

Statement of Basis For Title V Permit

Company Name	The Lubrizol Corporation - Painesville Plant	
Premise Number	02-43-00-0024	
Number of Non-insignificant Emissions Units	61	
What makes this facility a Title V facility?	HCl, NOx, PM, SO2 and VOC	
Has each insignificant emissions unit been reviewed to confirm it meets the definition in 3745-77-01 (U)?	Yes	

Part II (State and Federally Enforceable Requirements)			
Term and Condition (paragraph)	Basis		Comments
	SIP (3745-)	Other	

▼ **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.

- ▼ If there were any “common control” issues associated with this facility, after the table for Part II, provide a summary of those issues and explain how the DAPC decided to resolve them.

Part III (Requirements Within the State & Federally Enforceable Section)

EU(s)	Limitation	Basis		O R	M	R	Rp	E T	M i s c	Comments
		SIP (3745-)	Other							
B001 - B004	20% opacity	-17-07		Y	Y	Y	Y	Y	N	OR: permittee shall burn only natural gas &/or #2 fuel oil.
B001 - B004	PM: 0.020 lb/mmBTU	17-10(B) (1)		Y	Y	Y	Y	Y	N	OR: permittee shall burn only natural gas &/or #2 fuel oil.
B001 - B004	SO2: 1.6 lbs/mmBTU	18-06(D)		Y	Y	Y	Y	Y	N	OR: quality of oil shall meet a sulfur content sufficient to comply with 1.6 lbs/mmBTU.
N001	20% opacity	-17-07		Y	Y	Y	Y	Y	N	OR: the pressure drop across the baghouse shall be maintained within the range of 1.5 - 8 inches of water while the emissions unit is in operation.
N001	PM: 0.10 lb/100 lbs liquid, semi-solid, solid	-17-09		Y	Y	Y	Y	Y	N	OR: the pressure drop across the baghouse shall be maintained within the range of 1.5 - 8 inches of water while the emissions unit is in operation.
N001	SO2: 100 lbs/hr	-18- 02(D)		Y	Y	Y	Y	Y	N	OR: permittee shall operate and maintain the wet scrubber at all times the process vent stream is vented to the scrubber in accordance with the following parameters: (a) not less than 2.9 pH; and (b) not less than five gallons per 1000 cubic feet liquid-to-gas ratio.
N001	See 40 CFR 63.1203	N	Y	Y	Y	Y	Y	Y	N	40 CFR 63, Subpart EEE (MACT for Hazardous Waste Combustors)
P001 - P022 P025 - P036 P053 & P054	VOC: controlled by a flare that meets OAC rule 3745-21-09(DD)(10)(d), or by an incinerator that meets OAC rule 3745-21-09(L L)(1)(a)	-21- 09(LL) (1)(a)/(b)		Y	Y	Y	Y	N	N	Unless otherwise exempt, per OAC 3745-21-09(LL)(3)(b): Reactor process vent stream is vented to an enclosed combustion device or a flare for which construction commenced prior to May 25, 1988. OR: The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1600 degrees Fahrenheit; a pilot flame shall be maintained at all times in the flare's pilot light burner. ET: not applicable

P001 - P022 P025 - P036 P050, P053 & P054	VOC: 5 tons/ rolling 12-month period if not controlled by flare or incinerator.	-21- 09(LL) (3)(a)		N	Y	Y	Y	Y	Y	Misc.: If percent control efficiency of control equipment is assumed to be zero, and compliance with the emission limitation of five tons per rolling twelve-month period from all process vent streams is demonstrated by the record keeping required in Section A.III of these terms and conditions, then the permittee may choose not to conduct parametric maintenance, monitoring and reporting as required under A.II, A.III and A.IV.
P001 - P022 P025 - P036 P050 - P054	Process wastewater discharged to separator equipped with covers and seals which minimize VOC.	-21-09 (LL)(2)		N	N	N	N	N	N	M, R, Rp: no requirements established in SIP. ET: not applicable
P001 P026 P029	SO2: 19.05lbs/hr 29.62 lbs/hr 68.8 lbs/hr	-18- 06(E)		N	Y	Y	Y	Y	N	
P006	SO2: 26.99lbs/hr SO2: controlled by caustic wet scrubber.	-18- 06(E)		Y	Y	Y	Y	Y	N	OR: permittee shall operate and maintain wet scrubber G-3 (G-3 Scrub) at all times the process vent stream is vented to the scrubber in accordance with the following parameters: (a) not less than 7.00 pH; and (b) not less than two gallons per minute scrubber liquor flow rate.
P011 P012 P013 P014 P022 P030	SO2: 2.4 lbs/hr 160.0 lbs/hr 25.0 lbs/hr 10.0 lbs/hr 20.0 lbs/hr 30.0 lbs/hr	N	Y	N	Y	Y	Y	Y	Y	Director's Final Findings and Orders for alternative SO2 emission control strategy, November 9, 2000 Misc.: A statement of certification of the existing continuous SO2 monitoring system shall be maintained ...; permittee shall implement a quality assurance/quality control plan for the continuous SO2 monitoring system ...
P011 P012 P013 P014 P022 P030	Total hourly and annual SO2: 247.4 lbs/hr & 100 tons/yr	N	Y	N	Y	Y	Y	Y	N	Director's Final Findings and Orders for alternative SO2 emission control strategy, November 9, 2000
P024	20% opacity	-17-07		Y	Y	Y	Y	Y	N	OR: pressure drop across the baghouse shall be maintained within the range of 2.5 - 5 inches of water while the emissions unit is in operation.

