

Statement of Basis For Title V Permit

Part I - General	
Company Name	Emerald Performance Materials, LLC
Premise Number	1677010029
What makes this facility a Title V facility?	Volatile Organic Compounds, Particulate Matter, Sulfur Dioxide, Nitrogen Oxides, and Hazardous Air Pollutants
Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01 (U)?	Yes
Were there any "common control" issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them.	No
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1)	Submitted a Minor Modification on March 10, 2008 for emissions units P003, P006, and P016 to change from having a carbon adsorber to a flare as the control equipment.
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E)	Emissions units P003, P006, and P016 are changing from having a carbon adsorber to a flare as the control equipment. PTI 16-01525 and 16-01843 have been administratively modified to reflect the change in control equipment.

Part II (State and Federally Enforceable Requirements)			
Term and Condition (paragraph)	Basis		Comments
	SIP (3745-)	Other	
A.1	N	Y	This is a statement that says the facility is subject to 40 CFR Part 68.
A.2	77-07(A)(13)	N	List of insignificant emissions units that are subject to an emission limitation in a Permit to Install.
A.3	N	40 CFR Part 63	States applicability of 40 CFR Part 63, Subpart U for emissions units P007, P020, T041, T042, T043 and T044.
A.4	N	40 CFR Part 63	States applicability of 40 CFR Part 63, Subpart FFFF for emissions units P003, P006, P016, T020, T031, T032, T034, T036, T037, T039, T040, T079 and T082.

C

Instructions for Part II:

Each paragraph in Part II must be identified and the remainder of the table completed. If the SIP (not including 31-05) is the basis for the term and condition, identify the specific rule. If the SIP is not the basis for the term and condition, place an "N" in the column under "SIP." If the basis for the term and condition is something other than the SIP, including 3745-31-05, NSPS or MACT, a "Y" should be noted in the "Other" column, and if not, an "N" should be noted. Whether the basis for the term and condition is the "SIP" or "Other," an explanation of each term and condition in Part II must be provided in the "Comments" section.

Part III (Requirements Within the State and Federally Enforceable Section)															
Any unusual requirements or aspects of the terms and conditions in Part III that are not self-explanatory should be explained in the appropriate comment field or in a paragraph following the table for Part III.															
EU(s)	Limitation	Basis		ND	OR	M	St	ENF	R	St	Rp	St	ET	Misc	Comments
		SIP (3745-)	Other												
B001	0.020 pound of particulates per million Btu actual heat input	17-10(B)(1)	N	N	N	N	N	N	N	N	N	N	N	N	M, R, Rp, ET - Are not required. AP-42 emissions factors are well developed for these types of emissions units

B002	0.020 pound of particulates per million Btu actual heat input	17-10(B)(1)	N	N	Y	N	N	N	N	N	N	N	N	N	OR - Permittee shall only burn natural gas in this emissions unit. M, R, Rp, ET - Are not required. AP-42 emissions factors are well developed for these types of emissions units
B001, B002, B008, P005, and P006	20% opacity as a six-minute average	17-07(A)	N	N	N	Y	N	N	Y	N	Y	N	N	N	ET- Permittee shall demonstrate compliance through the monitoring and record keeping requirements. Emission testing is not required.
B008	0.19 lb of particulate emissions per million Btu actual heat input	17-10(C)	N	N	Y	Y	N	N	Y	N	Y	N	Y	N	OR - Quality of coal burned. CAM is applicable.
B008	5.22 lbs of sulfur dioxide per million Btu actual heat input	18-83(H)	N	N	Y	Y	N	N	Y	N	Y	N	N	N	OR - Quality of coal burned. ET - Coal sampling and analysis along with record keeping and employing applicable equation in OAC rule 3745-18-04(G) to show compliance with the emission limitation.
F004, P003	20% opacity as a three-minute average	17-07(B)	N	N	N	Y	N	N	Y	N	Y	N	N	N	ET - Permittee demonstrates compliance through monitoring and record keeping. No emission testing required.
P003	No visible particulate emissions from the exhaust stack of the control equipment	17-08	N	N	N	Y	N	N	Y	N	Y	N	N	N	ET - Permittee demonstrates compliance through monitoring and record keeping. No emission testing required.
P003	95% control efficiency for VOC emissions by weight	21-09(BBB)(2)	N	N	N	Y	N	N	Y	N	Y	N	N	N	ET - Emissions unit tested February 28, 2006. May possibly be required to do testing by 40 CFR Part 63, Subpart FFFF. Installing a new flare as final control. Required to do an initial flare compliance assessment. CAM is not applicable.

