



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

6/8/2011

Certified Mail

Roger Brown
Chrysler Group LLC - Toledo North Assembly
4400 Chrysler Drive
Toledo, OH 43608-4000

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0448010414
Permit Number: P0108040
Permit Type: OAC Chapter 3745-31 Modification
County: Lucas

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Toledo Blade. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and Toledo Department of Environmental Services
348 South Erie Street
Toledo, OH 43604

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Toledo Department of Environmental Services at (419)936-3015.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 -Via E-Mail Notification
TDES; Michigan; Indiana; Canada



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Chrysler Group LLC (Chrysler) owns or is in co-operation with several automobile manufacturing plants in Toledo, Ohio. The operations associated with the Toledo North Assembly Plant (TNAP) and with the Toledo Supplier Park (TSP) are identified as premise number 0448010414. Chrysler requested a modification of PTI 04-01102, for emissions units P008, K021, K022 and K023 at the Toledo North Assembly Plant (TNAP) as part of a proposed plant expansion. PTI 04-1102 was originally issued in 1998 and was subsequently modified in 1999, 2000 and 2005. The permit actions associated with this project are identified as P0108007, P0108040 and P0108063. This project also includes installation of additional makeup air heaters which are all exempt from permitting requirements, an emergency generator issued as a PBR, and facility-wide increased VOC emissions associated with the projected production rate increase; all of which will be included with the total project emissions for purposes of PSD review.

An expansion of the body shop at Toledo North Assembly Plant (TNAP) is necessary to accommodate the 2013 model year vehicle platform. The sealer operations (P008) will be modified to improve underbody and hem flange corrosion protection for all vehicles manufactured at the facility, resulting in an increase in permit allowable VOC emissions. In addition, Chrysler is evaluating the feasibility of using several new sealer materials in the expanded sealer operation to meet the new model year design requirements. A new sealer gel oven, with a small thermal oxidizer, will also be installed for curing the sealer materials to prevent dripping of sealer materials in the existing prime coating operations.

The coating operations associated K021, K022 and K023 will be physically modified, without an increase in the permit allowable emissions. However the associated curing ovens will each be modified by the addition of 4 mmBtu of burner capacity to allow for a projected increased production rate.

3. Facility Emissions and Attainment Status:

The attainment status of Lucas County is:

SO₂: Attainment
CO: Unclassifiable/Attainment
Lead: Not Designated
NO_x: Unclassifiable/Attainment
Ozone: 8-hr non-attainment



PM-10: Unclassifiable

The existing 0448010414 facilities reported following emissions for calendar year 2010:

Actual emissions, in tons per year

CO	NO _x	PM ₁₀	SO ₂	VOC
18.11	28.70	3.65	0.21	193.34

The combined facilities at this location constitute a major source for NO_x, VOC and HAPs.

4. Source Emissions:

Permit allowable annual emissions in tons:

	CO	NO _x	PE	PM ₁₀	PM _{2.5}	SO ₂	VOC
P008*	3.64	4.38	0.08	0.33	0.33	0.03	77.49
K021	10.91	13.14	0.24	0.99	0.99	0.08	52.72
K022	14.47	17.43	0.33	1.31	1.31	0.10	4.19
K023	17.60	21.20	67.30	1.59	1.59	0.13	769.83

* P008 includes a 4 mmBtu/hr incinerator whose 0.10 tons of VOC per year emissions are included in the PSD determination, but are not included in the permit allowables.

The entire project is expected to result in an increase in actual to future projected actual VOC emissions of 39.0 tons per year.

5. Conclusion:

Issuance of this permit will not involve PSD review and the modification of this process at the existing facility meets the applicable requirements for permit issuance. An enforceable restriction to P008 will limit the source to less than full potential to emit, however the restriction is not utilized for purposes of the PSD review. The permit should be issued as a draft/final as the facility is Title V and require federal enforceability.

6. Please provide additional notes or comments as necessary:

See notes below and the included company provided Technical Support Documents.



7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
CO	46.62 (8.02 increase)
NOx	56.15 (9.75 increase)
PE	67.95 (1.05 increase)
PM ₁₀	4.22 (2.19 increase)
PM _{2.5}	4.22 (4.22 increase)
SO ₂	0.34 (0.06 increase)
VOC	904.23 (22.91 increase)

PSD applicability

Chrysler owns and operates automobile manufacturing plants in Toledo, Ohio. The Toledo North Assembly Plant (TNAP) is a full scale automotive assembly plant located adjacent to the Toledo Supplier Park facility complex. Two plants (TNAP and TSP) operate under one premise number as 0448010414. Three operationally linked facilities operate under separate premise numbers as 0448011729, 0448011730 and 0448011731. For PSD purposes these separate sources are considered to be one facility with a combined potential to emit greater than major source status for NOx, VOC and HAPs based on the reported PTE in the latest Title V permit applications.

	CO	NOx	PM ₁₀	SO ₂	VOC	Single HA P	Combined HAPs
0448010414	137.77	322.49	108.40	2.17	1635.65	216.8	612.1
0448011729	3.36	3.36	0.3	0.03	6.02	-	-
0448011730	-	-	5	-	12	-	-
0448011731	<u>68.9</u>	<u>61.45</u>	<u>6.52</u>	<u>7.85</u>	<u>297.83</u>	-	-
PTE	210	387	120	10	1952	217	612
Major status	250	250	250	250	250	10	25

Chrysler submitted a Technical Support Document of the actual TNAP facility wide emissions increases for PSD purposes (actual to projected future actual, or actual to potential), which is included following this discussion. Our confirming calculations are summarized as



(differences are thought to have occurred due to rounding error and the use of 1000 mmBtu/hrvs 1020 mmBtu/hr for the heat content of natural gas):

	CO	NO _x	PE	PM ₁₀	PM _{2.5}	SO ₂	VOC ⁴
K021 (burner)	1.45	1.74	0.03	0.13	0.13	0.01	0.10
K022 (burner)	1.45	1.74	0.03	0.13	0.13	0.01	0.10
K023 (burner)	1.45	1.74	0.03	0.13	0.13	0.01	0.10
P008	5.09	6.13	0.11	0.46	0.46	0.04	34.81 ²
P012	0	0	0	0	0	0	0
P014	0	0	0	0	0	0	8.67
MAH	19.48	23.18	0.44	1.76	1.76	0.14	1.28
Gen	0.02	2.04	0.01	0.01	0.01	0.01	0.06
K021	0	0	0	0	0	0	0.50
K022	0	0	0	0	0	0	0.22
K023	0	0	0	0	0	0	37.81
P007	0	0	0	0	0	0	26.74
P009	0	0	0	0	0	0	5.81
P010	0	0	0	0	0	0	0.14
Increase	29	37	1	3	3	1	116.34
Minus ¹							77.34 ³
Adj. Increase	29	37	1	3	3	1	39
Significance	100	40	40	25	15	10	40

1. Minus excludable portion due to product demand.
2. Our review establishes the maximum actual to projected future actual VOC emissions increase in P008 to be 34.81 VOC tpy which is comprised of an increase of 0.24 tpy PTE from the installation of new oven burners, and 0.10 tpy PTE from the installation of new incinerator burners and 34.47 tpy related to the increase in coating usage and in the operation to the existing burners associated with this emissions unit.
3. Chrysler's analysis of the excludable portion was based on reported emissions of 503.78 tons of VOC for 2002 and 446.19 for 2003 for an average related emissions rate of 474.99 tons per year at an average production rate of 280,689 vehicles per year which equates to 3.38 pounds of VOC per vehicle. Chrysler demonstrated an excludable level of production of 46,311 vehicles which equates to excludable emissions of 78.27 tons. Our review based on the emissions fee reports of 2002 and 2003 and additional comments from Chrysler, suggest that the emissions attributed to the boilers (1.70 tpy average) and to the emissions units located at the Stickney Ave plant (3.04 tpy average) should be excluded from the analysis, for an average related emissions rate of 468.54 tons per year and 3.34 pounds of VOC per vehicle. At the Chrysler demonstrated excludable level of production of 46,311 vehicles this equates to excludable emissions of 77.34 tons.
4. The emissions for the makeup air heaters, generator, the burner emissions of K021, K022, K023, P008, P012 and P014 represent past actual to future PTE increases. The increases in the emissions of P007, P009, P010 and coating emissions of K021, K022 and K023, we calculated as the increase in an average of the 2002 and 2003 reported emissions raised by the projected production rate from 280,689 to 327,000 vehicles per year as follows:

	K021	K022	K023	P007	P008	P009	P010
2002	2.37	1.29	226.55	184.56	38.18	44.94	1.27
2003	3.67	1.41	231.77	139.52	38.92	25.55	0.43
average	3.02	1.35	229.16	162.04	38.55	35.24	0.85
projected actual	3.52	1.57	266.97	188.78	44.92*	41.05	0.99
increase	0.50	0.22	37.81	26.74	6.37*	5.81	0.14

* Chrysler requested a higher level of projected future actual emissions to allow the maximum operational flexibility in the usage of new material.

At this level of emissions, PSD review will be avoided. In order to assure compliance with the projected future actual emissions of the PSD review performed in association with the changes required for the 2013 model year (i.e. changes to P008, P012, P014, K021, K022 and K023) the



permittee will have to demonstrate that the projected future actual PSD limitations have not been exceeded. For enforceability OEPA developed standardized language to be included in the facility-wide section of this permit which will require a calculation of actual emissions annually.

OEPA requires this information to appear as a permit restriction in the Facility-wide permit as follows:

**NSR for VOC - Baseline Actual Emissions vs
Potential/Projected Actual Emissions**

	Baseline 2002/2003 Actual Emissi ons (tons/yr)	*Potential Emissi ons **Projected Actual Emissi ons (tons/yr)	Incremental Difference (tons/yr)
	VOC	VOC	VOC
New & Modified Sources at PTE*			
P008 new burners	0	0.34	0.34
K021 new burners	0	0.10	0.10
K022 new burners	0	0.10	0.10
K023 new burners	0	0.10	0.10
P012 (Welding)	0	0	0
P014 (Purfoam)	0	8.67	8.67
Make up air heaters	0	1.28	1.28
New Emergency Generator (PBR)	0	0.06	0.06
Emissions from Associated Units **	0	10.65	10.65
K021 ¹	3.02	3.52	0.50
K022 ¹	1.35	1.57	0.22
K023 ¹	229.16	266.97	37.81
P007	162.04	188.78	26.74
P008	38.55	73.02 ²	34.47
P009	35.24	41.05	5.81
P010	0.85	0.99	0.14
Subtotals	470.21	586.55	116.34



Excludable Emissions Expansion Project Totals			<77.34>
			39

- ¹ includes reported VOC emissions from the existing burners
- ² Chrysler requested increased future actual emissions to allow for operational flexibility in the usage of new sealant and adhesive materials

E-Coat tank extension - K021

The E-coat line is an electrodeposition process involving the total immersion of the vehicle body in a water based coating followed by drying in a natural gas, indirect fired oven with an incinerator. Thermal incineration for VOC control was required by the BAT determination of PTI 04-1102 with additional requirements of 0.23 pound of VOC per gallon of applied solids, 52.01 tons of VOC per rolling 12 month period, 5 percent opacity from the RTO stack and emissions limitations for the 26.0 mmBtu/hr indirect fired, natural gas drying oven based on AP-42 boiler combustion emissions. Chrysler has indicated that they will be able to comply with the E-coat portion of the terms and conditions of their existing permit and any physical changes to the electrodeposition process made to accommodate the 2013 production, do not constitute a “reconstruction” or a permit modification. Therefore this portion of the existing permit will not be considered to be subject to a new OAC rule 3745-31-05 determination. Ohio EPA advised our office on 5/11/11 that the intention of the SIP was that compliance for this source be on a monthly basis. Specifically we were instructed that for OAC rule 3745-21-09(C)(1)(a)(ii) through (iv) only, we may ignore the applicability of the daily aspects of OAC rule 3745-21-09(B)(3)(j), (k) and (m). The applicable elements of the PSD review performed for the electrodeposition process in PTI 04-1102 will be carried into this permit unchanged. The automobile MACT, 40 CFR Part 63, Subpart IIII will apply and the company has requested flexibility in the listing of the available compliance options.

Oven burner capacity has been increased by the addition of two heater boxes, each with a rating of 2 mmBtu/hr for an increase of 4 mmBtu/hr in burner capacity. Therefore this portion of the existing permit will be considered to be subject to a new OAC rule 3745-31-05 determination.

In PTI 04-1102 as issued 6/26/98 the requirements for the oven burners are: CO: 0.021 pound/mmBtu& 2.7 tons/year, NOx: 0.100 lb/mmBtu& 13 tons/year, PM10: 0.012 pound/mmBtu and 1.6 tons/year, SO2: 0.0006 pound/mmBtu and 0.078 ton/year, VOC: 0.0028 pound/mmBtu and 0.36 ton/year from the oven combustion gases at 29.6 mmBtu per hour maximum burner capacity and 8760 hours per year operation.

In PTI 04-1102 as issued 9/8/05 the requirements for the oven burners were revised to CO: 0.083 pound/mmBtu& 9.5 tons/year, NOx: 0.100 lb/mmBtu& 11.4 tons/year, PM10: 0.0056 pound/mmBtu and 0.064 ton/year, SO2: 0.0006 pound/mmBtu and 0.068 ton/year, VOC: 0.0054 pound/mmBtu and 0.62 ton/year from the oven combustion gases based upon emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1, dated 7/98 at 26.0 mmBtu per hour maximum burner capacity and 8760 hours per year operation.

This revision will increase the burner capacity to 30 mmBtu/hr, correct the PM10 restriction to current AP-42 levels, and add requested PE and PM2.5 limitations: CO: 0.083 pound/mmBtu& 10.91 tons/year, NOx: 0.100 lb/mmBtu& 13.14 tons/year, PE: 0.0019 pound/mmBtu and 0.24



ton/yr, PM10 and PM2.5: 0.0075 pound/mmBtu and 0.99 ton/year, SO2: 0.0006 pound/mmBtu and 0.08 ton/year, VOC: 0.0054 pound/mmBtu and 0.71 ton/year, as mandated by OAC rule 3745-31-05(A)(3) (as effective 11/30/01). In consideration of SB265 or OAC rule 3745-31-05(A)(3) (as effective 12/01/06) BAT will also be stated as CO: 0.083 pound/mmBtu and NOx: 0.100 lb/mmBtu after the SIP revision is accepted. At the instruction of OEPA, the elements of the PSD review performed in PTI 04-1102 as issued 6/26/98 for the natural gas combustion products (0.100 pound of NOx, 0.0075 pound of PM10 and 0.0054 pound of VOC per mmBtu of actual heat input) will not be carried into this permit.

Table with 8 columns: CO, NOx, PE, PM10, PM2.5, SO2, VOC. Rows include 04-1102, P0108063, and Increase values.

40 CFR Part 63 Subpart DDDDD will also apply to this source as a process heater.

K022, Powder Anti-chip

The anti-chip line is an electrodeposition process involving the powder coating of the vehicle body controlled by a fabric filter, followed by baking to cure in a natural gas, indirect fired oven with an incinerator. Because the fabric filter was vented back into the plant, in the 1996 determination it was assumed that the particulate emissions were contained and no particulate limitations were included in the permit. This assumption has been revised based on the newly issued EG#75, and particulate will be addressed at SIP levels in this revision. Chrysler maintains that the fabric filter is integral to the process and is not a control device. They maintain that it is normal industry practice to employ a fabric filter for powder coatings as product recovery equipment and all recovered powder is recycled back into the coating process. As such Engineering Guide #37 allows us to treat the controls as an inherent part of the process operation. Particulate emissions will therefore be treated as described in Scenario #16 of EG#75 and appropriate fugitive particulate terms and conditions will be added to the permit.

While thermal incineration was not required by the BAT determination, Federally enforceable terms and conditions recordkeeping reporting and testing requirements were added to the 1996 permit to allow the VOC control efficiency to be used for compliance and fee purposes. Chrysler has indicated that they will be able to comply with the VOC restrictions of their existing permit and any changes to the process made to accommodate the 2013 production, do not constitute a permit modification. Therefore the coating portion of the existing permit will not be considered to be subject to a new OAC rule 3745-31-05 determination. The applicable elements of the PSD review performed for PTI 04-1102 will be carried into this permit unchanged.

Oven burner capacity has been increased by the addition of two heater boxes, each with a rating of 2 mmBtu/hr for an increase of 4 mmBtu/hr burner capacity. Therefore this portion of the existing permit will be considered to be subject to a new OAC rule 3745-31-05 determination.

In PTI 04-1102 as issued 6/26/98 the requirements for the oven burners are: CO: 0.021 pound/mmBtu and 3.4 tons/year, NOx: 0.100 pound/mmBtu and 16 tons/year, PM10: 0.012 pound/mmBtu and 2.0 tons/year, SO2: 0.0006 pound/mmBtu and 0.098 ton/year, VOC: 0.0028



pound/mmBtu and 0.46 ton/year from the oven combustion gases at 37.3 mmBtu per hour maximum burner capacity and 8760 hours per year operation.

In PTI 04-1102 as issued 9/8/05 the requirements for the oven burners were revised to CO: 0.083 pound/mmBtu and 12.9 tons/year, NOx: 0.100 pound/mmBtu and 15.5 tons/year, PM10: 0.0056 pound/mmBtu and 0.87 ton/year, SO2: 0.0006 pound/mmBtu and 0.093 ton/year, VOC: 0.0054 pound/mmBtu and 0.84 ton/year and 5 percent opacity from the oven combustion gases based upon emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1, dated 7/98 at 35.8 mmBtu per hour maximum burner capacity and 8760 hours per year operation.

This revision will increase the burner capacity to 39.8 mmBtu/hr and correct the PM10 restriction to current AP-42 levels; CO: 0.083 pound/mmBtu& 14.47 tons/year, NOx: 0.100 lb/mmBtu& 17.43 tons/year, PE: 0.0019 pound/mmBtu and 0.33 ton/year, PM10 and PM2.5: 0.0075 pound/mmBtu and 1.31 tons/year, SO2: 0.0006 pound/mmBtu and 0.10 ton/year, VOC: 0.0054 pound/mmBtu and 0.94 ton/year, as mandated by OAC rule 3745-31-05(A)(3) (as effective 11/30/01). In consideration of SB265 or OAC rule 3745-31-05(A)(3) (as effective 12/01/06) BAT will also be stated as CO: 0.083 pound/mmBtu and NOx: 0.100 lb/mmBtu after the SIP revision is accepted. At the instruction of OEPA, the elements of the PSD review performed in PTI 04-1102 as issued 6/26/98 for the natural gas combustion products (0.100 pound of NOx, 0.0075 pound of PM10 and 0.0054 pound of VOC per mmBtu of actual heat input) will not be carried into this permit.