P024	PE: 3.53 lbs/hr	-17-11		Y	Y	Y	Y	Y	N	OR: pressure drop across the baghouse shall be maintained within the range of 2.5 - 5 inches of water while the emissions unit is in operation.
P054	20% opacity PE controlled by wet scrubber (AB-11 WScrb).	-17-07		Y	Y	Y	Y	Y	N	OR: scrubber water flow rate of the wet scrubber shall be continuously maintained at a value of not less than two gallons per minute at all times the process vent stream is vented to the scrubber.
P054	PE: 3.07 lbs/hr	-17-11		Y	Y	Y	Y	Y	N	OR: scrubber water flow rate of the wet scrubber shall be continuously maintained at a value of not less than two gallons per minute at all times the process vent stream is vented to the scrubber.
P038 - P049	Prevent liquid drainage from loading arm when not in use or accomplish complete drainage before loading arm is disconnected.	N	Y	N	Y	Y	Y	N	N	3745-31-05(A)(3) ET: not applicable
P038 - P049	VOC: 39.95 tons/rolling 12-month period from all emission units.	N	Y	N	Y	Y	Y	Y	N	3745-31-05(A)(3)

P038 P039 P040 P041 P042 P043 P044 P045 P046 P047 P048 P049	VOC: 23 lbs/hr 12 lbs/hr 170 lbs/hr 90 lbs/hr 47 lbs/hr 23 lbs/hr 12 lbs/hr 22 lbs/hr 12 lbs/hr 12 lbs/hr 12 lbs/hr 12 lbs/hr	N	Y	N	Y	Y	Y	Y	N	3745-31-05(A)(3)
P038 P039 P040 P041 P042 P043 P044 P045 P046 P047 P048 P049	VOC: 5.3 tons/yr 2.7 tons/yr 39.95 tons/yr 21 tons/yr 8.3 tons/yr 5.3 tons/yr 6.9 tons/yr 13 tons/yr 6.9 tons/yr 6.9 tons/yr 6.9 tons/yr 6.9 tons/yr	N	Y	N	Y	Y	Y	Y	N	3745-31-05(A)(3)

P040 & P041	Loading of anglmols accomplished so displaced vapors/gases be vented to carbon adsorption system: operated with sufficient volumetric flow; upon detection of break through, immediately recharge/ replace with fresh carbon.	N	Y	N	Y	Y	Y	N	N	3745-31-05(A)(3) ET: not applicable
P040, P041 & P049	Loading of gasoline additives accomplished either through submerged fill loading line or bottom loaded.	N	Y	N	Y	Y	Y	N	N	3745-31-05(A)(3) ET: not applicable
P042	Loading of sodium hydro sulfide accomplished such that all displaced vapors/gases be vented to caustic scrubber which discharges to fume incinerator AC-6 or AC-7.	N	Y	N	Y	Y	Y	N	N	3745-31-05(A)(3) ET: not applicable

P043	HCl: 8.30 lbs/ hr & 5 tons/yr	N	Y	N	Y	Y	Y	Y	N	3745-31-05(A)(3)
P047	1.4 lbs/hr & .9 ton/yr									
P043 & P047	Displaced vapors/gases vented to a water scrubber which, for P043, discharges to elevated flare AE-7.	N	Y	N	Y	Y	Y	N	N	3745-31-05(A)(3) ET: not applicable
P045	Displaced vapors/gases vented to a caustic scrubber (Z-13)	N	Y	N	Y	Y	Y	N	N	3745-31-05(A)(3) ET: not applicable
P050	VOC: 1.1 lbs/hr HCl: .86 lb/hr & 3.8 tons/yr	N	Y	Y	Y	Y	Y	Y	N	3745-31-05(A)(3) OR: scrubber liquor of wet scrubber AK-1 (AK-1 WScrb) shall be maintained such that the solution will not exceed 13.0 percent weight hydrochloric acid. The scrubber water flow rate shall be continuously maintained at a value of not less than two gallons per minute.
P050	HCl shall be controlled by a packed column scrubber.	N	Y	N	Y	Y	Y	N	N	3745-31-05(A)(3) ET: not applicable
P051	VOC: 31.08 lbs/batch & 11.34 tons/yr	N	Y	N	Y	Y	Y	Y	N	3745-31-05(A)(3)
P051	VOC controlled at all times by a condenser and an incinerator.	N	Y	N	Y	Y	Y	N	N	3745-31-05(A)(3) ET: not applicable

