calculations, Emission Factors Used, etc.	<input checked="" type="checkbox"/> Detailed Explanation of Assumptions, Bottlenecks, etc.
<input checked="" type="checkbox"/> Supporting Information: Manufacturer's Data, etc.	<input type="checkbox"/> Source Test Information
<input checked="" type="checkbox"/> Details on Limits Being Taken for Limited Emissions	<input type="checkbox"/> NSR Analysis

SUMMARY OF PROJECTED CHANGE IN FACILITY WIDE POTENTIAL EMISSIONS

(Calculated at maximum design capacity.)

Pollutants	Emission Rates Prior to Construction / Modification (tons/year)			Emission Rates After Construction / Modification (tons/year)				
	Uncontrolled	Controlled	Limited	Uncontrolled	Controlled	Limited		
Particulate Matter (PM)	Not Applicable	Not Applicable	Not Applicable	902.69	57.18	<250 tpy		
Particulate Matter <10 Microns (PM ₁₀)				263.47	20.50	<100 tpy		
Particulate Matter <2.5 Microns (PM _{2.5})				36.24	2.68	NA		
Sulfur Dioxide (SO ₂)				Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Nitrogen Oxides (NO _x)								
Carbon Monoxide (CO)								
Volatile Organic Compounds (VOC)								
Lead (Pb)								
Highest HAP Prior to Construction (CAS #: NA)								
Highest HAP After Construction (CAS #: NA)								
Total HAP Emissions*								

Include emissions from exempt equipment and emission increases from process changes that were exempt from construction permits.

(*All HAP emitted from the various equipment or processes must be listed in the appropriate "Potential Emission Rates at Maximum Design Capacity" Table)

POTENTIAL EMISSION RATES AT MAXIMUM DESIGN CAPACITY

Equipment ID / Process ID	Emission Point ID	Pollutants (Include CAS #)	Calculation Methods / Limits Taken / Other Comments	Uncontrolled		Controlled		Limited	
				lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr

See EA&C



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APPLICATION IDENTIFICATION

(Please ensure that the information list in this table is the same on all of the forms and required information submitted in this construction permit application package.)

Facility Name <i>(This should be the name used to identify the facility)</i> RDA, LLC	SC Air Permit Number (8-digits only) <i>(Leave blank if one has never been assigned)</i> -	Application Date June 2017 Original October 2017 Revision
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STATE AND FEDERAL AIR POLLUTION CONTROL REGULATIONS AND STANDARDS

(If not listed below add any additional regulations that are triggered.)

Regulation	Applicable		Include all limits, work practices, monitoring, record keeping, etc.		
	Yes	No	Explain Applicability Determination	List the specific limitations and/or requirements that apply.	How will compliance be demonstrated?
Regulation 61-62.1, Section II(E) Synthetic Minor Construction Permits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The project is subject as federally enforceable permit conditions are requested to keep the emission below PSD and Title V major source levels	See Summary Section	See Summary Section
Regulation 61-62.1, Section II(G) Conditional Major Operating Permits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The project is subject as federally enforceable permit conditions are requested to keep the emission below PSD and Title V major source levels	See Summary Section	See Summary Section
Regulation 61-62.5, Standard No. 1 Emissions from Fuel Burning Operations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA
Regulation 61-62.5, Standard No. 2 Ambient Air Quality Standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The project is subject. PM-10 modeling is included with this application. While no modeling is required for PM _{2.5} , RDA has voluntarily agreed to conduct air dispersion modeling for PM _{2.5} with this submittal.	PM-10 (24-hour) = 150 µg/m ³	Air Dispersion Modeling
Regulation 61-62.5, Standard No. 3 Waste Combustion and Reduction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA



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STATE AND FEDERAL AIR POLLUTION CONTROL REGULATIONS AND STANDARDS					
<i>(If not listed below add any additional regulations that are triggered.)</i>					
Regulation	Applicable		Include all limits, work practices, monitoring, record keeping, etc.		
	Yes	No	Explain Applicability Determination	List the specific limitations and/or requirements that apply.	How will compliance be demonstrated?
Regulation 61-62.5, Standard No. 4 Emissions from Process Industries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The project is subject to the PM and Opacity limits in Sections VIII and IX and Non-Enclosed Operations in Section X.	See Summary Section	See Summary Section
Regulation 61-62.5, Standard No. 5 Volatile Organic Compounds	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA
Regulation 61-62.5, Standard No. 5.2 Control of Oxides of Nitrogen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA
Regulation 61-62.5, Standard No. 7 Prevention of Significant Deterioration*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA
Regulation 61-62.5, Standard No. 7.1 Nonattainment New Source Review*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA
Regulation 61-62.5, Standard No. 8 Toxic Air Pollutants	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA
Regulation 61-62.6 Control of Fugitive Particulate Matter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The project is subject	See Summary Section	The facility will utilize wet suppression and other best management practices.
Regulation 61-62.68 Chemical Accident Prevention Provisions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA
Regulation 61-62.70 Title V Operating Permit Program	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA
40 CFR Part 64 - Compliance Assurance Monitoring (CAM)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA
40 CFR 60 Subpart A - General Provisions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The project is subject	See Summary Section	See Summary Section
Subprt OOO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The project is subject	See Summary Section	See Summary Section
40 CFR 61 Subpart A - General Provisions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA
40 CFR 63 Subpart A - General Provisions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is not subject	NA	NA

* Green House Gas emissions must be quantified if these regulations are triggered.



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