Table with 8 columns: CO, NOx, PE, PM10, PM2.5, SO2, VOC. Rows include permit numbers 04-1102, P0108063, and an Increase row.

Applicability of particulate rules will be cited with the applicable requirements set at SIP levels. 40 CFR Part 63 Subpart DDDDD will also apply to this source as a process heater.

Clearcoat material change – K023

The topcoat lines consists of automated and manual spray painting of a water based basecoat, infrared flash tunnel, automated and manual spray painting of a solvent based clearcoat and an indirect gas fired drying oven. The VOC emissions from the tunnels and ovens are controlled by thermal incineration. Thermal incineration for VOC control was required by the BAT determination with additional limitations set for PM10 VOC and opacity. While some changes will be made to the coating application system and formulation, Chrysler has indicated that they will be able to comply with the allowable limitations of their existing permit and any changes to the process made to accommodate the 2013 production, do not constitute a permit modification. Therefore this portion of the existing permit will not be considered to be subject to a new OAC rule 3745-31-05 determination. The applicable elements of the PSD review performed for PTI 04-1102 will be carried into this permit unchanged. The existing coating permit is restricted to 66.9 tons per year as PM10 and 768.68 tons per year as VOC.



Oven burner capacity has been increased by the addition of one 2 mmBtu/hr heater box to each existing oven, for an increase of 4 mmBtu/hr burner capacity. Therefore the oven portion of the existing permit will be considered to be subject to a new OAC rule 3745-31-05 determination.

In PTI 04-1102 as issued 6/26/98 the requirements for the oven burners are: CO: 0.021 pound/mmBtu and 6.1 tons/year, NOx: 0.100 pound/mmBtu and 14 tons/year, PM10: 0.012 pound/mmBtu and 3.5 tons/year, SO2: 0.0006 pound/mmBtu and 0.17 ton/year, VOC: 0.0028 pound/mmBtu and 0.81 ton/year from the oven combustion gases at 66 mmBtu per hour maximum burner capacity and 8760 hours per year operation.

In PTI 04-1102 as issued 9/8/05 the requirements for the oven burners were revised to CO: 0.083 pound/mmBtu and 16.2 tons/year, NOx: 0.100 pound/mmBtu and 19.5 tons/year, PM10: 0.0056 pound/mmBtu and 1.1 tons/year, SO2: 0.0006 pound/mmBtu and 0.12 ton/year, VOC: 0.0054 pound/mmBtu and 1.1 tons/year from the oven combustion gases based upon emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1, dated 7/98 at 44.4 mmBtu per hour maximum burner capacity and 8760 hours per year operation.

This revision will increase the burner capacity to 48.4 mmBtu/hr and correct the PM10 restriction to current AP-42 levels: CO: 0.083 pound/mmBtu& 17.60 tons/year, NOx: 0.100 lb/mmBtu& 21.20 tons/year, PE: 0.0019 pound/mmBtu and 0.40 ton/year, PM10 and PM2.5: 0.0075 pound/mmBtu and 1.59 tons/year, SO2: 0.0006 pound/mmBtu and 0.13 ton/year, VOC: 0.0054 pound/mmBtu and 1.15 tons/year, as mandated by OAC rule 3745-31-05(A)(3) (as effective 11/30/01). In consideration of SB265 or OAC rule 3745-31-05(A)(3) (as effective 12/01/06) BAT will also be stated as CO: 0.083 pound/mmBtu and NOx: 0.100 lb/mmBtu after the SIP revision is accepted. At the instruction of OEPA, the elements of the PSD review performed in PTI 04-1102 as issued 6/26/98 for the natural gas combustion products (0.100 pound of NOx, 0.0075 pound of PM10 and 0.0054 pound of VOC per mmBtu of actual heat input) will not be carried into this permit.

Table with 8 columns: CO, NOx, PE, PM10, PM2.5, SO2, VOC. Rows include permit numbers 04-1102, P0108063, and an Increase row.

40 CFR Part 63 Subpart DDDDD will also apply to this source as a process heater.

P008 - Miscellaneous use of Sealers and Adhesives

General Description – Chrysler identifies the miscellaneous use of various sealers and adhesives as a source of low level fugitive VOC emissions. Chrysler’s sealer operations will be modified to improve underbody and hem flange corrosion protection for all vehicles manufactured at the facility, resulting in an increase in permit allowable VOC emissions. In addition, Chrysler is evaluating the feasibility of using several new sealer materials in the expanded sealer operation to meet the new model year design requirements. Chrysler has requested a 22.43 tons per year increase in the allowable VOC emissions related to these changes. A new sealer gel oven, with a small thermal oxidizer, will also be installed to speed curing the of the sealer materials to prevent dripping of sealer materials in the existing prime coating operations. Allowable combustion



emissions will be added for the 10 mmBtu/hr, natural gas, indirect fired gel oven, however the control device emissions, while accounted for in the evaluation of PSD, need not be included in the permit. Since the control device will not be made federally enforceable, Chrysler will not be allowed utilize the VOC control efficiency for compliance and fee purposes.

Best available technology

Sealers and adhesives - PTI 04-1102 set BAT as the use of non-photochemically reactive, low VOC materials of 0.5 pound VOC per gallon excluding water and exempt solvents as a monthly average, or less, 55.06 tons VOC/year, and minimizing exposure time by proper dispenser and disposal container design. Chrysler requested an increase in allowable emissions for this emissions unit of 22.43 tons per year from the sealants for an allowable emissions rate of 77.49 tons of VOC per year. At an actual production rate of 327,000 vehicles per year, this results in an equivalent emissions factor of 0.474 lb of VOC per vehicle. Because the proposed permit modifications will result in an increase in allowable emissions a review of the BAT determination is appropriate. For BAT we would equate the process to the similar installation of PTI 04-01358 emissions unit P301 where in 2004, LAER was defined as the use, non-photochemically reactive, low VOC materials of 0.3 lb VOC/gal minus water, or less, 47.7 tons of VOC per year and minimizing exposure time by proper dispenser and disposal container design. Based on a production rate of 200,064 vehicles, 47.7 tons per year also results in an equivalent emissions factor of 0.474 lb of VOC per vehicle.

Chrysler submitted additional information supporting the equivalency of the two limitations. Therefore BAT will be set at 0.5 lb VOC/gal excluding water and exempt solvents and the company requested 77.49 tons of VOC per year will be set as BAT.

NSPS Subpart MM—Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations, does not apply to sealants or adhesives. Subpart IIII—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks applies to this source as a coating operation: a material applied to a substrate for functional purposes including sealants and adhesives. In accordance with 63.3090(d) the permittee must limit average organic HAP emissions from all deadener materials to no more than 0.010 kg/kg (lb/lb) of adhesive and sealer material used during each month.

Increase in allowable - 22.43 tons of VOC per year

Gel Oven - Chrysler intends to add a curing oven to this process with an installed capacity of 10 mmBtu/hr. BAT will be set at current AP-42 levels as follows: CO: 0.083 pound/mmBtu& 3.64 tons/year, NOx: 0.100 lb/mmBtu& 4.38 tons/year, PE: 0.0019 pound/mmBtu and 0.08 ton/year, PM10 and PM2.5: 0.0075 pound/mmBtu and 0.33 ton/year, SO2: 0.0006 pound/mmBtu and 0.03 ton/year, VOC: 0.0054 pound/mmBtu and 0.24 ton/year, as mandated by OAC rule 3745-31-05(A)(3) (as effective 11/30/01). In consideration of SB265 or OAC rule 3745-31-05(A)(3) (as effective 12/01/06) BAT will also be stated with no restrictions after the SIP revision is accepted.

Table with 8 columns: CO, NOx, PE, PM10, PM2.5, SO2, VOC and a row for 'Increase' with values: 3.64, 4.38, 0.08, 0.33, 0.33, 0.03, 0.24



This emissions unit will also have a 4 mmBtu natural gas fired thermal incinerator which is not included in the permit, but which will account the following increase in the actual to potential emissions increase for PSD review purposes.

Table with 8 columns: CO, NOx, PE, PM10, PM2.5, SO2, VOC. Row 1: Increase 1.45, 1.75, 0.03, 0.13, 0.13, 0.01, 0.10

Applicable regulations

Sealers and adhesives - OAC 3745-31-05, 3745-21-07(G)(9)(f), 3745-21-09(U)(3) which clarifies applicability of 3745-21-09(U)(1)(d): 3.5 pound VOC per gallon (because the oven operates at less than 200oF) and OAC rule 3745-21-09(U)(1)(g): 4.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a glass adhesion body primer coating used for the installation of any glass windows during the assembly of automobiles and trucks; and 40 CFR Part 63 Subpart IIII. OAC 3745-31-05 requires BAT which will be set as 0.5 pound VOC per gallon excluding water and exempt solvents as a monthly average. 3745-21-07(G)(9)(f) excludes the OC emissions from non-photochemically reactive cleanup materials in the determining compliance with the pounds of OC per hour and pounds of OC per day restrictions of 3745-21-07(G)(1), (2) and (3).

Gel Oven - OAC 3745-31-05, OAC 3745-17-07(A)(1): 20% opacity, OAC rule 3745-17-10(B)(1): 0.20 lb PE/mmBtu, OAC rule 3745-18-06(A): exemption from SO2 requirements and 40 CFR Part 63 Subpart DDDDD.

Permit allowable emissions

Sealers and adhesives - 0.5 pound VOC per gallon excluding water and exempt solvents as a monthly average. Chrysler estimated 73.02 tons per year maximum VOC emissions with a production rate of 327,000 vehicles. This rate of emissions would equate to an unrestricted permit allowable emission limitation of 133 tons VOC per year at 64 vehicles per hour and 8760 hour per year. The utilization of this allowable limitation would not affect the 73.02 ton per year future proposed actual restriction imposed by the PSD review process. Chrysler requested the addition of 77.49 tons per year as a permit limitation, however also requested no permit restrictions. Typically this request would result in a limitation on the coating usage (gallons per month). In this emissions unit, where multiple coatings are in use, OEPA will accept a tons per year limitation to be demonstrated by monthly calculation. This provision will be included in the permit.

Gel Oven – pending the applicability of SB265, allowable emissions will be set at the calculated AP-42 levels above, with a 5% opacity restrict based on previous similar BAT determinations.

Potential to emit - PTE is equal to the permit allowable emissions.

Actual emissions - Actual emissions will be estimated as 80% of the estimated maximum, or 62 tons VOC per year.

Other applicable regulations - CEM, NSPS, and OFFSETs are not applicable.

Fees - 1 Permit to Install, 0 to 1000 lbs/hr @ \$200 = \$200.



Environmental
Protection Agency

Permit Strategy Write-Up
Chrysler Group LLC - Toledo North Assembly
Permit Number: P0108040
Facility ID: 0448010414

TECHNICAL SUPPORT DOCUMENT

For
Amended Permit to Install Application

TOLEDO NORTH ASSEMBLY PLANT

Chrysler Group LLC
Toledo, Ohio 43608

May 2, 2011



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1.0 INTRODUCTION

Chrysler Group LLC (Chrysler) owns and operates the existing Toledo North Assembly Plant (TNAP) located at 4400 Chrysler Drive, Toledo, Lucas County Ohio. The TNAP facility consists of a fully operational body shop, paint shop, and trim, chassis final department to produce the current versions of the Jeep Liberty and Dodge Nitro. Along with other facilities, Chrysler is considering an upgrade to the TNAP facility in an effort to establish additional production flexibility and efficiency through technology improvements. As a result of the upgrades, Chrysler is considering an expansion of the existing body shop operations and an expansion of the Trim/Chassis/Final (TCF) storage and testing areas. The expanded body shop will be capable of producing the current vehicle with added flexibility to “cross-load” and produce smaller or larger car platform vehicles. The proposed body shop and TCF expansions will include the installation of multiple natural gas-fired air make-up units and space heaters. The maximum rated heat input of the combined proposed natural gas-fired equipment will be 54.0 million British thermal units per hour (MMBtu/hr.). Additionally, in order to accommodate safety and emergency concerns, a natural gas-fired emergency generator is proposed for installation as part of the proposed body shop. The natural gas-fired emergency generator will have a maximum rated heat input capacity of 2.0 MMBtu/hr. and a maximum rated power output capacity of 500 horsepower (hp).

The 2013 MY platform will also require expanded use of existing sealer materials as well as the potential use of new sealer materials. A new natural gas-fired gel oven is proposed for installation in the existing paint shop to prevent dripping due to the expanded use of sealer materials. The maximum rated heat input of the proposed natural gas-fired gel oven is 10.0 MMBtu/hr. Associated with the sealer gel oven will be a thermal oxidizer with a heat input rating of 4.0 MMBtu/hr heat input. Other changes to sealer operations include replacement of liquid applied sound deadeners with mastic pads (typically non-VOC containing).

In addition to the typical sealing materials, Chrysler is planning for the use of a purfoam material that is injected into the body cavities for sound deadening and sealing purposes. The nature of the purfoam operation is such that the foam is injected (not sprayed) into the vehicle body cavities (i.e., sills, cowels, etc.) so the only emissions are volatiles from the reaction of the foam components.



Finally, Chrysler is planning changes to the paint shop in order to accommodate a larger vehicle platform and also to increase hourly production rates. Specifically, Chrysler will extend the e-coat tank and oven, the powder anti-chip oven, the topcoat oven, while increasing the line speed through the color prep, topcoat booths and the powder booths. In addition, eight existing robotic applicators will be replaced with more efficient turbo-bell applicators and an additional two cut-in robots will be added to certain sections of the topcoat (basecoat booth). A switch to a new two-component clear coat to improve vehicle finish will be included in the changes. All of the above changes are proposed to accommodate a new vehicle platform.

Chrysler is seeking a Permit-to-Install (PTI) from the State of Ohio Environmental Protection Agency (OEPA) to accommodate construction of the expanded body shop and associated natural gas-fired equipment, installation of the proposed natural gas-fired gel oven and thermal oxidizer in the existing paint shop, the expanded sealer/deadener operations (including purfoam) and finally the paint shop oven extensions, line speed increase, replacement of and additional paint applicators and changes to clearcoat materials.

This PTI application package contains the necessary information related to existing operations, proposed construction and changes, emission profiles, and applicable regulatory requirements for permit approval of the proposed changes at TNAP, as well as the applicable state permit application forms. The completed and signed Permit-to-Install application forms have been included in Appendix A.

2.0 BACKGROUND

1. 2.1 Existing Permits and Operations

As indicated above, Chrysler owns and operates the existing TNAP facility which includes the existing body shop, paint shop and final assembly operations. The TNAP facility was originally constructed by Chrysler in the early 2000s. Historically, the facility has been subject to a single PTI (04-1102) issued by the OEPA in 1998. In January 2005, TNAP was issued Title V Permit No. 0448010414. The Title V Permit consolidated the applicable requirements specified by PTI No. 04-1102 with other State and Federal applicable requirements.



The TNAP facility Body-in-White (BIW) operations consist of the body shop where un-coated vehicle bodies (e.g., stamped body panels) are assembled. Operations in the body shop consist of adhesive application, machining, welding, body wash, and a highlight booth.

Un-coated vehicle bodies proceed from the body shop to the paint shop for surface treatment (phosphating), electro deposition coating (E-coat) operations, sanding operations, sealer applications, deadener installation, solvent wiping, powder primer surfacer application, topcoat application and polishing. Currently, the TNAP facility utilizes a waterborne basecoat and solvent-borne clearcoat technology to apply the topcoat to the vehicles. TNAP also employs a full body powder anti-chip in lieu of a liquid guidecoat/primer surfacer.

2.2 Proposed Operations

2.2.1 Body Shop Building Expansion

A proposed plan under consideration is to expand the existing facility to accommodate the new body shop. The expanded body shop will contain additional tooling and equipment to assemble and hem vehicle panels and will also include welding and natural gas combustion equipment (i.e., air make-up units, heaters, etc.) for space or process heating. In addition, to accommodate safety and emergency concerns, a natural gas-fired emergency generator is proposed for installation. Vehicle production will be shared during concurrent operation of both areas of the body shop and will not impact the overall production of the facility.

2.2.2 Paint Shop

The specific design of the 2013 MY vehicle platform has not yet been finalized. Therefore, TNAP cannot determine exactly how the body configuration and surface area will change from the existing models produced in the paint shop. However, the current plans are for a larger vehicle platform that will require certain changes. One of the changes to existing coating operations will consist of a conversion to a two component clearcoat material to enhance finish quality. In addition, TNAP will replace eight current robotic applicators with turbo-bell applicators in the basecoat booth to improve the transfer efficiency of the coating operation and improve coating quality. Also, to accommodate the larger vehicle platform, two cut-in robots will



be added to each basecoat section of the topcoat line. Finally, as mentioned a purfoam injection line will be added to the operation for additional sound deadening and sealing purposes.

Associated with the changes to the coating lines will be several oven extensions. As a result, the facility will need to install additional heater box capacity that will rely on natural gas combustion for heat. Accordingly, the heat input capacity of the expanded body shop, the extended ovens, and the new sealer gel oven and thermal oxidizer are addressed in this application.

The overall sealer operations will be expanded to improve underbody and hem flange corrosion protection for all vehicles manufactured at the facility. Chrysler is also evaluating the feasibility of using several new sealer materials in the expanded sealer operation to meet the new MY design requirements. A new sealer gel oven and associated thermal oxidizer will be installed in the existing paint shop for curing the sealer materials to prevent dripping of sealer materials in the existing prime coating operations.

2.2.3 TCF Expansion

The TCF building will be expanded for material storage and to add a water test system. The proposed expansions will not include any significant emissions sources, but will require additional natural gas heating capacity. This additional heating capacity is included in the 54.0 MMBtu/hr. designated for the body shop expansion.

3.0 STATE PERMIT TO INSTALL APPLICABILITY

In the State of Ohio, a facility that plans to install or modify any new air contaminant source that is part of a Title V subject facility must first obtain a Permit-to-Install (PTI) from the OEPA. Only after the PTI is issued may a facility commence installation, construction, and/or modification of the emissions unit(s). However, the installation of a new emissions unit or the modification of an existing emissions unit may be exempt from the PTI requirements based upon a list of exemptions identified in Ohio Administrative Code (OAC) 3745-31-03.



3.1 Body Shop and TCF

The proposed expansion of the body shop and TCF at TNAP is necessary to accommodate the 2013 MY vehicle platform. The expanded body shop facility will contain additional tooling and equipment to assemble and hem vehicle panels. Emission sources associated with the body shop and TCF expansions are described in detail below.