P051 & P052	Incinerator shall reduce VOC by at least 98% by weight.	N	Y	Y	Y	Y	Y	Y	Y	N	3745-31-05(A)(3) OR: average combustion temperature within the thermal incinerator shall not be less than 1600 degrees Fahrenheit at all times the emissions unit is in operation, unless the permittee demonstrates that 98% by weight can be achieved at a lower temperature.
P052	VOC: 130.8 lbs/day, 16.14 tons/yr from reactors and holding tanks, 4.29 tons/yr from feed tanks, 4.43 tons/yr from filters Include requirements of OAC rules 3745-21-09(L) and 3745-31-05(D)	N	Y	N	Y	Y	Y	Y	Y	N	3745-31-05(A)(3)
P052	SO2: 21.05 lbs/hr and 15.6 tons/yr SO2 : controlled by the scrubber prior to exhausting to the flare.	N	Y	Y	Y	Y	Y	Y	Y	N	3745-31-05(A)(3) OR: pH of the scrubber liquor shall be maintained at minimum of 7.5 while the scrubber is in use.

P052	VOC: 24.86 tons/rolling 12-month period	N	Y	Y	Y	Y	Y	Y	N	<p>3745-31-05(D)</p> <p>OR: maximum annual number of "solvent-containing" batches, excluding the methanol batches, shall not exceed 2,867, based upon a rolling, 12-month summation of the production rates.</p> <p>To ensure enforceability during the first 12 calendar months of operation, permittee shall not exceed:</p> <table border="0"> <thead> <tr> <th>Month</th> <th>Maximum Allowable Number of "solvent-containing" Batches</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>239</td> </tr> <tr> <td>to</td> <td></td> </tr> <tr> <td>1-12</td> <td>2867</td> </tr> </tbody> </table> <p>After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual limitation of "solvent-containing" batches shall be based upon a rolling, 12-month summation of the number of batches.</p>	Month	Maximum Allowable Number of "solvent-containing" Batches	1	239	to		1-12	2867
Month	Maximum Allowable Number of "solvent-containing" Batches																	
1	239																	
to																		
1-12	2867																	
P052	VOC: controlled by either an incinerator or a flare unless otherwise exempted by OAC 3745-21-09(L)(3).	N	Y	N	Y	Y	Y	N	N	<p>3745-31-05(A)(3)</p> <p>ET: not applicable</p>								
P052	The flare designed/ operated according to OAC 3745-21-09(DD)(10)(d)	N	Y	Y	Y	Y	Y	N	N	<p>3745-31-05(A)(3)</p> <p>OR: pilot flame shall be maintained at all times in the flare's pilot light burner.</p> <p>ET: not applicable</p>								

P052	none	-18-06(E)		N	N	N	N	N	N	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
P055, P057, P058 & P063	Not load more than 40,000 gal. of any volatile photochemically reactive material in loading rack unless vented to adsorption system.	-21-07(E)		Y	Y	Y	Y	Y	N	OR: carbon adsorber system shall process and recover at least ninety per cent by weight of all vapors and gases from the equipment being controlled.
P055, P057, P058 & P063	Displaced vapors/gases vented only to the adsorption system.	-21-07(E)		N	Y	Y	Y	Y	N	
P055 - P071	Prevent liquid drainage from loading arm when not in use or accomplish complete drainage before the loading arm is disconnected.	-21-07(E)		N	N	N	N	N	N	M, R, Rp: no requirements established in SIP. ET: not applicable
P056, P060-P061, P064-P071	Not load more than 40,000 gallons of any volatile photochemically reactive material in loading rack during any one day.	-21-07(E)		N	Y	Y	Y	N	N	ET: not applicable

T013 - T0186	Not store petroleum liquids, as defined in OAC Rule 3745-21-01(E)(13), with a vapor pressure of 1.52 psia.	-21-09(L)		N	Y	Y	Y	N	N	ET: not applicable
T077 & T186	VOC: 0.25 tons/yr	N	Y	N	Y	Y	Y	Y	N	3745-31-05(A)(3)

EU = emissions unit id

OR = operational restriction

M = monitoring requirements

R = record keeping requirements

Rp = reporting requirements

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

Misc = miscellaneous requirements

▼ **Instructions for Part III:**

- ▼ 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.
- ▼ 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. If the basis for the term and condition is “Other,” an explanation of the basis must be provided in the “Comments” section.

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 comments. Also, if a “Y” is noted under “OR” or “Misc,” an explanation of the requirements should be provided in the “Comments” section. In addition to a general explanation of the “OR” and/or “Misc,” the following should be provided:

1. For an operational restriction, clarify if appropriate monitoring, record keeping, 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 superseding language is included in the “Miscellaneous Requirements” section of the permit, explain which requirements are being superseded and which requirements are being superseded on the State-only side of the permit and why they are on the State-only side.

An explanation is not required if an “N” is noted in the “OR” column or in the “Misc” column.

- ▼ Any unusual requirements or aspects of the terms and conditions in Part III that are not self-explanatory should be explained in a paragraph following the table for Part III.