P003, P006, and P016	MACT Rule	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other - 40 CFR Part 63, Subpart FFFF ET - Initial flare compliance assessment for P006.
P005	1.98 lbs of particulate emissions per hour	17-11	N	N	N	Y	N	N	Y	N	Y	N	N	N	ET - Emissions unit tested January 7, 2003.
P006	0.96 lb of VOC per hour	N	Y	N	N	Y	Y	N	Y	Y	Y	Y	N	N	Other - OAC rule 3745-31-05 ET - Emissions unit was tested on October 7, 2004. Actual emission rate was only 0.025% of allowable emission rate. Installing a new flare as final control. Required to do an initial flare compliance assessment. CAM is not applicable.
P006	6.35 lbs of particulate emissions per hour	N	Y	N	N	Y	Y	N	Y	Y	Y	Y	N	N	Other - OAC rule 3745-31-05 ET - Emissions unit was test on November 5, 2003. Actual emission rate was only 0.78% of allowable emission rate.
P006	VOC emissions shall not exceed 1.0 ton per year	21-09(BBB)(1)	N	N	N	Y	Y	N	Y	Y	Y	Y	N	N	ET - Emissions unit was tested on October 7, 2004. Actual emission rate would calculate out to only 0.1% of allowable emission rate (i.e., 0.001 ton/year). Installing a new flare as final control. Required to do an initial flare compliance assessment.
P007 and P020	reduce organic HAP emissions by 90 weight percent or to a concentration of 20 ppmv, whichever is less stringent, on a continuous basis using a control device	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other - 40 CFR Part 63, Subpart U OR - Minimum daily average temperature in the firebox. ET - MACT standard only required initial compliance test.

P007	85% overall control efficiency for OC	21-07(G)(2)	N	N	N	Y	N	N	Y	N	Y	N	N	N	ET - Emissions unit was tested on March 15-16, 2006.
P007	90% destruction of OC	21-07(G)(6)	N	N	N	Y	N	N	Y	N	Y	N	N	N	ET - Emissions unit was tested on March 15-16, 2006.
P012 and P020	None	N	N	N	Y	Y	N	N	Y	N	Y	N	N	N	The permittee shall not employ photochemically reactive material in the emissions unit. The appropriate monitoring, record keeping and reporting have been specified for the operational restriction. ET - No emission limitation to do emissions testing for.
P016	2.0 lbs of VOC per hour and 8.8 tons of VOC per year	N	Y	N	N	Y	Y	N	Y	Y	Y	Y	N	N	Other - OAC rule 3745-31-05 ET - Emissions unit was tested February 28, 2006. Installing a new flare as final control. Required to do an initial flare compliance assessment. CAM is not applicable.
P016	95% control efficiency for VOC, by weight	21-09(BBB)(3)	N	N	N	Y	Y	N	Y	Y	Y	Y	N	N	ET - Emissions unit was tested February 28, 2006. Installing a new flare as final control. Required to do an initial flare compliance assessment.
P020	117.94 tons of VOC per year	N	Y	N	N	Y	N	N	Y	N	Y	N	N	N	Other - OAC rule 3745-31-05 ET - Record keeping to determine compliance with limitation.
T041, T042, T043, and T044	Leak Detection	N	Y	N	N	Y	N	N	Y	N	Y	N	N	N	Other - 40 CFR Part 63, Subpart U ET - Emissions testing is not required.

EU = emissions unit ID

ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit)

OR = operational restriction

M = monitoring requirements

St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement

ENF = did noncompliance issues drive the monitoring requirements?