3.1.1 Natural Gas-Fired Heating Equipment

b) 3.1.1.1 - OAC 3745-31-03 Exemptions

OAC 3745-31-03 provides a specific list of emission units that are considered exempt from the requirement to obtain a PTI. OAC 3745-31-03(A)(b) states that “*fossil fuel-fired boilers, preheaters, air heaters, water heaters, or heaters used for other heat exchange media less than ten million British thermal units per hour burning only natural gas*” are exempt from the requirement to obtain a PTI. To accommodate the heating requirements associated with the proposed new body shop and TCF building expansions, multiple air make-up units, air supply houses or unit heaters will be installed. The combined maximum heat input rating for these small natural gas combustion sources is expected to be 54.0 MMBtu/hour, with no individual combustion unit having a design heat input capacity in excess of 10 MMBtu/hr. All fuel burning units will utilize natural gas as the fuel source. Therefore, installation of the proposed natural gas-fired combustion equipment at TNAP is considered exempt from the requirement to obtain a PTI pursuant to OAC 3745-31-03(A)(b).

c) 3.1.1.2 - OAC 3745-17-10 Restrictions on Particulate Emissions from Fuel Burning Equipment

Ohio Administrative Code (OAC) 3745-17-10(B)(1) specifies that “the maximum allowable amount of particulate emissions for any new or existing fuel burning equipment which is fired only with gaseous fuel, excluding blast furnace gas, and/or number two fuel oil shall be 0.020 pound per million Btu of actual heat input”. The US EPA AP-42, Fifth Edition Compilation of Air Pollutant Emission Factors specifies a total particulate matter emission rate for natural gas combustion of 7.6 lbs./MMscf. The proposed body shop and TCF combustion equipment will exclusively fire pipeline quality natural gas with an expected heating value of 1,000 Btu/scf. Therefore, particulate matter emissions from the proposed combustion equipment are not expected to exceed 0.0076 lbs./MMBtu.



$(7.6 \text{ lbs. PM/MMscf})(1 \text{ MMscf}/1,000 \text{ MMBtu}) = 0.0076 \text{ lbs. PM/MMBtu}$

As the maximum potential particulate matter emission rate is less than 0.020 lbs./MMBtu, then the proposed natural gas-fired equipment at TNAP comply with the particulate emissions standard specified by OAC 3745-17-10(B)(1).

d) 3.1.1.3 – OAC 3745-18-06 – General Emission Limit Provisions (SO₂)

OAC 3745-18-06(A) specifies that “fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of this rule and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned”. The proposed body shop and TCF combustion equipment will exclusively fire pipeline quality natural gas. Therefore, the proposed combustion equipment is exempt from the requirements of 3745-18-06 to 3745-18-94 of the OAC for SO₂.

e) 3.1.1.4 – OAC 3745-110-03 – RACT Limitations for Emissions of NOX from Stationary Sources

OAC 3745-110-03(J) specifies that “the requirements of paragraphs (A) to (F) of this rule shall not apply to the following sources...

(8) Any space heating unit”.

Therefore, the proposed natural gas-fired combustion equipment is not subject to the RACT limitations of OAC 3745-110-03.

f) 3.1.1.5 – OAC 3745-114-01 – Air Toxics

OAC 3745-114-01 provides a list of toxic air contaminants from new or modified emissions units that are subject to review as part of an application for a Permit to Install. The review of subject air contaminants includes a risk assessment analysis that evaluates the ground level impacts of specific toxic air contaminants relative to the list of Threshold Limit Values (TLVs) published by the American Conference of Governmental Industrial Hygienists (ACGIH).

OEPA Engineering Guide No. 70 specifies that “many combustion sources do not need to be evaluated for air toxics at this time. These include boilers and heaters that burn fossil fuels exclusively (coal, natural gas, fuel oil, etc.)”. The proposed body shop and TCF heating equipment will exclusively fire natural gas. Therefore, based on the guidance provided by



OEPA Engineering Guide No. 70, a risk assessment analysis is not required in support of the installation of the proposed natural gas-fired heating equipment.

3.1.2 Emergency Generator

To accommodate safety and emergency concerns, a natural gas-fired emergency generator is proposed for installation as part of the proposed body shop. OEPA Engineering Guide No. 61 specifies that it is OEPA policy to “accept an assumption of 500 hours per year as the maximum amount of hours an emergency generator could operate”, and that “the owner or operator of an emergency generator may assume less than 500 hours per year of operation for purposes of calculating potential to emit”. Therefore, for the purposes of evaluating the proposed emergency generator relative to state and federal requirements, the potential operating capacity of the proposed emergency generator is 500 hours per year.

g) 3.1.2.1 – PTI Applicability

OAC 3745-31-03 does not provide a specific exemption for natural gas-fired emergency generators with power ratings greater than 50 horsepower (hp). Based upon the maximum power output rating of 500 hp, the proposed emergency generator is not considered exempt from the requirement to obtain a PTI pursuant to Rule OAC 3745-31-03.

h) 3.1.2.2 – OAC 3745-17-10 Restrictions on Particulate Emissions from Fuel Burning Equipment

Ohio Administrative Code (OAC) 3745-17-10(B)(1) specifies that “the maximum allowable amount of particulate emissions for any new or existing fuel burning equipment which is fired only with gaseous fuel, excluding blast furnace gas, and/or number two fuel oil shall be 0.020 pound per million Btu of actual heat input”. The US EPA AP-42, Fifth Edition Compilation of Air Pollutant Emission Factors specifies a total particulate matter emission rate for natural gas-fired, 4-stroke, lean-burn internal combustion engines (SCC: 2-02-002-54) of 0.00991 lbs./MMBtu of heat input. Therefore, the proposed natural gas-fired emergency generator at TNAP will comply with the particulate emissions standard specified by OAC 3745-17-10(B)(1).

i) 3.1.2.3 – OAC 3745-18-06 – General Emission Limit Provisions (S02)

OAC 3745-18-06(A) specifies that “fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of this rule and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned”. The proposed body natural gas-fired



emergency generator will exclusively fire pipeline quality natural gas. Therefore, the proposed body shop emergency generator is exempt from the requirements of 3745-18-06 to 3745-18-94 of the OAC for SO₂.

j) 3.1.2.4 – OAC 3745-110-03 – RACT Limitations for Emissions of NOX from Stationary Sources

OAC 3745-110-03(J) specifies that “the requirements of paragraphs (A) to (F) of this rule shall not apply to the following sources...

(3) Any stationary internal combustion engine having an energy output capacity of less than two thousand horsepower”...

The output capacity of the proposed natural gas-fired emergency generator is 500 hp.

Therefore, the proposed natural gas-fired emergency generator is not subject to the RACT limitations of OAC 3745-110-03.

k) 3.1.2.5 – OAC 3745-114-01 - Air Toxics

OAC 3745-114-01 provides a list of toxic air contaminants from new or modified emissions units that are subject to review as part of an application for a Permit to Install. The review of subject air contaminants includes a risk assessment analysis that evaluates the ground level impacts of specific toxic air contaminants relative to the list of TLVs published by the ACGIH.

OEPA Engineering Guide No. 70 specifies that “Ohio EPA has determined that for the following emission units and/or contaminants a toxic air pollutant evaluation is not necessary: ...

- Emergency Generators”

Therefore, based on the guidance provided by OEPA Engineering Guide No. 70, a risk assessment analysis is not required in support of the installation of the proposed natural gas-fired emergency generator.

l) 3.1.2.6 – OAC 3745-31-05 - BAT

OAC 3745-31-05(3) specifies that for any non-exempt source (i.e., new or modified emissions units with criteria pollutant or criteria pollutant precursor emission limitations greater than 10 tons per year), a permit-to-install may be issued to an applicant if it is determined that the installation, modification, or operation of the air contaminant source will employ BAT, when applicable. Chrysler is proposing to fire natural gas exclusively in the proposed emergency generator. In general, the combustion of natural gas, in itself, is considered BAT for internal combustion engines, as further reduction of air pollutants is generally considered economically



restrictive. Additionally, as the proposed generator is used exclusively for emergency backup situations, maximum annual air pollutant emission rates for the emergency generator are restricted based on restricted operation of the equipment (i.e., less than 500 hours per year). Therefore, the use of add-on control technologies would be considered even more economically restrictive due to the abbreviated operating schedule.

3.1.3 Welding Operations

Resistance spot welding, MIG welding, and laser braze welding/cutting are the lone forms of welding expected to occur in the body shop areas. According to the American Welding Society, particulate matter (PM) emissions associated with these types of welding operations are insignificant based upon the reference manual "Fumes and Gases in the Welding Environment." Furthermore, since essentially zero mill oil remains on the stamped sheet metal parts received at the assembly plant, it is estimated that the proposed welding operations will not volatilize any mill oil.

OAC 3745-31-03(A)(ii) states that "*arc welding operations where emissions of particulate matter are vented to a control device located and vented inside the building*" are exempt from the requirement to obtain a PTI. The proposed body shop welding operations will be similar to the existing welding operations at TNAP. However, the new body shop welding emissions will be exhausted to the ambient atmosphere as opposed to being vented inside of the building. Therefore, the proposed spot welding operations at TNAP are not considered exempt from the requirement to obtain a PTI pursuant to OAC 3745-31-03(A)(ii).

3.1.4 Grinding Operations

Grinding for panel repair is planned for the proposed new body shop. The proposed repair grinding stations will not be considered part of normal production operations. A minimal amount of PM emissions are expected from the grinding operations. Emissions will be exhausted internally to the general plant atmosphere and localized "smoke eater" filtration systems will be installed near each system.

OAC 3745-31-03(A)(z) states that "*uncontrolled grinding, machining, and sanding operations*" ... "*that have no visible emissions, vent to the inside of a building,*" and "*emit less than ten pounds*



per day of nonparticulate matter air contaminants” are exempt from the requirement to obtain a PTI. The proposed grinding operations will not have visible emissions and the minimal amount of PM emissions from the grinding operations will be vented to the inside of the building. In addition, as the proposed grinding operations are not part of the normal production process, and due to the fact that there are only trace amounts of non-particulate matter present on the machined parts, non-particulate matter emissions are expected to be significantly less than ten pounds per day. Therefore, the proposed body shop grinding operations are considered to be exempt from the requirement to obtain a PTI pursuant to OAC 3745-31-03(A)(z).

3.2 Paint Shop

To accommodate the 2013 MY vehicle platform, changes to coating operations in the paint shop are proposed. Each anticipated change to the paint shop (including sealer operations) is evaluated below for PTI applicability.

3.2.1 Sealer Operations

The 2013 MY vehicle platform requires an expansion of the current sealer operations in the paint shop to improve underbody and hem flange corrosion protection for all vehicles manufactured at the facility. A gel oven will be employed to partially dry the sealer in an effort to prevent sealer drips and subsequent contamination of the powder primer operation. This expansion may require the increased use of certain existing sealer materials and may also require the use of new sealer materials.

m) 3.2.1.1 - OAC 3745-21-29 - RACT Rules

The proposed changes to the TNAP facility will not impact the facility’s ability to comply with current regulations that apply to reasonably available control standards for existing automobile and light duty truck surface coating operations (i.e., RACT rules) found in OAC 3745-21-29(C).



n) 3.2.1.2 - OAC 3745-114-01 - Air Toxics

OAC 3745-114-01 provides a list of toxic air contaminants from new or modified emissions units that are subject to review as part of an application for a Permit to Install. The review of subject air contaminants includes a risk assessment analysis that evaluates the ground level impacts of specific toxic air contaminants relative to the list of TLVs published by the ACGIH. Section II.B.2 of TNAP's Title V permit specifies that any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled 'American Conference of Governmental Industrial Hygienists' (ACGIH)", than the lowest TLV previously established for that emission unit, may be deemed a "modification" to an emissions unit. In addition, OEPA Engineering Guide No. 70 specifies that only the changes in toxic air contaminant emissions that result from a particular change to an existing emissions unit need to be evaluated. Neither the expanded use of the existing sealer materials nor the use of the new sealers/deadeners (including purfoam) under review will result in emissions of any toxic air contaminant with a lower TLV or higher ground level impact than the "worst case" pollutant evaluated in previous risk analyses at TNAP. Therefore, the proposed modifications to the sealer/deadener operations do not require further analysis relative to OEPA's toxics policy.

o) 3.2.1.3 - OAC 3745-31-05 - BAT

OAC 3745-31-05(3) specifies that for any non-exempt source (i.e., new or modified emissions units with criteria pollutant or criteria pollutant precursor emission limitations greater than 10 tons per year), a permit-to-install may be issued to an applicant if it is determined that the installation, modification, or operation of the air contaminant source will employ BAT, when applicable. The Inter-office Communication issued by Mr. Mike Hopkins, Assistant Chief, Permitting, DAPC on December 10, 2009 provides guidance on BAT requirements for permit applications filed on or after August 3, 2009. Per the referenced document, for an air contaminant source that is to be installed or modified after August 3, 2009, if the source is subject to Section 112 (Maximum Achievable Control Technology, MACT), Part C of Title I (PSD), or Part D of Title I (non-attainment NSR) for a particular criteria pollutant, then BAT is equivalent to the most stringent standard specified by the applicable program. Sealer/adhesive operations at TNAP are subject to the Auto MACT surface coating standards in 40 CFR 63 Subpart IIII. Therefore, BAT for VOC emissions from the proposed modifications to the



sealer/adhesive operations is equivalent to the emissions standards specified by Subpart IIII that currently apply to the sealer/adhesive operations at TNAP.

3.2.2 Natural Gas-Fired Sealer Gel Oven and Thermal Oxidizer

p) 3.2.2.1 - OAC 3745-31-03 Exemptions

OAC 3745-31-03 provides a specific list of emission units that are considered exempt from the requirement to obtain a PTI. OAC 3745-31-03(A)(d) states that "fossil fuel-fired furnaces or dryers less than ten million British thermal units per hour burning only natural gas" are exempt from the requirement to obtain a PTI. The maximum heat input rating for the natural gas-fired sealer gel oven is 10.0 MMBtu/hr and the maximum heat input level for the thermal oxidizer is 4.0 MMBtu/hr. Both the gel oven and thermal oxidizer will utilize natural gas as the fuel source. Therefore, installation of the proposed natural gas-fired sealer gel oven is subject to the requirement to obtain a Permit-to-Install. However, the associated thermal oxidizer at TNAP is considered exempt from the requirement to obtain a PTI pursuant to OAC 3745-31-03(A)(d). The maximum potential criteria pollutant emission rates from the natural gas-fired sealer gel oven are presented in Table 3.2.2.1.

Table 3.2.2.1
Maximum Potential Criteria Pollutant Emissions
From the Proposed Natural Gas-fired Sealer Gel Oven

Table with 4 columns: Pollutant, Emission Factor (lbs./MMcf), Maximum Emission Rate (lbs./hr.), and Maximum Emission Rate (TPY). Rows include CO, NOx, SO2, VOC, PM, PM10, and PM2.5.

- 1. Lead (Pb) emissions from natural gas combustion are insignificant.
2. Based on US AP-42, Fifth Edition, Volume I, Table 1.4-2.
3. Based on the maximum rated heat input of 10.0 MMBtu/hr.
4. Sample calculation (CO):
(10.0 MMBtu/hr.) * (1 MMcf/1,000 MMBtu) * (84 lbs. CO/MMcf) = 0.84 lbs. CO/hr.



5. Sample calculation (CO):
 $(0.84 \text{ lbs./hr.}) * (8,760 \text{ hr./yr.}) * (1 \text{ ton}/2,000 \text{ lbs}) = 3.68 \text{ tons CO/yr.}$

q) 3.2.2.2 – OAC 3745-17-10 Restrictions on Particulate Emissions from Fuel Burning Equipment

Ohio Administrative Code (OAC) 3745-17-10(B)(1) specifies that “the maximum allowable amount of particulate emissions for any new or existing fuel burning equipment which is fired only with gaseous fuel, excluding blast furnace gas, and/or number two fuel oil shall be 0.020 pound per million Btu of actual heat input”. The US EPA AP-42, Fifth Edition Compilation of Air Pollutant Emission Factors specifies a total particulate matter emission rate for natural gas combustion of 7.6 lbs./MMscf. The proposed sealer gel oven and thermal oxidizer will exclusively fire pipeline quality natural gas with an expected heating value of 1,000 Btu/scf. Therefore, particulate matter emissions from the proposed sealer gel oven is not expected to exceed 0.0076 lbs./MMBtu.

$$(7.6 \text{ lbs. PM/MMscf})(1 \text{ MMscf}/1,000 \text{ MMBtu}) = 0.0076 \text{ lbs. PM/MMBtu}$$

As the maximum potential particulate matter emission rate is less than 0.020 lbs./MMBtu, then the proposed natural gas-fired sealer gel oven and thermal oxidizer at TNAP comply with the particulate emissions standard specified by OAC 3745-17-10(B)(1).

r) 3.2.2.3 – OAC 3745-18-06 – General Emission Limit Provisions (SO₂)

OAC 3745-18-06(A) specifies that “fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of this rule and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned”. The proposed sealer gel oven and thermal oxidizer will exclusively fire pipeline quality natural gas. Therefore, the proposed sealer gel oven and thermal oxidizer is exempt from the requirements of 3745-18-06 to 3745-18-94 of the OAC for SO₂.

s) 3.2.2.4 – OAC 3745-110-03 – RACT Limitations for Emissions of NO_x from Stationary Sources

OAC 3745-110-03(J) specifies that “the requirements of paragraphs (A) to (F) of this rule shall not apply to the following sources...”



(15) Any source other than a boiler, gas turbine or internal combustion engine that has the potential to emit less than twenty-five tons per year of NOx”.

The proposed natural gas-fired sealer gel oven has the potential to emit 4.38 TPY NOx as detailed below:

$(10.0 \text{ MMBtu/hr.}) * (1 \text{ MMcf}/1,000 \text{ MMBtu}) * (8,760 \text{ hr./yr.}) * (100 \text{ lbs. NOx/MMcf}) * (1 \text{ ton}/2,000 \text{ lbs.}) = 4.38 \text{ TPY NOx}$

Therefore, the proposed natural gas-fired sealer gel oven is not subject to the RACT limitations of OAC 3745-110-03.

t) 3.2.2.5 - OAC 3745-31-05 - BAT

OAC 3745-31-05(3) specifies that for any non-exempt source (i.e., new or modified emissions units with criteria pollutant or criteria pollutant precursor emission limitations greater than 10 tons per year), a permit-to-install may be issued to an applicant if it is determined that the installation, modification, or operation of the air contaminant source will employ BAT, when applicable. Chrysler is proposing to fire natural gas exclusively in the sealer gel oven. In general, the combustion of natural gas, in itself, is considered BAT for oven heaters, as further reduction of air pollutants is generally considered economically restrictive.

u) 3.2.2.6 - OAC 3745-114-01 - Air Toxics

OAC 3745-114-01 provides a list of toxic air contaminants from new or modified emissions units that are subject to review as part of an application for a Permit to Install. The review of subject air contaminants includes a risk assessment analysis that evaluates the ground level impacts of specific toxic air contaminants relative to the list of Threshold Limit Values (TLVs) published by the American Conference of Governmental Industrial Hygienists (ACGIH).

OEPA Engineering Guide No. 70 specifies that “many combustion sources do not need to be evaluated for air toxics at this time. These include boilers and heaters that burn fossil fuels exclusively (coal, natural gas, fuel oil, etc.)”. The proposed sealer gel oven and oxidizer will exclusively fire natural gas. Therefore, based on the guidance provided by OEPA Engineering Guide No. 70, a risk assessment analysis is not required in support of the installation of the proposed sealer gel oven and associated thermal oxidizer.



3.2.3 Purfoam Operations

The 2013 MY vehicle platform also requires an expansion of the current sealer/deadener operations in the paint shop to improve corrosion protection and enhanced sound deadening for all vehicles manufactured at the facility. A foam injection station will be employed to allow the injection of a two-component foam material to be injected into various cavities (i.e., sills, cowells, etc.) on the vehicle. This operation is referred to as the purfoam operation. Due to the mechanism of reaction and the fact that the material is injected through ports into vehicle cavities, there is little to no emissions of volatile components associated with the operation and no emissions of particulate matter. There are no combustion sources or ovens associated with the purfoam operation.

v) 3.2.3.1 - OAC 3745-21-29 - RACT Rules

The proposed installation of the purfoam operation at the TNAP facility will not impact the facility's ability to comply with current regulations that apply to reasonably available control standards for existing automobile and light duty truck surface coating operations (i.e., RACT rules) found in OAC 3745-21-29(C).

w) 3.2.3.2 - OAC 3745-114-01 - Air Toxics

OAC 3745-114-01 provides a list of toxic air contaminants from new or modified emissions units that are subject to review as part of an application for a Permit to Install. The review of subject air contaminants includes a risk assessment analysis that evaluates the ground level impacts of specific toxic air contaminants relative to the list of TLVs published by the ACGIH. Section II.B.2 of TNAP's Title V permit specifies that any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled 'American Conference of Governmental Industrial Hygienists' (ACGIH)", than the lowest TLV previously established for that emission unit, may be deemed a "modification" to an emissions unit. In addition, OEPA Engineering Guide No. 70 specifies that only the changes in toxic air contaminant emissions that result from a particular change to an existing emissions unit need to be evaluated. The use of purfoam sealer/deadener materials includes the use of Methylene bisphenylisocyanate which has a



threshold limit value (TLV) that is higher than the worst case component in the original air toxics analysis. Accordingly, the proposed use of purfoam materials will not result in emissions of any toxic air contaminant with a lower TLV than the “worst case” pollutant evaluated in previous risk analyses at TNAP. Therefore, the proposed installation of the purfoam station does not require further analysis relative to OEPA’s toxics policy.

x) 3.2.3.3 – OAC 3745-31-05 - BAT

OAC 3745-31-05(3) specifies that for any non-exempt source (i.e., new or modified emissions units with criteria pollutant or criteria pollutant precursor emission limitations greater than 10 tons per year), a permit-to-install may be issued to an applicant if it is determined that the installation, modification, or operation of the air contaminant source will employ BAT, when applicable. The Inter-office Communication issued by Mr. Mike Hopkins, Assistant Chief, Permitting, DAPC on December 10, 2009 provides guidance on BAT requirements for permit applications filed on or after August 3, 2009. Per the referenced document, for an air contaminant source that is to be installed or modified after August 3, 2009, if the source is subject to Section 112 (Maximum Achievable Control Technology, MACT), Part C of Title I (PSD), or Part D of Title I (non-attainment NSR) for a particular criteria pollutant, then BAT is equivalent to the most stringent standard specified by the applicable program.

Sealer/adhesive/deadener operations at TNAP are subject to the Auto MACT surface coating standards in 40 CFR 63 Subpart IIII. Therefore, BAT for VOC emissions from the proposed installation of the purfoam operation is equivalent to the emissions standards specified by Subpart IIII that currently apply to the similar operations at TNAP.

3.2.4 Applicator Changes

The current paint shop consists of various electrostatic, robotic and reciprocating coating applicators in the basecoat and clearcoat sections of the topcoat booth. In the second pass of the basecoat booths there are four robotic reciprocating applicators (recips) that utilize standard air atomized spray guns. These four recips are being replaced on each line (a total of 8) with more efficient bell type applicators that will reduce overall coating usage in these areas.

Additionally, the new applicators are expected to require reduced purge and cleaning solvents. In addition, two additional cut-in robots will be installed in the basecoat booth to allow for line speed increases and larger vehicles. These units will rely on air atomization technology.



The proposed changes to the basecoat applicators will result in an overall more efficient painting operation and thus a decrease in VOC and PM emissions. Accordingly, this type of change has no impact on the facility's ability to meet regulatory programs or the current VOC and PM emission limits applicable to coating operations in the current permit.

3.2.5 Line Speed Changes

The TNAP facility will make certain changes to the existing conveyor lines in order to increase the line speed of the coating operations. These changes are necessary due to the proposed larger vehicle platform that will have the effect of reducing the net amount of vehicles that can be produced during a short term time period (typically one hour). However, while this line speed change will be required, the facility's original permits were based upon a projected line speed of 64 jobs per hour and therefore, the increase in emissions on an hourly basis that will result from the proposed changes was addressed as part of the original emission limits that currently apply to the facility. The current lines speed is estimated to be roughly 53 jobs per hour (JPH) and the proposed line speed net out of the final assembly areas is estimated to be 60 JPH. This type of change does not result in the need for an amended PTI pursuant to the state permitting regulations in 3745-31.

3.2.6 Oven Extensions

Associated with the larger vehicle platform will be certain changes to the coating operation ovens. Specifically, the following changes will be implemented:

- Increase the length of the e-coat oven 140 feet and add two heater boxes with a rating of 2 MMBtu/hr for a total of 4 MMBtu
- Increase the length of the powder oven 170 feet and add two heater boxes with a rating of 2 MMBtu/hr for a total of 4 MMBtu
- Increase the length of both topcoat ovens 30 feet each. Add one heater box to each new section for a total of 4 MMBtu/hr

y)

z) 3.2.6.1 - OAC 3745-31-03 Exemptions

OAC 3745-31-03 provides a specific list of emission units that are considered exempt from the requirement to obtain a PTI. OAC 3745-31-03(A)(d) states that "*fossil fuel-fired furnaces or dryers less than ten million British thermal units per hour burning only natural gas*" are exempt from the requirement to obtain a PTI. The maximum heat input rating for the heater boxes



being installed in the oven extensions is 2.0 MMBtu/hr., and the heater boxes will utilize natural gas as its primary fuel source. Therefore, installation of the proposed natural gas-fired heater boxes and the oven extensions for E-coat, powder and topcoat at TNAP are considered exempt from the requirement to obtain a PTI pursuant to OAC 3745-31-03(A)(d).

3.2.7 E-Coat Tank Extension

In order to accommodate the new larger vehicle platform and maintain line speed, the e-coat tank will be lengthened. The new larger vehicle will require a commensurate increase in E-coat material usage, but due to the low VOC content of the E-coat components, any increase in VOC emissions will be relatively small since current actual VOC emissions on an annual basis are in the range of 4 to 6 tons per year. The increase in emissions associated with any new larger vehicles models are not expected to exceed 15%, which would result in less than one ton per year of additional VOCs. Accordingly, this change will not impact TNAP's ability to comply with the existing permit limits or the state RACT regulations.

3.2.8 Clearcoat Material Change

The proposed change to a two-component clearcoat will have minimal impact on emissions from the topcoat operations and will have no bearing the TNAP's ability to comply with the existing permit limits. The formula VOC content of the proposed two component clearcoat material (Part A - 3.72 lbs/gallon and Part B – 3.82 lbs/gallon) is slightly less than the existing clearcoat formula VOC content (3.83 lbs/gallon). The amount of clearcoat applied to each vehicle is expected to be the same or less than the existing clearcoat process due to the upgraded applicators.

4.0 FEDERAL REGULATORY APPLICABILITY

The existing TNAP facility is considered a major stationary source under the federal New Source Review (NSR) program (i.e., VOC emissions from the facility exceed 250 tons per year). As a result, any physical changes or changes in the method of operation at TNAP that constitute a "modification" must be considered pursuant to the applicable Federal NSR provisions.

Accordingly, the proposed changes that include construction of a new body shop as well as changes to the sealer and coating operations must be evaluated to determine whether they meet the definition of a "major modification" under the federal NSR program



TNAP is currently located in an area that is considered to be in attainment for the criteria pollutants ozone (O₃), NO_x, SO₂, CO, PM, PM₁₀, PM_{2.5}, and lead (Pb). Chrysler must therefore evaluate whether the criteria pollutant emissions from the proposed changes will exceed levels, such that, review under the federal NSR program for attainment pollutants will be required. A project at an existing major stationary source located in an attainment area, consisting of the installation of a new emissions unit or a modification to an existing emissions unit, and that is considered to be a “major modification” pursuant to 40 CFR 52.21(b)(2) is subject to the attainment provisions of the federal Prevention of Significant Deterioration (PSD) program. The attainment provisions of the federal PSD program require an analysis of the best available control technology (BACT) as well as an impact analysis (dispersion modeling demonstration) applicable to those pollutants that exceed the significance thresholds specified by 40 CFR 52.21.

4.1 Federal NSR Program Applicability

A “*major modification*” to an existing major stationary source is defined by 40 CFR 52.21(b)(2) to be “*any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(40) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(50) of this section); and a significant net emissions increase of that pollutant from the major stationary source*”.

A “*significant emissions increase*” is defined by 40 CFR 52.21(b)(40) to be “*an increase in emissions that is significant (as defined in paragraph (b)(23) of this section) for that pollutant*”. 40 CFR 52.21(b)(40) defines significant as “*a rate of emissions that would equal or exceed any of the following rates:*

Carbon monoxide: 100 TPY

Nitrogen oxides: 40 TPY

Sulfur dioxide: 40 TPY

Particulate Matter 25 TPY

PM10 15 TPY

PM2.5 10 TPY



Ozone: 40 TPY of volatile organic compounds”

The proposed project at TNAP involves both existing emission units (sealer/deadener and coating application processes including e-coat tanks extension, line speed increase, additional cut-in robots and conversion from air atomized to bell applicators) and new emission units (proposed combustion equipment). Therefore, the hybrid test for projects that involve multiple types of emission units, as defined by 40 CFR 52.21(a)(2)(iv)(f), must be used to determine if the proposed project will result in a significant emissions increase of criteria pollutants. The hybrid test includes both an “*actual-to-projected-actual*” applicability test for changes involving existing emissions units and an “*actual-to-potential*” test for changes that involve the construction of new emissions units.

4.1.1 Actual-to-Potential Test

Pursuant to 40 CFR 52.21(a)(2)(iv)(d) for projects involving the construction of **new** emissions units, “*a significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in paragraph (b)(4) of this section) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph (b)(48)(iii) of this section) of these units before the project equals or exceeds the significant amount for that pollutant*”.

Baseline Actual Emissions

40 CFR 52.21(b)(48)(iii) specifies that “*for a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero*”.

Potential to Emit

The potential to emit of criteria pollutants for the natural gas-fired space heaters, air make-up units sealer gel oven, and the heater boxes associated with the oven extensions is calculated based on the total rated heat input of 80.0 MMBtu/hr, 8,760 hours of operation per year (hr./yr.), and the emission factors for natural gas combustion presented in US AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition, Volume I, Table 1.4-2. The potential to emit criteria pollutants for the natural gas-fired emergency generator is



calculated based on the maximum rated heat input of 2.0 MMBtu/hr and the emission factors for natural gas-fired, 4-stroke, lean-burn reciprocating engines presented in US AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition, Volume I, Table 3.2-2.

Table 4.1.1 presents the maximum potential criteria pollutant emission rates for the proposed natural gas fired equipment at TNAP.

Table 4.1.1

**Maximum Potential Criteria Pollutant Emissions
From Proposed Natural Gas Combustion Units at TNAP**

Pollutant ¹	<u>Heater Boxes/AMUs/Gel Oven²</u>		<u>Emergency Generator⁵</u>		<u>Natural Gas Combustion</u>
	Emission Factor ³ (lbs./MMcf)	Maximum Emission Rate (TPY)	Emission Factor ⁶ (lbs./MMBtu)	Maximum Emission Rate (TPY)	Maximum Emission Rate (All) (TPY)
CO ^{4,7}	84	29.43	3.17E-01	1.59E-01	29.59
NO _x	100	35.04	4.08E+00	2.04E+00	37.1
SO ₂	0.6	0.2	5.88E-04	2.94E-04	0.2
VOC	5.5	1.93	1.18E-01	5.90E-02	1.99
PM	7.6	2.66	9.91E-03	4.96E-03	2.66
PM ₁₀	7.6	2.66	7.71E-05	3.86E-05	2.66
PM _{2.5}	7.6	2.66	7.71E-05	3.86E-05	2.66

1. Lead (Pb) emissions from natural gas combustion are insignificant.
2. Based on the maximum rated heat input of 80.0 MMBtu/hr.
3. Based on US AP-42, Fifth Edition, Volume I, Table 1.4-2.
4. Sample calculation (CO):
 $(80.0 \text{ MMBtu/hr.}) * (1 \text{ MMcf}/1,000 \text{ MMBtu}) * (8,760 \text{ hr./yr.}) * (84 \text{ lbs. CO/MMcf}) * (1 \text{ ton}/2,000 \text{ lbs})$
 = 29.43 tons CO/yr.
5. Based on the maximum rated heat input of 2.0 MMBtu/hr. and maximum operating capacity of 500 hr./yr.
6. Based on US AP-42, Fifth Edition, Volume I, Table 3.2-2 Uncontrolled Emission Factors for 4-Stroke Lean-Burn Engines (SCC: 2-02-002-54).
7. Sample calculation (CO):
 $(2.0 \text{ MMBtu/hr.}) * (500 \text{ hr./yr.}) * (0.317 \text{ lbs. CO/MMBtu}) * (1 \text{ ton}/2,000 \text{ lbs})$
 = 0.159 tons CO/yr.

The potential to emit of VOC for the Purfoam operations is based on mass balance and the maximum projected annual production rate of 327,000 vehicles per hour (veh/hr.). Table 4.1.2



presents the maximum potential VOC emission rate for the proposed Purfoam operations at TNAP.

Table 4.1.2

**Maximum Potential VOC Emissions
From Proposed Purfoam Operations at TNAP**

CO ₂ Correc tion						
Material	Wet Usage (g)	Specific Gravity	Wet Usage (gal)	VOC (lb./gal.)	VOC (lb./gal.)	VOC Emitted ² (lbs.)
Component A ¹	1,541.76	1.10	0.371	0.0302	0.0284	0.0105
Component B	58.24	0.99	0.016	2.905	2.7307	0.0425
Totals:	1,600.0		0.386			0.053
Process CO₂ Correction:					6.0%	
Anticipated Production Volume:						327,000
Maximum Annual VOC Emission Rate (lbs.):						17,338
Maximum Annual VOC Emission Rate (TPY):						8.67

1. Sample Calculation:

$$(1,541.76 \text{ g/veh.}) * (1 \text{ lb./453.6 g}) * (1 \text{ gal/8.34 lb. H}_2\text{O}) * (1 \text{ lb. H}_2\text{O/1.1 lb.}) = 0.371 \text{ gal/veh.}$$

$$(0.371 \text{ gal/veh.}) * (0.0302 \text{ lb. VOC/gal}) / (1.06_{\text{CO}_2 \text{ Corr}}) = 0.0105 \text{ lbs. VOC/veh.}$$

$$2. (0.053 \text{ lb. VOC/veh.}) * (327,000 \text{ veh./yr.}) * (1 \text{ ton/2,000 lb.}) = 8.67 \text{ TPY VOC}$$

40 CFR 52.21(b)(48)(iii) specifies that “for a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero”. As baseline emissions for new emissions units are equal to zero, the total criteria pollutant emissions increases from all proposed combustion equipment (i.e., space heaters, air make-up units, sealer gel oven,



heater boxes, and emergency generator) are equivalent to the maximum potential emission rates presented in Table 4.1.1.

Total Emissions Increase from New Emissions Units

The total VOC emissions increase resulting from installation of the proposed body shop combustion equipment and the proposed Purfoam operations is 10.66 TPY.

$$(\text{Potential to Emit}) - (\text{Baseline Actual}) = (1.99 \text{ TPY}) + (8.67 \text{ TPY}) - (0 \text{ TPY}) = 10.66 \text{ TPY}$$

4.1.2 Actual-to-Projected-Actual Test

Pursuant to 40 CFR 52.21(a)(2)(iv)(c) for projects that only involve **existing** emissions units, “a significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in paragraph (b)(41) of this section) and the baseline actual emissions (as defined in paragraphs (b)(48)(i) and (ii) of this section), for each existing emissions unit, equals or exceeds the significant amount for that pollutant”.

The existing and modified sealer/deadener and coating operations have the potential to emit VOC. 40 CFR 52.21(b)(48)(ii) defines baseline actual emissions for an existing emission unit (other than an electric utility steam generating unit) as “the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Administrator for a permit required under this section”. Chrysler selected calendar years 2002 and 2003 to represent the baseline actual emissions from the emission unit affected by the proposed changes at TNAP as they provided the most representative actual VOC emissions over any two consecutive year period within the 10-year look back period. The average VOC emission rate from sealer operations for the selected 24-month period was based on data submitted to the Ohio Environmental Protection Agency (OEPA) as part of the annual emission inventory program. The baseline actual VOC emission rate for calendar years 2002 and 2003 is 38.6 tons from sealer/deadener operations and 474.0 tons facility-wide.