R = record keeping requirements

Rp = reporting requirements

ET = emission testing requirements (not including compliance method terms)

Misc = miscellaneous requirements

C **Instructions for Part III:**

- C All non-insignificant EUs must be included in this table. For each EU, or group of similar EUs, each emission limitation and control requirement specified in section A.I.1 and A.I.2 of the permit must be identified and the remainder of the table completed.
- C If the SIP (not including OAC rule 3745-31-05) is the basis for the term and condition, identify the specific rule. If the SIP is not the basis for the term and condition, place an "N" in the column under "SIP." If the basis for the term and condition is something other than the SIP, including OAC rule 3745-31-05, NSPS or MACT, a "Y" should be noted in the "Other" column, and if not, an "N" should be noted. If the basis for the term and condition is "Other," an explanation of the basis must be provided in the "Comments" section. If OAC rule 3745-31-05 is cited in the "Other" column, please indicate in the "Comments" section whether or not all of the requirements have been transferred from the permit to install.
- To complete the remainder of the table after "Basis," except for the "Comments" section, simply specify a "Y" for yes or an "N" for no. For the "M," "R," "Rp," and "ET" columns, if "N" is specified, there should be a brief explanation in the "Comments" section as to why there are no requirements. If a brief explanation is provided in the "Comments" section, please do not simply indicate that monitoring or testing requirements are not necessary. An explanation of why a requirement is not necessary should be specified.

When periodic monitoring requirements are established to satisfy the provisions of OAC rule 3745-77-07(A)(3)(a)(ii), the basis for the requirements must be explained. Whenever Engineering Guides have been used to establish the periodic monitoring requirements, the applicable Engineering Guide may be referenced in the "Comments" section. An example that should be clarified would be the situation where it has been determined that control equipment parametric monitoring will be used to evaluate ongoing compliance in lieu of performing frequent emission tests. In this situation, Engineering Guide #65 would be referenced along with the fact that the parametric monitoring range (or minimum value) corresponded to the range (or minimum value) documented during the most recent emission tests that demonstrated that the emissions unit was in compliance. If streamlining language is included in the "Monitoring," "Record Keeping," or "Reporting" requirements sections of the permit, explain which requirements are being streamlined (mark appropriate column above) and provide a brief explanation of why the streamlined term is equal to or more stringent than the "Monitoring," "Record Keeping," or "Reporting" requirements specified in the permit to install. If Engineering Guide #16 was used as the basis for establishing an emission test frequency, a simple note referencing the Engineering Guide in the "Comments" section would be sufficient.

Also, if a "Y" is noted under "OR," "Misc," "St," "ND," or "ENF" an explanation of the requirements must be provided in the "Comments" section. In addition to a general explanation of the "OR," "Misc," "St," "ND," and/or "ENF" the following must be provided:

1. For an operational restriction, clarify if appropriate monitoring, record keeping, and reporting requirements have been specified for the operational restriction and indicate whether or not CAM is currently applicable.
2. If a control plan and schedule is included in the "Miscellaneous Requirements" section of the permit, provide an explanation in the "Comments" section of the violation, basis for the violation, and the company's proposed control plan and schedule.
3. If the "ND" column above is marked, please identify the particular rule(s) that is (are) not applicable to the specified emissions unit.
2. If the "ENF" column above is marked, please provide a brief explanation of the noncompliance issue(s) which prompted the use of the specified monitoring requirement.

An explanation is not required if an "N" is noted in the "OR," "Misc," "St," "ND," or "ENF" columns.

C **Additional information for modifications** - Several types of modifications, as defined by rule, may be processed concurrently. Please provide enough of a description for someone wishing to review the changes to the permit language to be able to identify where the change is made in the permit document. This brief description should be identified in the appropriate row in the first table of this form by replacing the "N/A" in the applicable row(s). Please also indicate if the modification is being initiated by an appeal by including the ERAC case number in the "Comments" area. Please update the term-specific text in the SOB as warranted (full insertion or replacement is acceptable; bold italic and strike out is not needed). Note all modification/reopening rows should remain "N/A" when developing the SOB during the initial permit development. Note: APA's and Off-permit changes do not need to be noted in the SOB.