2002/2003 Baseline Actual Emission Rates

Emission Unit	2002 Reported VOC Emissions @ 271,555 veh./yr. (TPY)	2003 Reported VOC Emissions @ 289,822 veh./yr. (TPY)	2002/2003 Average VOC Emissions @ 280,689 veh./yr. (TPY)
Sealers/Adhesives	38.18	38.92	38.55
Facility-Wide	503.78	446.19	474.99

Projected Actual Emissions

40 CFR 52.21(b)(41)(i) defines “*projected actual emissions*” as “*the maximum annual rate, in tons per year, at which an existing emission unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit’s design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source*”. In addition, 40 CFR 52.21(b)(41)(ii) specifies that “*in determining the projected actual emissions under paragraph (b)(41)(i) of this section (before beginning actual construction), the owner or operator of the major stationary source:*

(a) *Shall consider all relevant information, including but not limited to, historical operational data, the company’s own representations, the company’s expected business activity and the company’s highest projections of business activity, the company’s filings with the State or Federal regulatory authorities, and compliance plans under the approved State Implementation Plan”*

In addition, 40 CFR 52.21(b)(41)(ii) specifies that “*in determining the projected actual emissions under paragraph (b)(41)(i) of this section (before beginning actual construction), the owner or operator of the major stationary source:*

(c) *Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit’s emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual*

emissions under paragraph (b)(48) of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth”.

The projected actual emissions from the proposed changes at TNAP are based on the maximum projected annual production rate for any one of the 5 years (12-month period) following the proposed changes. Based on existing business related marketing and product demand data, Chrysler estimates the projected maximum production rate for the 5 year period following the proposed changes to be 327,000 vehicles per year (veh./yr.).

Excluding the expanded use of sealers, the manner of use and composition of materials expected for use in manufacturing the 2013 model year vehicles are nearly identical to those used at TNAP in 2008. Therefore, to estimate the projected annual VOC emission rate from the operational and model year changes (excluding the portion of emissions resulting from the expanded sealer operations), the 2008 VOC emission rate per vehicle was applied to the maximum projected production rate. The maximum projected VOC emission rate (based on the maximum 5-year projected production rate) is presented below:

Maximum Projected VOC Emission Rate (Production = 327,000 vehicles)

Maximum Projected VOC Emission Rate (lbs./veh.)	Maximum Projected VOC Emission Rate ¹ (TPY)
3.42	559.17

1. Sample Calculation: (3.42 lbs. VOC/veh.) * (327,000 veh.) * (1 ton/2,000 lbs.) = 559.17 TPY VOC

The proposed increase in line speed will increase short-term (hourly) VOC emission rates for the affected emission units. However, daily and long-term emission rates are not affected by the increased line speed due to the fact that daily emission rates are dictated by demand-driven daily production schedules. The intent of the line speed increase is to meet daily production targets within two production shifts. The facility currently has the ability to meet the daily production targets by continuing operations through a third production shift. However, increasing the production during two shifts to meet the desired level of production has a significant economic benefit relative to the addition of a third operating shift, as well as a



substantial increase in operational flexibility. The average annual operating hours at TNAP for calendar years 2002 and 2003 is 4,748 hr./yr. The alternative work schedule (AWS) for the maximum normal operating schedule at an automotive assembly plant is 6,069 hr./yr. Therefore, for the 2-year period TNAP could have accommodated production for an additional 1,321 hr./yr. Based on the existing line speed of 53 vehicles per hour (veh./hr.) the facility had the ability to accommodate an additional 70,013 veh./yr. Therefore, the maximum level of production that could have been accommodated at TNAP for calendar years 2002 and 2003 is 350,702 veh./yr. which is higher than the maximum projected production rate of 327,000 veh./yr.

$$(53 \text{ veh./hr.}) * (1,321 \text{ hr./yr.}) = 70,013 \text{ veh.}$$
$$(280,689 \text{ veh./yr.}) + (70,013 \text{ veh./yr.}) = 350,702 \text{ veh./yr.}$$

In addition to evaluating the operating capacity of TNAP for calendar years 2002 and 2003, Chrysler also evaluated TNAP's Title V permit to determine the maximum level of production that would result in a VOC emission rate equivalent to the most restrictive enforceable limit related to production. The most restrictive enforceable limit specified by the Title V permit for the emission units affected by the proposed changes 3.25 TPY VOC for K022 – Anti-chip. To determine the maximum level of production that could have been achieved in 2002 and 2003, Chrysler extrapolated an equivalent level of production that would result in a total of 3.25 TPY VOC based on the 2002/2003 actual average production and VOC emission rate from K022 – Anti-chip of 1.35 TPY. Based upon the most restrictive enforceable VOC emission limit specified by TNAP's Title V permit, the equivalent level of production that could have been achieved in calendar years 2002 and 2003 is 675,733 vehicles.

$$(280,689 \text{ veh./yr.}) * (3.25 \text{ ton/yr.}) * (1 \text{ yr./1.35 ton}) = 675,733 \text{ veh./yr.}$$

The excludable portion of emissions that the existing emission unit could have accommodated is equivalent to the VOC emissions associated with production of additional vehicles equal to the difference of the maximum projected production rate of 327,000 vehicles and the average production rate during the 24-month period used to establish the baseline actual emissions. As the maximum projected production rate of 327,000 veh./yr. is less than the maximum level of production that could have been achieved by TNAP in calendar years 2002 and 2003, then the excludable level of production that could have been accommodated by the existing emission units is (327,000 vehicles) – (280,689 vehicles) = 46,311 vehicles. Based on the actual



average, production normalized emission rate (3.38 lbs. VOC/veh.) for calendar years 2002 and 2003, the total excludable portion of projected VOC emissions is 78.3 TPY.

$$(46,311 \text{ veh./yr.}) * (3.38 \text{ lb. VOC/veh.}) * (1 \text{ ton}/2,000 \text{ lb.}) = 78.27 \text{ TPY}$$

Pursuant to 40 CFR 52.21(b)(41)(i) and 40 CFR 52.21(b)(41)(ii), the actual projected VOC emission rate for the proposed changes at TNAP (excluding VOC emissions resulting from expanded use of sealers/deadeners) is 480.9 TPY.

$$\begin{aligned} \text{Projected Actual Emissions} &= \text{Maximum Projected Emissions} - \text{Excludable Emissions} \\ &= 559.17 \text{ TPY} - 78.27 \text{ TPY} = 480.9 \text{ TPY} \end{aligned}$$

Total Emissions Increase from Existing Emissions Units

The total VOC emissions increase resulting from the proposed coating operation changes (changes to existing emission units excluding VOC emissions resulting from expanded use of sealer/deadeners) is 6.8 TPY.

$$\begin{aligned} \text{Projected Actual Emissions} - \text{Baseline Actual Emissions} &= 480.9 \text{ TPY} - 474.99 \text{ TPY} \\ &= 5.91 \text{ TPY} \end{aligned}$$

4.1.3 Total Project Emissions Increase

To maintain operational flexibility and to restrict the total project emissions increase below the corresponding PSD significance level, Chrysler requests that VOC emissions from the expanded sealer/deadener operations be limited to 61.0 TPY, such that the VOC emissions increase from the entire project is 39.0 TPY, and therefore considered to be a minor modification relative to federal NSR. The VOC emissions increase due to the expanded sealer operations is calculated as follows:



Description	VOC Emission Rate (TPY)
Total Project VOC Emissions Increase	39.0
Add Baseline Actual Emissions	474.99 TPY
Add excludable portion of emissions due to increased product demand	78.27 TPY
Less projected emissions due to line speed and model year changes at maximum projected production rate	(559.17) TPY
Less emissions increase from new emission units	(10.66 TPY)
Total Emissions Increase Due to Expanded Sealer/Deadener Operations	22.43 TPY

Based on the table above, the proposed VOC emissions limit for sealer/deadener operations is calculated as follows:

$$(\text{Sealer/Deadener Baseline Actual Emissions}) + (\text{Emissions increase from expanded sealer operations}) = (38.55 \text{ TPY}) + (22.43 \text{ TPY}) = 60.98 \text{ TPY}$$

Description	VOC Emission Rate (TPY)
Allowable emissions increase due to expanded sealer operations	22.43 TPY
Add projected emissions due to coating changes, line speed and model year changes at maximum projected production rate	559.17 TPY
Less excludable portion of emissions due to increased product demand	(78.27 TPY)
Less Baseline Actual Emissions	(474.99 TPY)
Add emissions increase from new emission units	10.66 TPY
Total Project VOC Emissions Increase	39.0 TPY

Based on the previous discussion, the criteria pollutant emissions increases from installation of the proposed new emission units and expansion of the existing sealer operations are presented in Table 4.1.3.



Table 4.1.3
Criteria Pollutant Emissions Increases from the Proposed Project at TNAP

Table with 5 columns: Pollutant, New Emission Units (TPY), Existing Emission Unit Emissions Increase (TPY), Total Emissions Increase (TPY), and PSD Significance Level (TPY). Rows include CO, NOx, SO2, VOC, PM, PM10, and PM2.5.

*derived by the following: 559.17 TPY + 22.43 TPY - 474.99tpy - 78.27 TPY = 28.34 TPY

Pursuant to 40 CFR 52.21(b)(2), in order to be considered a "major modification", the proposed changes at TNAP must result in both a significant emissions increase and a significant net emissions increase. Based on the analysis above, the total criteria pollutant emissions increases that result from the proposed changes at TNAP are less than the respective PSD significance levels. Since total criteria pollutant emissions increases from the proposed project are less than the respective significance levels specified by 40 CFR 52.21(b)(23), then the first portion of the two-part criteria specified by 40 CFR 52.21(b)(2) has not been satisfied, and the proposed changes at TNAP are not considered to be a "major modification" subject to the requirements of federal NSR.

4.2 Standards of Performance for New Stationary Sources (NSPS)

4.2.1 Natural Gas-Fired Space Heaters and Air Make-up Units

There are no Standards of Performance for New Stationary Sources (NSPS) that apply to natural gas space heaters, heater boxes or air make-up units with maximum heat input ratings less than 10 MM Btu/hr.

4.2.2 Natural Gas-Fired Emergency Generator

40 CFR 60, Subpart JJJJ specifies standards of performance for stationary spark ignition internal combustion engines. Subpart JJJJ requires that new stationary internal combustion



engines meet specific emissions standards based on maximum rated power output, intended use, and fuel type. Typically the standards specified by Subpart JJJJ apply to the design requirements of the internal combustion engine that must be certified by the manufacturer. The natural gas-fired emergency generator purchased by Chrysler for installation in the proposed body shop will meet the requirements specified by Subpart JJJJ.

4.2.3 Natural Gas-Fired Sealer Gel Oven/Heater Boxes

There are no Standards of Performance for New Stationary Sources (NSPS) that apply to natural gas-fired gelling ovens or heater boxes with maximum heat input ratings less than 10 MM Btu/hr.

4.2.4 Surface Coating Operations

The NSPS applicable to the automobile surface coating operations in 40 CFR 60 Subpart MM is substantially less stringent than the applicable permit limit. Accordingly, the facility will continue to comply with the permit and therefore, Subpart MM.

4.3 Maximum Achievable Control Technology (MACT)

4.3.1 Natural Gas-Fired Space Heaters and Air Make-up Units

There are no categorical maximum achievable control technology (MACT) standards specified by the National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for natural gas space heaters, heater boxes, and air make-up units with maximum heat input ratings less than 10 MMBtu/hr.

4.3.2 Natural Gas-Fired Emergency Generator

Installation of the proposed natural gas-fired emergency generator is subject to the requirements of 40 CFR, Part 63, Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. Subpart ZZZZ specifies emissions standards for new and existing stationary reciprocating internal combustion engines (RICE) located at a major source of HAP emissions. Based on the applicability requirements of 40 CFR 63.6590, the proposed emergency generator is subject to the specific standards associated with new stationary RICE with a site rating of less than or equal to 500 brake hp. 40 CFR 63.6590(c) states that for stationary rice subject to regulations under 40 CFR



Part 60, “an affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.” Based on the discussion in Section 4.2.2, the natural gas-fired emergency generator purchased by Chrysler for installation in the proposed body shop will meet the requirements specified by 40 CFR, Part 60, Subpart JJJJ. Therefore, the proposed emergency generator will meet the requirements specified by 40 CFR, Part 63, Subpart ZZZZ.

4.3.3 Natural Gas-Fired Sealer Gel Oven/Heater Boxes

There are no categorical maximum achievable control technology (MACT) standards specified by the National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for natural gas-fired gelling ovens with maximum heat input ratings less than 10 MMBtu/hr.

4.3.4 Auto MACT

Additionally, the facility is currently subject to and complies with the Auto MACT surface coating standards in 40 CFR 63 Subpart IIII. The changes proposed herein do not require an analysis of case-by-case MACT or the new source Auto MACT requirements which apply only to new or reconstructed major sources of Hazardous Air Pollutants (i.e., paint shops). The proposed changes will not impact TNAP’s ability to comply with the MACT standards applicable to the existing facility.

5.0 CONCLUSION

Chrysler has evaluated both the federal and state air quality regulatory requirements associated with the proposed changes to the Toledo North Assembly Plant in support of plans for body shop and TCF expansions as well as changes to the existing sealer operations and the coating operations. Based upon the information contained herein, Chrysler believes that the proposed body shop and TCF expansions as well as the associated natural gas-fired space heaters and air make-up units are not subject to the requirement to obtain a Permit to Install from the Ohio Environmental Protection Agency and meet all applicable air pollution control requirements. However, installation of the proposed natural gas-fired emergency generator, sealer gel oven, and expanded welding operations are subject to the requirement to obtain a PTI.

Documentation supporting the proposed modifications to the existing sealer/deadener and



surface coating operations and proposed body shop and TCF expansions with associated combustion equipment has been submitted to the OEPA using the E-Services online system.

Chrysler is requesting a limit on allowable VOC emissions from the installation of several robotic applicators associated with the expanded sealer/deadener operations of 68.8 TPY. Potential VOC emission increases for all of the other changes, including increased line speed when considering past actual to projected future actual are less than significance levels. The requested limit on allowable VOC emissions from the sealer/deadener operations corresponds to a total project (which includes all changes to the surface coating operations) VOC emissions increase of 39.0 TPY, and therefore the proposed changes at TNAP are considered to be a minor modification relative to VOC. All other increases in criteria pollutants from the proposed project are less than the respective PSD significance levels as well. Therefore, Chrysler has determined that the proposed project does not meet the definition of a major modification to an existing major source and is therefore not subject to provisions of the federal New Source Review program.



**Environmental
Protection Agency**

Permit Strategy Write-Up
Chrysler Group LLC - Toledo North Assembly
Permit Number: P0108040
Facility ID: 0448010414

APPENDIX A

Application Forms
And
Emission Activity Category Forms

PUBLIC NOTICE PUBLIC HEARING
ISSUANCE OF DRAFT AIR POLLUTION Permit-To-Install
Chrysler Group LLC - Toledo North Assembly

Issue Date: 6/8/2011
Facility ID: 0448010414
Facility Location: Chrysler Group LLC - Toledo North Assembly
4400 Chrysler Drive,
Toledo, OH 43608-4000
Facility Description: Automobile Manufacturing

Permit Number: P0108007
Permit Type: Initial Installation
Permit Description: The purpose of this project is to add a new foam injection process, the injection of a two-component material into the vehicle cavities to add sound deadening, will be added to the production line. The new emissions unit is identified as a source of VOC emissions as the two liquid component compounds react chemically to form an inert solid.

Permit Number: P0108040
Permit Type: OAC 3745-31 Modification
Permit Description: This project includes installation of additional makeup air heaters which are all exempt from permitting requirements, an emergency generator issued as a Permit-by-Rule, and facility-wide increased VOC emissions associated with the projected production rate increase to accommodate the 2013 model year vehicle platform.

Permit Number: P0108063
Permit Type: Administrative Modification
Permit Description: Replace some but not all welding equipment for the automated welding process (P012), and the emissions previously released indoors will be ducted and vented to atmosphere.

The Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of air pollution control permits-to-install (PTI) for air contaminant sources at the location identified above on the date indicated. Installation of the air contaminant sources may proceed upon final issuance of the PTI.

A public hearing and information session on the draft air permit is scheduled for 6:30 p.m., Thursday, July 14, 2011, at West Toledo YMCA Auditorium, 2110 Tremainsville Road, Toledo OH 43613. A presiding officer will be present and may limit oral testimony to ensure that all parties are heard. All interested persons are entitled to attend or be represented and give written or oral comments on the draft permit at the hearing.

Written comments must be received by July 18, 2011 in order to be considered. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Bob Kossow, Toledo Division of Environmental Services, (419) 936-3015, or 348 South Erie Street, Toledo, Ohio, 43602. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc



DRAFT

Division of Air Pollution Control
Permit-to-Install
for
Chrysler Group LLC - Toledo North Assembly

Facility ID: 0448010414
Permit Number: P0108040
Permit Type: OAC Chapter 3745-31 Modification
Issued: 6/8/2011
Effective: To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install
for
Chrysler Group LLC - Toledo North Assembly

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Authorization

Facility ID: 0448010414
Facility Description: Automotive and Light Duty Truck Assembly Plant.
Application Number(s): A0041730, A0041768, A0041778
Permit Number: P0108040
Permit Description: minor modifications to the coating line to accommodate the 2013 model year production
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: \$800.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 6/8/2011
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

Chrysler Group LLC - Toledo North Assembly
4400 Chrysler Drive
Toledo, OH 43608-4000

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Toledo Department of Environmental Services
348 South Erie Street
Toledo, OH 43604
(419)936-3015

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director



Authorization (continued)

Permit Number: P0108040

Permit Description: minor modifications to the coating line to accommodate the 2013 model year production

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	K021
Company Equipment ID:	E-Coat
Superseded Permit Number:	04-01102
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K022
Company Equipment ID:	Powder Anti-chip
Superseded Permit Number:	04-01102
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K023
Company Equipment ID:	Topcoat
Superseded Permit Number:	04-01102
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P008
Company Equipment ID:	Sealers and Adhesives
Superseded Permit Number:	04-01102
General Permit Category and Type:	Not Applicable



A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Toledo Department of Environmental Services.



- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Toledo Department of Environmental Services. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Toledo Department of Environmental Services every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Toledo Department of Environmental Services in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.



- c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Toledo Department of Environmental Services concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Toledo Department of Environmental Services.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission

limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Toledo Department of Environmental Services. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently



removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.



15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

B. Facility-Wide Terms and Conditions



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart MM: K021, K022 and K023. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Toledo Division of Environmental Services.
3. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart IIII: K021, K022, K023 and P008. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Toledo Division of Environmental Services.
4. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart DDDDD: K021, K022, K023 and P008. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Toledo Division of Environmental Services.

The above referenced emissions units are subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act (CAA) due to the May 16, 2011 U.S. EPA decision to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the U.S. EPA completes its reconsideration of the rules and the Agency publishes a notice in the Federal Register announcing that the rules are in effect.

If notified by the Ohio EPA or U.S. EPA, the permittee shall submit an application for a revision to this Title V permit that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S. EPA.

5. Recordkeeping for netting purposes as required by P0108007, P0108040 and P0108063 for VOCs.
 - a) The permittee shall monitor the emissions of VOC that are emitted by emissions units P008, P012, P014, K021, K022, and K023 associated with Chrysler Group, LLC's PTI 04-1102; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the change, or for a period of ten years following resumption of regular operations after the change if the NSR project increases the design capacity or potential to emit of that regulated NSR pollutant at such emissions unit.
 - a) If the unit is an existing unit, the permittee shall submit a report through the Ohio EPA's eBusiness Center: Air Services online web portal if the annual emissions, in tons per year, from Chrysler Group, LLC's PTI 04-1102, as modified by P0108007, P0108040 and P0108063, exceed the baseline actual emissions (as documented and maintained pursuant to paragraph (C)(1)(c) of OAC rule 3745-31-10, by a significant amount for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (C)(1)(c) of OAC rule 3745-31-10. The permittee's pre-construction projection is listed in Table 1 below where construction is planned to be completed in fall of 2012 in time for start of assembly for Model Year 2013. Such report shall be submitted through



the Ohio EPA's eBusiness Center: Air Services online web portal within 60 days after the end of such year. The report shall contain the following:

- (1) The name, address and telephone number of the major stationary source;
- (2) The annual emissions as calculated pursuant to 5.a) above; and
- (3) Any other information that the permittee wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).



Table 1 NSR for VOC - Baseline Actual Emissions vs. Potential/Projected Actual Emissions

	Baseline 2002/2003 Actual Emissions (tons/yr)	*Potential Emissions **Projected Actual Emissions (tons/yr)	Incremental Difference (tons/yr)
	VOC	VOC	VOC
New & Modified Sources at PTE*			
P008 new burners	0	0.34	0.34
K021 new burners	0	0.10	0.10
K022 new burners	0	0.10	0.10
K023 new burners	0	0.10	0.10
P012	0	0	0
P014	0	8.67	8.67
Make up air heaters	0	1.28	1.28
New Emergency Generator (PBR)	0	0.06	0.06
Emissions from Associated Units **	0	10.65	10.65
K021	3.02	3.52	0.50
K022	1.35	1.57	0.22
K023	229.16	266.97	37.81
P007	162.04	188.78	26.74
P008	38.55	73.02	34.47
P009	35.24	41.05	5.81
P010	0.85	0.99	0.14
Subtotals	470.21	586.55	116.34
Excludable Emissions			<77.34>
Expansion Project Totals			39

C. Emissions Unit Terms and Conditions



1. P008, Sealers and Adhesives

Operations, Property and/or Equipment Description:

Automotive sealers and adhesives and a 10.0 mmBtu/hr indirect fired natural gas gel oven, with control by appropriate work practices: TNAP.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
(1) None.
b) Applicable Emissions Limitations and/or Control Requirements
(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below.

Table with 2 columns: Applicable Rules/Requirements, Applicable Emissions Limitations/Control Measures. Rows include sealant and adhesive emissions with sub-rows a through e detailing specific rules and VOC limits.



f.	40 CFR Part 63, Subpart A (63.1 through 63.16)	see b)(2)f.
g.	<p>40 CFR Part 63, Subpart IIII (63.3080 through 63.3176)</p> <p>In accordance with 40 CFR 63.3081(b), this emissions unit is an existing automobile, or new light-duty truck, surface coating operation located at a facility which is a major source of HAPs subject to the emission limitations/control measures specified in this section.</p>	<p>In accordance with 40 CFR 63.3091(c) the average organic hazardous air pollutant (HAP) emissions from all adhesive and sealer materials other than materials used as components of glass bonding systems shall not exceed 0.010 kg/kg (lb/lb) of adhesive and sealer material used during each month.</p> <p>see b)(2)g.</p>
10.0 mmBtu per hour indirect fired, natural gas gel oven combustion emissions		
h.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>emissions from the stack(s) serving this emissions unit shall not exceed:</p> <p>0.083 pound per mmBtu and 3.64 tons of carbon monoxide (CO) per rolling, 12-month period</p> <p>0.100 pound per mmBtu and 4.38 tons of nitrogen oxides (NOx) per rolling, 12-month period</p> <p>0.0019 pound per mmBtu and 0.08 ton of particulate emissions (PE) per rolling, 12-month period</p> <p>0.0075 pound per mmBtu and 0.33 ton of particulate matter less than or equal to 10 microns in diameter (PM10) per rolling, 12-month period</p> <p>0.0075 pound per mmBtu and 0.33 ton of particulate matter less than or equal to 2.5 microns in diameter (PM2.5) per rolling, 12-month period</p> <p>0.0006 pound per mmBtu and 0.03 ton of sulfur dioxide (SO₂) per rolling, 12-month period</p> <p>0.0054 pound per mmBtu and 0.24 ton of volatile organic compounds (VOC) per rolling, 12-month period</p> <p>visible particulate emissions from this</p>



Table with 3 columns: Item ID, Description, and Emission Limit/Condition. Rows include items i through n with various regulatory references and emission unit specifications.

(2) Additional Terms and Conditions

- a. The permittee shall employ only dispensers and disposal containers appropriate to minimize exposure times in this emissions unit.
b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(d) and OAC rule 3745-21-09(U)(1)(g).
c. The maximum sealer and adhesive usage at this emissions unit shall be limited by the following formula, calculated as a rolling, 12-month summation:

77.49 tons VOC ≥ Σ(SA_i)(VOC_i) ÷ (2000 pounds/ton)

Where:

SA_i = usage of sealer and/or adhesive material i, gallons
VOC_i = volatile organic compound content of material i, pounds per gallon

The permittee has sufficient existing records to demonstrate compliance with this limitation during the first twelve months of operation after issuance of this permit.

- d. The permittee shall employ no photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in the emissions unit.
- e. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: b)(1)c., b)(2)d., b)(2)e., d)(2), e)(2) and f)(1)a.
- f. Table 2 to Subpart IIII of 40 CFR Part 63, provides applicability provisions, definitions, and other general provisions that are applicable to this emissions unit.
- g. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart IIII upon the date of startup of this affected source after modification.
- h. These emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit while combusting natural gas. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- i. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants emitted at less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

The following terms and conditions shall become void after U.S. EPA approves the rule revision: b)(1)g., b)(2)i. and f)(2)c. through q.

- j. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology requirements under OAC rule 3745-31-05(A)(3) do not apply to the carbon monoxide (CO), nitrogen oxides (NO_x), particulate emissions (PE), particulate matter less than or equal to 10 microns in diameter (PM₁₀), particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}), sulfur dioxide (SO₂), and volatile organic compound (VOC) emissions from this air contaminant source since the uncontrolled potential to emit for CO, NO_x, PE, PM₁₀, PM_{2.5}, SO₂, and VOC is less than 10 tons per year.

- k. OAC rule 3745-18-06(A) does not establish SO₂ emission limitations for the fuel burning equipment associated with this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emission unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).

On September 1, 2003, OAC rule 3745-18-06 was revised to delete the following phrase: "having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pounds per million standard cubic feet". Therefore, this phrase is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-18-06, the requirements still exists as part of the federally-approved SIP for Ohio.

- l. Table 10 to Subpart DDDDD of 40 CFR Part 63, provides applicability provisions, definitions, and other general provisions that are applicable to this emissions unit.
- m. This emissions unit is subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act (CAA) due to the May 16, 2011 U.S. EPA decision to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until U.S. EPA completes its reconsideration of the rules and the Agency publishes a notice in the Federal Register announcing that the rules are in effect.

If notified by the Ohio EPA or U.S. EPA, the permittee shall submit an application for a revision to this permit that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S. EPA.

c) Operational Restrictions

- (1) The following term shall become void after USEPA approves the OAC rule 3745-18-06 revisions:

The permittee shall burn only natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet in this emissions unit.

- (2) The following term shall become effective after USEPA approves the OAC rule 3745-18-06 revisions:

The permittee shall burn only natural gas in this emissions unit.

- (3) See 40 CFR Part 63, Subpart IIII (40 CFR 63.3080-3176).
 - (4) See 40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575).
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 - (2) For each sealer or adhesive utilized in this emissions unit, the permittee shall record a determination of whether the sealer or adhesive material is photochemically reactive or non-photochemically reactive as defined in OAC rule 3745-21-01(C)(5).
 - (3) For purposes of compliance with the emissions limitation for material applied to metallic surfaces (3.5 pounds VOC per gallon, excluding water and exempt solvents) the permittee shall collect and record on a monthly basis the following information:
 - a. the name and identification number of each sealer and adhesive applied to metallic surfaces; and
 - b. the VOC content, excluding water and exempt solvents, of each sealer and adhesive applied to metallic surfaces.
 - (4) For purposes of compliance with the emissions limitation for glass adhesion body primers (4.9 pounds VOC per gallon, excluding water and exempt solvents) the permittee shall collect and record on a monthly basis the following information:
 - a. the name and identification number of each glass adhesion body primer utilized; and
 - b. the VOC content, excluding water and exempt solvents, of each glass adhesion body primer utilized.
 - (5) For purposes of compliance with the emissions limitation for sealers and adhesives (0.5 pound of VOC per gallon, excluding water and exempt solvents, on a monthly basis), the permittee shall collect and record the following information each month for this emissions unit:
 - a. When using complying coatings for all sealers and adhesives:
 - i. the name and identification number of each sealer and adhesive, as applied; and
 - ii. the VOC content, excluding water and exempt solvents, of each sealer and adhesive, as applied.

Alternate, equivalent record keeping methods may be used upon written approval by the Toledo Division of Environmental Services.

- b. When calculating a monthly volume-weighted average VOC content for the sealers and adhesives;
 - i. the name and identification number of each sealer and adhesive, as applied;
 - ii. the VOC content, excluding water and exempt solvents, and the number of gallons, excluding water and exempt solvents, of each sealer and adhesive, as applied; and
 - iii. the volume-weighted average VOC content of all sealer and adhesive, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,₂.
- (6) For purposes of compliance with the rolling, 12-month VOC emissions limitation for sealers and adhesives (77.49 tons), the permittee shall collect and record on a monthly basis the following information for all sealer and adhesive operations:
 - a. the company identification for each sealer and adhesive utilized;
 - b. the number of gallons of each sealer and adhesive utilized, SA_i ;
 - c. the volatile organic compound content of each sealer and adhesive utilized, in pounds per gallon, VOC_i ;
 - d. the total VOC emissions from all sealers and adhesives utilized, in tons; $\sum_{i=1}^n (SA_i)(VOC_i) \div (2000 \text{ pounds/ton})$; and
 - e. the rolling, 12-month total quantity of VOC emissions, in tons.

Alternate, equivalent record keeping methods may be used upon written approval by the Toledo Division of Environmental Services.

- (7) See 40 CFR Part 63, Subpart IIII (40 CFR 63.3080-3176).
- (8) See 40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575).

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (2) The permittee shall submit quarterly deviation (excursion) reports identifying the use of any photochemically reactive sealer or adhesive material in this emissions unit.
- (3) The permittee shall notify the Director (the Toledo Division of Environmental Services) of any monthly record showing the use of a sealer or adhesive in this emissions unit and applied to metallic surfaces which exceeded 3.5 pounds VOC per gallon, excluding water and exempt solvents. The notification shall include a copy of such record and shall be submitted within 30 days following the end of the calendar month.



- (4) The permittee shall notify the Director (the Toledo Division of Environmental Services) of any monthly record showing the use of a glass adhesion body primer which exceeded 4.9 pounds VOC per gallon, excluding water and exempt solvents. The notification shall include a copy of such record and shall be submitted within 30 days following the end of the calendar month.
 - (5) The permittee shall submit quarterly deviation (excursion) reports that identify each monthly record showing an exceedance of the 0.5 pound of VOC per gallon, excluding water and exempt solvents, emissions limitation. The notification shall include a copy of such record.
 - (6) The permittee shall submit quarterly deviation (excursion) reports that identify each monthly record showing that the VOC emissions from all sealants and adhesives utilized in this emissions unit exceed 77.49 tons per rolling, 12-month period.
 - (7) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
 - (8) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (9) See 40 CFR Part 63, Subpart IIII (40 CFR 63.3080-3176).
 - (10) See 40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575).
- f) Testing Requirements
- (1) Compliance with the emission limitations for sealers and adhesives emissions in b)(1) shall be determined in accordance with the following methods:
 - a. Emission Limitation:

The permittee shall employ no photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit.

Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements of d)(2).
 - b. Emission Limitation:

0.5 pound of VOC per gallon, excluding water and exempt solvents

Applicable Compliance Method :

Compliance shall be determined through the monitoring and record keeping requirements of d)(5).

If, required, compliance shall be determined through the methods and procedures of OAC rule 3745-21-10(B). USEPA Methods 24 and 24A shall be used to determine the VOC content. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular non-production maintenance material, the permittee shall notify the Administrator of the USEPA and shall use formulation data for that non-production maintenance material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

c. Emission Limitation:

3.5 pounds of VOC per gallon, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements of d)(3).

If required, compliance shall be determined through the methods and procedures of OAC rule 3745-21-10(B). USEPA Methods 24 and 24A shall be used to determine the VOC content. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular non-production maintenance material, the permittee shall notify the Administrator of the USEPA and shall use formulation data for that non-production maintenance material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

d. Emission Limitation:

4.9 pounds of VOC per gallon, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance shall be determined through the monitoring and record keeping requirements of d)(4).

If required, compliance shall be determined through the methods and procedures of OAC rule 3745-21-10(B). USEPA Methods 24 and 24A shall be used to determine the VOC content. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular non-production maintenance material, the permittee shall notify the Administrator of the USEPA and shall use formulation data for that non-production maintenance material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

- e. Emission Limitation:

77.49 tons VOC per rolling 12-month period.

Applicable Compliance Method :

Compliance shall be determined through the monitoring and record keeping requirements of d)(6).
 - f. Emission Limitation:

0.010 kg/kg (lb/lb) of adhesive and sealer material used during each month.

Applicable Compliance Method:

Compliance with the mass average organic HAP content for each compliance period shall be determined according to the methods and procedures of 40 CFR 63.3151.
- (2) Compliance with the emission limitations for oven burner emissions in b)(1) shall be determined in accordance with the following methods:
- a. Emission Limitation:

20% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

0.020 pound PE per mmBtu actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(9). Alternatively, other U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.
 - c. Emission Limitation:

5% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

d. Emission Limitation:

0.083 pound CO per mmBtu of heat input.

Applicable Compliance Method:

This emissions limitation was established based on emission factors specified in AP 42, Table 1.4-1, dated July 1998, as follows: divide the emission factor of 84 pounds of CO emissions per million standard cubic feet by a heating value of 1,020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

e. Emission Limitation:

3.64 tons of CO per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emission limitation of 0.083 pound of CO per mmBtu by the maximum heat input capacity of 10.0 mmBtu per hour and by 8,760 hours per year and divide by 2,000 pounds per ton.

f. Emission Limitation:

0.10 pound of NOx per mmBtu of heat input.

Applicable Compliance Method:

This emissions limitation was established based on emission factors specified in AP 42, Table 1.4-1, dated July 1998 as follows: divide the emission factor of 100 pounds of NOx emissions per million standard cubic feet by a heating value of 1,020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 7 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

g. Emission Limitation:

4.38 tons of NOx per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emission limitation of 0.10 pound of NOx per mmBtu by the maximum heat input capacity of 10 mmBtu per hour and by 8,760 hours per year and divide by 2,000 pounds per ton.

h. Emission Limitation:

0.0019 pound of PE per mmBtu of heat input.

Applicable Compliance Method:

This emissions limitation was established based on emission factors specified in AP 42, Table 1.4-2, dated July 1998, as follows: divide the emission factor of 1.9 pounds of PE emissions per million standard cubic feet by a heating value of 1,020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A. Alternatively, other U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

i. Emission Limitation:

0.08 ton of PE per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emissions limitation of 0.0019 pound of PE per mmBtu by the maximum heat input capacity of 10 mmBtu per hour and by 8,760 hours per year and divide by 2,000 pounds per ton.

j. Emission Limitation:

0.0075 pound of PM10 per mmBtu of heat input.

Applicable Compliance Method:

This emissions limitation was established based on emission factors specified in AP 42, Table 1.4-2, dated July 1998, as follows: divide the emission factor of 7.6 pounds of PM10 emissions per million standard cubic feet by a heating value of 1,020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51 Appendix. Alternatively, other U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

k. Emission Limitation:

0.33 ton of PM10 per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emissions limitation of 0.0075 pound of PM10 per mmBtu by the maximum heat input capacity of 10 mmBtu per hour and by 8,760 hours per year and divide by 2,000 pounds per ton.

l. Emission Limitation:

0.0075 pound of PM2.5 per mmBtu of heat input.

Applicable Compliance Method:

This emissions limitation was established based on emission factors specified in AP 42, Table 1.4-2, dated July 1998, as follows: divide the emission factor of 7.6 pounds of PM2.5 emissions per million standard cubic feet by a heating value of 1,020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51 Appendix. Alternatively, other U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

m. Emission Limitation:

0.33 ton of PM2.5 per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emissions limitation of 0.0075 pound of PM2.5 per mmBtu by the maximum heat input capacity of 10 mmBtu per hour and by 8,760 hours per year and divide by 2,000 pounds per ton.

n. Emission Limitation:

0.0006 pound of SO₂ per mmBtu of heat input.

Applicable Compliance Method:

This emissions limitation was established based on emission factors specified in AP 42, Table 1.4-2, dated July 1998, as follows: divide the emission factor of 0.6 pounds of SO₂ emissions per million standard cubic feet by a heating value of 1,020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 6 of 40 CFR Part 60 Appendix A. Alternatively, other U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

o. Emission Limitation:

0.03 ton of SO₂ per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emissions limitation of 0.0006 pound of SO₂ per mmBtu by the maximum heat input capacity of 10 mmBtu per hour and by 8,760 hours per year and divide by 2,000 pounds per ton.

p. Emission Limitation:

0.0054 pound of VOC per mmBtu of heat input.

Applicable Compliance Method:

This emissions limitation was established based on emission factors specified in AP 42, Table 1.4-2, dated July 1998, as follows: divide the emission factor of 5.5 pounds of VOC emissions per million standard cubic feet by a heating value of 1,020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 25 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-21-10. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

q. Emission Limitation:

0.24 ton of VOC per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emissions limitation of 0.0054 pound



of VOC per mmBtu by the maximum heat input capacity of 10 mmBtu per hour and by 8,760 hours per year and divide by 2,000 pounds per ton.

- g) Miscellaneous Requirements
 - (1) None.



2. K021, E-Coat

Operations, Property and/or Equipment Description:

E-coat with 30.0 mmBtu per hour indirect fired, natural gas drying oven

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Rows include Electrodeposition (E-Coat) prime coat of automobile bodies with regenerative thermal oxidizer (RTO) on the oven exhaust, and various OAC rules and CFR parts with their corresponding emission limitations.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	40 CFR Part 63, Subpart A (63.1 through 63.16)	see b)(2)g.
g.	40 CFR Part 63, Subpart IIII (63.3080 through 63.3176) In accordance with 40 CFR 63.3081(b), this emissions unit is an existing automobile, or new light-duty truck, surface coating operation located at a facility which is a major source of HAPs subject to the emission limitations/control measures specified in this section.	see b)(2)h. [63.3091(a) and (b)]
30.0 mmBtu per hour indirect fired, natural gas drying oven combustion emissions		
h.	OAC rule 3745-31-05(A)(3) (as effective 11/30/01)	the emissions from the oven combustion stack(s) serving this emissions unit shall not exceed: 0.083 pound of carbon monoxide (CO) per mmBtu of actual heat input; 10.91 tons of CO per rolling, 12-month period; 0.100 pound of nitrogen oxides (NOx) per mmBtu of actual heat input; 13.14 tons of NOx per rolling, 12-month period; 0.0019 pound of particulate emissions (PE) per mmBtu of actual heat input; 0.24 ton of PE per rolling, 12-month period; 0.0075 pound of particulate emissions of 10 microns or less in diameter (PM10) per mmBtu of actual heat input; 0.99 ton of PM10 per rolling, 12-month period; 0.0075 pound of particulate emissions of 2.5 microns or less in diameter (PM10) per mmBtu of actual heat input; 0.99 ton of PM2.5 per rolling, 12-month period; 0.0006 pound of sulfur dioxide (SO2) per mmBtu of actual heat input; 0.08 ton of SO2 per rolling, 12-month period; 0.0054 pound of volatile organic compounds (VOC) per mmBtu of actual heat input; 0.71 ton of VOC per rolling, 12-month period; and 5% opacity as a 6-minute average see b)(2)i. and b)(2)j.
i.	OAC rule 3745-31-05(A)(3) (as effective 12/01/06)	the emissions from the oven combustion stack(s) shall not exceed:



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.083 pound of carbon monoxide (CO) per mmBtu of actual heat input; and 0.100 pound of nitrogen oxides (NOx) per mmBtu of actual heat input. see b)(2)i., and b)(2)k.
j.	OAC rule 3745-17-07(A)(1)	visible particulate emissions from this emissions unit shall not exceed 20 percent opacity as a six-minute average
k.	OAC rule 3745-17-10(B)(1)	particulate emissions (PE) from the oven combustion stack(s) shall not exceed 0.020 pound per million Btu of actual heat input
l.	OAC rule 3745-18-06(A)	see b)(2)l.
m.	40 CFR Part 63, Subpart A (63.1 through 63.16)	see b)(2)m.
n.	40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575) In accordance with 40 CFR 63.7485, this emissions unit is an process heater that is located at, or is part of, a major source of HAP subject to the emission limitations/control measures specified in this section.	In accordance with 40 CFR 63.7500(a), the permittee shall meet each applicable emission limit and work practice standard in Table 1 to this subpart and shall meet each applicable operating limit in Tables 2 through 4 to this subpart. See b)(2)n.

(2) Additional Terms and Conditions

- a. The permittee shall operate and maintain a thermal incinerator, with a 100 percent capture efficiency and a minimum of 95 percent control efficiency, to control VOC emissions from the drying oven. The thermal incinerator shall be operated and maintained in accordance with the manufacturer's recommendations.
- b. In order to maintain compliance with the applicable VOC emission limitation(s), the acceptable average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit controlled by the thermal oxidizer is in operation, shall not be below the average temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance.
- c. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart MM and 40 CFR Part 63, Subpart IIII.
- d. The permittee shall not discharge or cause the discharge into the atmosphere from this emissions unit VOC emissions in excess of:

- i. 1.4 pounds of VOC per gallon of solids from any electrodeposition (EDP) coating line when the solids turnover ratio (RT) is 0.16 or greater.
- ii. $1.4 \times 350^{(0.160-RT)}$ pounds of VOC per gallon of solids from any EDP coating line when RT is greater than or equal to 0.040 and less than 0.160; or
- iii. when RT, is less than 0.040 for any EDP coating line, there is no emission limit;

where RT is calculated according to the equation in paragraph OAC rule 3745-21-09(C)(1)(a)(ii).

- e. 40 CFR Part 60, Subpart A provides applicability provisions, definitions, and other general provisions that are applicable to this emissions unit.
- f. In accordance with 40 CFR 60.392(a), the permittee shall not discharge or cause the discharge into the atmosphere from this emissions unit VOC emissions in excess of:
 - i. 0.17 kilogram of VOC per liter of applied coating solids when RT is 0.16 or greater.
 - ii. $0.17 \times 350^{(0.160-RT)}$ kg of VOC per liter of applied coating solids when RT is greater than or equal to 0.040 and less than 0.160.
 - iii. When RT is less than 0.040, there is no emission limit.
- g. Table 2 to Subpart IIII of 40 CFR Part 63 provides applicability provisions, definitions, and other general provisions that are applicable to this emissions unit.
- h. The combined organic hazardous air pollutant (HAP) emissions from electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to 40 CFR 63.3082(c), shall not exceed 0.072 kilogram per liter (0.60 pound per gallon) of coating solids deposited during each month, as determined according to the requirements in 63.3161;

or

if each individual material added to the electrodeposition primer system contains no more than 1.0 percent by weight of any organic HAP and 0.10 percent by weight of any organic HAP, or the emissions from all bake ovens used to cure electrodeposition primers are captured and ducted to a control device having a destruction efficiency of at least 95 percent, the combined organic HAP emissions from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not

components of glass bonding systems, used in coating operations added to the affected source pursuant to 63.3082(c) shall not exceed 0.132 kg/liter (1.10 lb/gal) of coating solids deposited during each month, determined according to the requirements in 63.3171.

- i. These emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit while combusting natural gas. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- j. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- k. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE), particulate matter less than or equal to 10 microns in diameter (PM10), particulate matter less than or equal to 2.5 microns in diameter (PM2.5), sulfur dioxide (SO₂), and volatile organic compound (VOC) emissions from this air contaminant source since the uncontrolled potential to emit for PE, PM10, PM2.5, SO₂, and VOC is less than 10 tons per year.

- i. OAC rule 3745-18-06(A) does not establish SO₂ emission limitations for the fuel burning equipment associated with this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emission unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).

On September 1, 2003, OAC rule 3745-18-06 was revised to delete the following phrase: "having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pounds per million standard cubic feet". Therefore,

this phrase is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-18-06, the requirements still exist as part of the federally-approved SIP for Ohio.

- m. Table 10 to Subpart DDDDD of 40 CFR Part 63, provides applicability provisions, definitions, and other general provisions that are applicable to this emissions unit.
- n. This emissions unit is subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act (CAA) due to the May 16, 2011 U.S. EPA decision to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until U.S. EPA completes its reconsideration of the rules and the Agency publishes a notice in the Federal Register announcing that the rules are in effect.

If notified by the Ohio EPA or U.S. EPA, the permittee shall submit an application for a revision to this permit that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S. EPA.

c) Operational Restrictions

- (1) The following term shall become void after USEPA approves the OAC rule 3745-18-06 revisions:

The permittee shall burn only natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet in this emissions unit.

- (2) The following term shall become effective after USEPA approves the OAC rule 3745-18-06 revisions:

The permittee shall burn only natural gas in this emissions unit.

- (3) The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the incinerator is in operation as a VOC control device for compliance purposes, shall not be below the average temperature measured during the most recent emission test that demonstrated the emissions unit was in compliance.

- (4) See 40 CFR Part 60, Subpart MM (60.390 through 60.398).

- (5) See 40 CFR Part 63, Subpart IIII (63.3080 through 63.3176).

- (6) See 40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575).

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the firebox of the thermal incinerator when the incinerator is in operation. Each temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications, with any modifications deemed necessary by the permittee and approved by the Toledo Division of Environmental Services. The device shall have an accuracy of the greater of 0.75 percent of the temperature being measured expressed in degrees Celsius or 4.0 Fahrenheit degrees. Each temperature measurement device shall be equipped with a recording device so that a permanent record is produced. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations.
- (3) The permittee shall collect and record the following information for each month for the coating line and control equipment:
 - a. the name and identification number of each coating used;
 - b. the mass of VOC per volume of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating;
 - c. the maximum VOC content (mass of VOC per volume of applied coating solids, as applied) or the daily volume-weighted average VOC content (mass of VOC per volume of coating solids, as applied) of all the coatings;
 - d. the calculated, controlled VOC emission rate, in mass of VOC per unit volume of coating solids, as applied. The controlled VOC emission rate shall be calculated using (i) either the maximum VOC content or the daily volume-weighted VOC content and (ii) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance;
 - e. the calculated, controlled VOC emissions, in tons of VOC per month and tons of VOC per rolling, 12-month period. The controlled VOC emissions shall be calculated using the controlled VOC emission rate in d. above, the volume solids content per month from b. above and a factor of 2,000 pounds/ton;
 - f. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;
 - g. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was below the average temperature determined during the most recent emission test that demonstrated that the emissions unit was in compliance.



- (6) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
 - (7) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal
 - (8) See 40 CFR Part 60, Subpart MM (60.390 through 60.398).
 - (9) See 40 CFR Part 63, Subpart IIII (63.3080 through 63.3176).
 - (10) See 40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575).
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
 - 5% opacity as a 6-minute average from the RTO stack.
 - 5% opacity as a 6-minute average from each oven combustion stack.
 - 20% opacity as a 6-minute average from each oven combustion stack.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 using the methods and procedures specified in OAC rule 3745-17-03(B)(1). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.
 - b. Emission Limitation:
 - 0.020 pound PE per mmBtu actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(9). Alternatively, other U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.
 - c. Emission Limitation:
 - 100 percent capture efficiency and a minimum of 95 percent control efficiency for the RTO.

Applicable Compliance Method:

If required, the permittee shall perform additional emission tests, conducted in accordance with USEPA Method 25 of 40 CFR Part 60, Appendix A, USEPA Methods 204 through 204F of 40 CFR Part 51, Appendix M, and the methods and procedures of OAC rule 3745-21-10(C). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

d. Emission Limitation:

0.23 pound of VOC per gallon of applied coating solids.

Applicable Compliance Method:

The permittee shall use the procedures in 40 CFR Part 60.393 for determining the monthly volume-weighted average mass of VOC emitted per volume of applied solids.

e. Emission Limitation:

52.01 tons of VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the emission limitation will be demonstrated by the record keeping requirements of d)(3)e.

f. Emission Limitation:

0.17 kilogram of VOC per liter of applied coating solids or
0.17×350 (0.160–RT) kg of VOC per liter of applied coating solids.

Applicable Compliance Method:

Compliance shall be demonstrated utilizing the methods and procedures of 40 CFR 60.393(c).

g. Emission Limitation:

combined HAP emissions shall not exceed 0.072 kilogram per liter (0.60 pound per gallon) of coating solids deposited during each month.

Applicable Compliance Method:

Compliance with the mass average organic HAP content for each compliance period shall be determined according to the methods and procedures of 40 CFR 63.3161.

h. Emission Limitation:

combined HAP emissions shall not exceed 0.132 kg/liter (1.10 lb/gal) of coating solids deposited during each month.

Applicable Compliance Method:

Compliance with the mass average organic HAP content for each compliance period shall be determined according to the methods and procedures of 40 CFR 63.3171.

i. Emission Limitation:

0.083 pound of CO per mmBtu actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on calculations using emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98, as follows: divide the emission factor of 84 pounds of CO per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

j. Emission Limitations:

10.91 tons of CO per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emission limitation (0.083 pound per mmBtu), by the maximum fuel heat input rate (30.0 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

k. Emission Limitation:

0.100 pound of NOx per mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on calculations using emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98, as follows: divide the

emission factor of 100 pounds of NOx per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

I. Emission Limitations:

13.14 tons of NOx per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emission limitation (0.100 pound of NOx per mmBtu), by the maximum fuel heat input rate (30.0 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

m. Emission Limitation:

0.0019 pound of PE per million Btu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on calculations using emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 1.9 pounds of PM10 per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(9). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

n. Emission Limitations:

0.24 tons of PE per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emission limitation (0.0019 pound of PE per mmBtu), by the maximum fuel heat input rate (30.0 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

o. Emission Limitation:

0.0075 pound of PM10 per mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on calculations using emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 7.6 pounds of PM10 per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

p. Emission Limitations:

0.99 ton of PM10 per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emission limitation (0.0075 pound PM10 per mmBtu), by the maximum fuel heat input rate (30.0 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

q. Emission Limitation:

0.0075 pound of PM2.5 per mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on calculations using emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 7.6 pounds of PM2.5 per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

r. Emission Limitations:

0.99 ton of PM2.5 per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emission limitation (0.0075 pound PM_{2.5} per mmBtu), by the maximum fuel heat input rate (30.0 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

s. Emission Limitation:

0.0006 pound of SO₂/mmBtu actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on calculations using emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 0.6 pound of SO₂ per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-18-04. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

t. Emission Limitations:

0.08 ton of SO₂ per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emission limitation (0.0006 pound SO₂ per mmBtu), by the maximum fuel heat input rate (30.0 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

u. Emission Limitation:

0.0054 pound of VOC/mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on calculations using emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 5.5 pound of VOC per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and Method 25 or 25A of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-21-10. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

v. Emission Limitations:

0.71 ton of VOC per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the technical emission limitation (0.0054 pound VOC per mmBtu), by the maximum fuel heat input rate (30.0 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. the emission testing shall be conducted within 30 days after achieving the maximum production rate at which the facility will be operated but not later than 180 days after the initial startup of the modified emissions unit;
 - b. the test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services;
 - c. the capture efficiency (i.e., the percent of total VOC which enters the control device) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.393. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services;
 - d. the control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.393. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services;
 - e. the permittee shall collect and record the 3-hour average combustion temperature within the thermal incinerator during testing; and
 - f. the permittee shall collect and record monitoring parameters established to demonstrate that the emissions unit is in compliance with the 100 percent capture efficiency requirement when the incinerator is in operation as a control device for VOC compliance purposes.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the local air agency' refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

g) **Miscellaneous Requirements**

- (1) Should any coating formulations cause a nuisance odor, or process changes cause an increase in the quantity or intensity of odors emitted from this facility, as determined by the Toledo Division of Environmental Services, the company shall take corrective action to reduce the impact of the odors. The time schedule for the corrective action shall be approved by the Toledo Division of Environmental Services.



3. K022, Powder Anti-chip

Operations, Property and/or Equipment Description:

Electrostatic powder anti-chip guidecoat operation with control by particulate filtration for overspray, discharging within the building, and a 39.8 mmBtu per hour natural gas-fired curing oven

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) g)(1).
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Electrostatic powder anti-chip guidecoat operation		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-1102 issued 10/27/99)	the emissions of volatile organic compounds (VOC) from the guidecoat shall not exceed 3.25 tons during any rolling, 12-month period see b)(2)a.
b.	OAC rules 3745-31-10 through 20 (PTI 04-1102 issued 10/27/99)	see b)(2)b.
c.	OAC rule 3745-17-07(B)(1)	visible emissions of fugitive dust shall not exceed 20 percent opacity, except for a period of time not to exceed three minutes during any 60-minute observation period
d.	OAC rule 3745-17-08(B), (B)(3)	see b)(2)c.
e.	OAC rule 3745-21-09(C)(1)(a)(v)	the emissions of VOC from this emissions unit shall not exceed 2.8 pounds per gallon of coating, excluding water and exempt solvents, or 15.1 pounds per gallon of deposited coating solids, on a daily basis
f.	40 CFR Part 60, Subpart A (60.1 through 60.19)	see b)(2)d.
g.	40 CFR Part 60, Subpart MM (60.390 through 60.398) In accordance with 40 CFR 63.390(a), this emissions unit is an automobile or light-duty truck assembly plant guide coat operation subject to the emission	in accordance with 60.392(b), the emissions of VOC from this emissions unit shall not exceed 1.40 kilograms of VOC per liter (11.7 pounds of VOC per gallon) of applied coating solids on a monthly basis



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	limitations/control measures specified in this section.	
h	40 CFR Part 63, Subpart A (63.1 through 63.16)	see b)(2)e.
i.	40 CFR Part 63, Subpart IIII (63.3080 through 63.3176) In accordance with 40 CFR 63.3081(b), this emissions unit is an existing automobile, or new light-duty truck, surface coating operation located at a facility which is a major source of HAPs subject to the emission limitations/control measures specified in this section.	see b)(2)f. [63.3091(a) and (b)]
39.8 mmBtu per hour natural gas curing oven combustion emissions		
j.	OAC rule 3745-31-05(A)(3) (as effective 11/30/01)	the emissions from the oven combustion stack(s) serving this emissions unit shall not exceed: 0.083 pound of carbon monoxide (CO) per mmBtu of actual heat input; 14.47 tons of CO per rolling, 12-month period; 0.100 pound of nitrogen oxides (NOx) per mmBtu of actual heat input; 17.43 tons of NOx per rolling, 12-month period; 0.0019 pound of particulate emissions (PE) per mmBtu of actual heat input; 0.33 ton of PE per rolling, 12-month period; 0.0075 pound of particulate matter less than or equal to 10 microns in diameter (PM10) per mmBtu of actual heat input; 1.31 tons of PM10 per rolling, 12-month period; 0.0075 pound of particulate matter less than or equal to 2.5 microns in diameter (PM2.5) per mmBtu of actual heat input; 1.31 tons of PM2.5 per rolling, 12-month period; 0.0006 pound of sulfur dioxide (SO2) per mmBtu of actual heat input; 0.10 ton of SO2 per rolling, 12-month period; 0.0054 pound of volatile organic compounds (VOC) per mmBtu of actual heat input; 0.94 ton of VOC per rolling, 12-month period; and 5% opacity as a 6-minute average from each oven combustion stack. see b)(2)g. and b)(2)h.



k.	OAC rule 3745-31-05(A)(3) (as effective 12/01/06)	the emissions from the oven combustion stack(s) serving this emissions unit shall not exceed: 0.083 pound of carbon monoxide (CO) per mmBtu of actual heat input; and 0.100 pound of nitrogen oxides (NOx) per mmBtu of actual heat input. see b)(2)g. and b)(2)i.
l.	OAC rule 3745-17-07(A)(1)	visible particulate emissions from this emissions unit shall not exceed 20 percent opacity as a six-minute average
m.	OAC rule 3745-17-10(B)(1)	particulate emissions (PE) from the oven combustion stack(s) shall not exceed 0.020 pound per million Btu of actual heat input
n.	OAC rule 3745-18-06(A)	see b)(2)j.
o.	40 CFR Part 63, Subpart A (63.1 through 63.16)	see b)(2)k.
p.	40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575) In accordance with 40 CFR 63.7485, this emissions unit is an process heater that is located at, or is part of, a major source of HAP subject to the emission limitations/control measures specified in this section.	In accordance with 40 CFR 63.7500(a), the permittee shall meet each applicable emission limit and work practice standard in Table 1 to this subpart and shall meet each applicable operating limit in Tables 2 through 4 to this subpart. See b)(2)l.

(2) Additional Terms and Conditions

- a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(C)(1)(a)(v) and 40 CFR Part 60, Subpart MM.
- b. The permittee shall employ only low VOC powder as a coating material in this emissions unit.
- c. The permittee shall employ reasonably available control measures on the powder guidecoat operations associated with this emissions unit for the purpose of ensuring compliance with the applicable requirements. The permittee has committed to utilize inherent fabric filtration and adequate enclosure to minimize or eliminate visible particulate emissions of fugitive dust. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance. Implementation of these control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08(B), (B)(3).
- d. 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are applicable to this emissions unit.

- e. Table 2 to Subpart III of 40 CFR Part 63 provides applicability provisions, definitions, and other general provisions that are applicable to this emissions unit.
- f. The combined organic hazardous air pollutant (HAP) emissions from electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to 40 CFR 63.3082(c), shall not exceed 0.072 kilogram per liter (0.60 pound per gallon) of coating solids deposited during each month, as determined according to the requirements in 63.3161;

or

if each individual material added to the electrodeposition primer system contains no more than 1.0 percent by weight of any organic HAP and 0.10 percent by weight of any organic HAP, or the emissions from all bake ovens used to cure electrodeposition primers are captured and ducted to a control device having a destruction efficiency of at least 95 percent, the combined organic HAP emissions from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to 63.3082(c) shall not exceed 0.132 kg/liter (1.10 lb/gal) of coating solids deposited during each month, determined according to the requirements in 63.3171.

- g. These emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit while combusting natural gas. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- h. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- i. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE), particulate matter less than or equal to 10 microns in diameter (PM10), particulate matter less than or equal to 2.5 microns in diameter (PM2.5), sulfur dioxide (SO2), and volatile organic compound (VOC) emissions from this air contaminant source since the uncontrolled potential to emit for PE, PM10, PM2.5, SO2, and VOC is less than 10 tons per year.

- j. OAC rule 3745-18-06(A) does not establish SO2 emission limitations for the fuel burning equipment associated with this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emission unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).

On September 1, 2003, OAC rule 3745-18-06 was revised to delete the following phrase: "having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pounds per million standard cubic feet". Therefore, this phrase is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-18-06, the requirements still exist as part of the federally-approved SIP for Ohio.

- k. Table 10 to Subpart DDDDD of 40 CFR Part 63, provides applicability provisions, definitions, and other general provisions that are applicable to this emissions unit.
- l. This emissions unit is subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act (CAA) due to the May 16, 2011 U.S. EPA decision to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until U.S. EPA completes its reconsideration of the rules and the Agency publishes a notice in the Federal Register announcing that the rules are in effect.

If notified by the Ohio EPA or U.S. EPA, the permittee shall submit an application for a revision to this permit that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S. EPA.

c) Operational Restrictions

- (1) The following term shall become void after USEPA approves the OAC rule 3745-18-06 revisions:

The permittee shall burn only natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet in this emissions unit.

- (2) The following term shall become effective after USEPA approves the OAC rule 3745-18-06 revisions:

The permittee shall burn only natural gas in this emissions unit.

- (3) The permittee shall utilize only compliant coatings, not exceeding the 15.1 pound per gallon of deposited coating solids limitation, in this emissions unit.
- (4) See 40 CFR Part 60, Subpart MM (60.390 through 60.398).
- (5) See 40 CFR Part 63, Subpart IIII (63.3080 through 63.3176).
- (6) See 40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575).

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) For emission points for which the daily checks show emissions that are representative of normal operation for 30 consecutive operating days, the required frequency of visible emissions checks may be reduced to weekly (once per week, when the emissions unit is in operation). If a subsequent check of such emission point by the permittee or an Ohio EPA inspector indicates abnormal emissions, the frequency of emissions checks shall revert to daily for that emission point until such time as there are 30 consecutive operating days of normal visible emissions.
 - (3) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions units.
 - (4) Pursuant to OAC 3745-21-09(C)(4), the permittee shall maintain daily records that demonstrate compliance with OAC rule 3745-21-09(C)(1)(a)(v) in accordance with the USEPA publication entitled "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations" (EPA 450/3-88-018) and any subsequent revisions thereof. The permittee shall calculate and record the VOC emission rates for the guidecoat operation in pounds of VOC per gallon of coating, excluding water and exempt solvents, or in pounds of VOC per gallon of deposited solids on a daily basis, using the overall capture and control efficiency for the control equipment, as determined during the most recent emissions test that demonstrated the emission unit was in compliance.
 - (5) The permittee, having chosen to demonstrate compliance through the use of compliant coatings (i.e., only low VOC powder coatings shall be utilized as a coating material and each powder shall comply with the applicable emission limitation as applied), shall collect and record the following information for each month for the coating line:
 - a. the name and identification number of each coating, as applied;
 - b. the mass of VOC per volume of coating solids of each coating, as applied.
 - c. the applied volume of coating solids of each coating;
 - d. the monthly emissions of VOC (the summation of b. x c. for all coatings) and the rolling, 12-month summation of the monthly emissions, in tons per year.

Alternate, equivalent record keeping methods may be used upon written approval by the Toledo Division of Environmental Services.
 - (6) See 40 CFR Part 60, Subpart MM (60.390 through 60.398).
 - (7) See 40 CFR Part 63, Subpart IIII (63.3080 through 63.3176).
 - (8) See 40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575).
- e) Reporting Requirements
- (1) The permittee shall submit quarterly reports that identify:



- a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
 - (3) The permittee shall notify the Director (Toledo Division of Environmental Services) of any daily record showing that the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (Toledo Division of Environmental Services) within 30 days after the event occurs.
 - (4) The permittee shall submit quarterly deviation (excursion) reports that identify all records showing that the tons of VOC per rolling, 12-month period exceeded the applicable limitation. The notification shall include a copy of such record.
 - (5) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
 - (6) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (7) See 40 CFR Part 60, Subpart MM (60.390 through 60.398).
 - (8) See 40 CFR Part 63, Subpart IIII (63.3080 through 63.3176).
 - (9) See 40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575).
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

5% opacity as a 6-minute average from each oven combustion stack.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 using the methods and procedures specified in OAC rule 3745-17-03(B)(1). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

b. Emission Limitation:

20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 using the methods and procedures specified in OAC rule 3745-17-03(B)(3). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

c. Emission Limitation:

0.020 pound PE per mmBtu actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(9). Alternatively, other U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

d. Emission Limitation:

3.25 tons of VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the emission limitation will be demonstrated by the record keeping requirements of d)(5)d.

e. 2.8 pounds per gallon of coating, excluding water and exempt solvents, or 15.1 pounds of VOC per gallon of deposited solids on a daily basis.

Applicable Compliance Method:

Where applicable, compliance shall be demonstrated pursuant to the methods and procedures set forth in the "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations", EPA-450-3-88-018, dated December 1988, and any subsequent revision approved by the USEPA and the State of Ohio Environmental Protection Agency, as provided in OAC rule 3745-21-09(C)(4) . Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

f. Emission Limitation:

1.40 kilograms of VOC per liter (11.7 pounds of VOC per gallon) of applied coating solids on a monthly basis.

Applicable Compliance Method:

The permittee shall use the procedures in 40 CFR Part 60.393 for determining the monthly volume-weighted average mass of VOC emitted per volume of applied solids.

g. Emission Limitation:

combined HAP emissions shall not exceed 0.072 kilogram per liter (0.60 pound per gallon) of coating solids deposited during each month.

Applicable Compliance Method:

Compliance with the mass average organic HAP content for each compliance period shall be determined according to the methods and procedures of 40 CFR 63.3161.

h. Emission Limitation:

combined HAP emissions shall not exceed 0.132 kg/liter (1.10 lb/gal) of coating solids deposited during each month.

Applicable Compliance Method:

Compliance with the mass average organic HAP content for each compliance period shall be determined according to the methods and procedures of 40 CFR 63.3171.

i. Emission Limitation:

0.083 pound of CO per mmBtu actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98, as follows: divide the emission factor of 84 pounds of CO per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

j. Emission Limitations:

14.47 tons of CO per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.083 pound per mmBtu), by the maximum fuel heat input rate (39.80 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

k. Emission Limitation:

0.100 pound of NOx per mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98, as follows: divide the emission factor of 100 pounds of NOx per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

l. Emission Limitations:

17.43 tons of NOx per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.100 pound of NOx per mmBtu), by the maximum fuel heat input rate (39.8 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

m. Emission Limitation:

0.019 pound of PE per million Btu of actual heat input.

Applicable Compliance Method:

This emissions limitation is less than the result of calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 1.9 pounds of PE per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(9). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

n. Emission Limitations:

0.33 ton of PE per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.0019 pound PE per mmBtu), by the maximum fuel heat input rate (39.8 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

o. Emission Limitation:

0.0075 pound of PM10 per mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 7.6 pounds of PM10 per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

p. Emission Limitations:

1.31 tons of PM10 per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.0075 pound PM10 per mmBtu), by the maximum fuel heat input rate (39.8 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

q. Emission Limitation:

0.0075 pound of PM2.5 per mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 7.6 pounds of PM2.5 per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

r. Emission Limitations:

1.31 tons of PM2.5 per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.0075 pound PM2.5 per mmBtu), by the maximum fuel heat input rate (39.8 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

s. Emission Limitation:

0.0006 pound of SO₂/mmBtu actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 0.6 pound of SO₂ per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-18-04. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

t. Emission Limitations:

0.10 ton of SO₂ per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.0006 pound SO₂ per mmBtu), by the maximum fuel heat input rate (39.8 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

u. Emission Limitation:

0.0054 pound of VOC/mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 5.5 pound of VOC per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and Method 25 or 25A of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-21-10. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

v. Emission Limitations:

0.94 ton of VOC per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.0054 pound VOC per mmBtu), by the maximum fuel heat input rate (39.8 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

g) Miscellaneous Requirements

- (1) Should any coating formulations cause a nuisance odor, or process changes cause an increase in the quantity or intensity of odors emitted from this facility, as determined by the Toledo Division of Environmental Services, the company shall take corrective action to reduce the impact of the odors. The time schedule for the corrective action shall be approved by the Toledo Division of Environmental Services.



4. K023, Topcoat

Operations, Property and/or Equipment Description:

Topcoat with 2 natural gas infrared flash tunnels and 2 indirect fired drying ovens with an actual heat input capacity of 24.2 mmBtu per hour each

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
(1) g)(1)
b) Applicable Emissions Limitations and/or Control Requirements
(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Rows include details for two automotive topcoat booths and specific OAC rule references (a-f) with their corresponding emission control measures.



g.	40 CFR Part 60, Subpart A (60.1 through 60.19)	see b)(2)f.
h.	40 CFR Part 60, Subpart MM (60.390 through 60.398) In accordance with 40 CFR 63.390(a), this emissions unit is an automobile or light-duty truck assembly plant topcoat coat operation subject to the emission limitations/control measures specified in this section.	in accordance with 60.392(c), the emissions of VOC from this emissions unit shall not exceed 1.47 kilograms of VOC per liter (12.3 pounds of VOC per gallon) of applied coating solids on a monthly basis
i.	40 CFR Part 63, Subpart A (63.1 through 63.16)	see b)(2)g.
j.	40 CFR Part 63, Subpart IIII (63.3080 through 63.3176) In accordance with 40 CFR 63.3081(b), this emissions unit is an existing automobile, or new light-duty truck, surface coating operation located at a facility which is a major source of HAPs subject to the emission limitations/control measures specified in this section.	see b)(2)h. [63.3091(a)]
two natural gas infrared flash tunnels and two indirect fired, drying ovens at 24.2 mmBtu per hour each; combustion emissions		
k.	OAC rule 3745-31-05(A)(3) (as effective 11/30/01)	the combined emissions from the oven combustion stacks serving this emissions unit shall not exceed: 0.083 pound of carbon monoxide (CO) per mmBtu of actual heat input; 17.60 tons of CO per rolling, 12-month period; 0.100 pound of nitrogen oxides (NOx) per mmBtu of actual heat input; 21.20 tons of NOx per rolling, 12-month period; 0.0019 pound of particulate emissions (PE) per mmBtu of actual heat input; 0.40 ton of PE per rolling, 12-month period; 0.0075 pound of particulate matter less than or equal to 10 microns in diameter (PM10) per mmBtu of actual heat input; 1.59 tons of PM10 per rolling, 12-month period; 0.0075 pound of particulate matter less than or equal to 2.5 microns in diameter (PM2.5) per mmBtu of actual heat input; 1.59 tons of PM2.5 per rolling, 12-month period; 0.0006 pound of sulfur dioxide (SO2) per mmBtu of actual heat input;



Table with 3 columns: Reference, Description, and Emission/Control Requirements. Rows include references to OAC rules (3745-31-05(A)(3), 3745-17-07(A)(1), 3745-17-10(B)(1), 3745-18-06(A)) and 40 CFR Part 63, Subpart A and DDDDD.

(2) Additional Terms and Conditions

- a. The permittee shall operate and maintain a thermal incinerator, with a 100 percent capture efficiency and a minimum of 95 percent control efficiency, to control VOC emissions from the drying oven.
b. In order to maintain compliance with the applicable VOC emission limitation(s), the acceptable average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit controlled by the thermal oxidizer is in operation, shall not be below the average temperature measured

during the most recent performance test that demonstrated the emissions unit was in compliance.

- c. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 20 and 40 CFR Part 60, Subpart MM.
- d. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- e. The permittee shall control the particulate emissions (PE) from the coating operations of emissions unit with a waterwash particulate filter, or equivalent, and shall comply with the work practice requirements of OAC rule 3745-17-11(C)(2)(a) through (g).
- f. 40 CFR Part 60, Subpart A provides applicability provisions, definitions, and other general provisions that are applicable to this emissions unit.
- g. Table 2 to Subpart IIII of 40 CFR Part 63 provides applicability provisions, definitions, and other general provisions that are applicable to this emissions unit.
- h. The combined organic hazardous air pollutant (HAP) emissions from electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to 40 CFR 63.3082(c), shall not exceed 0.072 kilogram per liter (0.60 pound per gallon) of coating solids deposited during each month, as determined according to the requirements in 63.3161;

or

if each individual material added to the electrodeposition primer system contains no more than 1.0 percent by weight of any organic HAP and 0.10 percent by weight of any organic HAP, or the emissions from all bake ovens used to cure electrodeposition primers are captured and ducted to a control device having a destruction efficiency of at least 95 percent, the combined organic HAP emissions from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to 63.3082(c) shall not exceed 0.132 kg/liter (1.10 lb/gal) of coating solids deposited during each month, determined according to the requirements in 63.3171.

- i. These emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit while combusting natural gas. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.

- j. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.

- k. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE), particulate matter less than or equal to 10 microns in diameter (PM10), particulate matter less than or equal to 2.5 microns in diameter (PM2.5), sulfur dioxide (SO₂), and volatile organic compound (VOC) emissions from this air contaminant source since the uncontrolled potential to emit for PE, PM10, PM2.5, SO₂, and VOC is less than 10 tons per year.

- l. OAC rule 3745-18-06(A) does not establish SO₂ emission limitations for the fuel burning equipment associated with this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emission unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).

On September 1, 2003, OAC rule 3745-18-06 was revised to delete the following phrase: "having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pounds per million standard cubic feet". Therefore, this phrase is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-18-06, the requirements still exists as part of the federally-approved SIP for Ohio.

- m. Table 10 to Subpart DDDDD of 40 CFR Part 63, provides applicability provisions, definitions, and other general provisions that are applicable to this emissions unit.

- n. This emissions unit is subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act (CAA) due to the May 16, 2011 U.S. EPA decision to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until U.S. EPA completes its reconsideration of the rules and the Agency publishes a notice in the Federal Register announcing that the rules are in effect.

If notified by the Ohio EPA or U.S. EPA, the permittee shall submit an application for a revision to this permit that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S. EPA.

c) Operational Restrictions

- (1) The permittee shall operate the waterwash system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the waterwash system in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

In the event the waterwash system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

- (2) The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the incinerator is in operation as a VOC control device for compliance purposes, shall not be below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
- (3) The following term shall become void after USEPA approves the OAC rule 3745-18-06 revisions:

The permittee shall burn only natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet in this emissions unit.

- (4) The following term shall become effective after USEPA approves the OAC rule 3745-18-06 revisions:

The permittee shall burn only natural gas in this emissions unit.

- (5) See 40 CFR Part 60, Subpart MM (60.390 through 60.398).
- (6) See 40 CFR Part 63, Subpart IIII (63.3080 through 63.3176).
- (7) See 40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575).

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the waterwash system, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Toledo Division of Environmental Services upon request.

The permittee shall conduct periodic inspections of the waterwash system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.

In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the waterwash system while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

The permittee shall document each inspection (periodic and annual) of the waterwash system and shall maintain the following information:

- a. the date of the inspection;
- b. a description of each/any problem identified and the date it was corrected;
- c. a description of any maintenance and repairs performed; and
- d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

The permittee shall maintain records that document any time periods when the waterwash system was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

- (2) Pursuant to OAC 3745-21-09(C)(4), the permittee shall maintain daily records for the topcoat process that will enable the permittee to calculate the VOC emission rate in order to demonstrate compliance with the emissions limitation identified in OAC rule 3745-21-09(C)(1)(c) for the topcoat process in accordance with the USEPA's Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations (EPA-45-/3-88-028, Dec. 1988) and any

subsequent revisions thereof. The permittee shall calculate and record the VOC emission rates for the topcoat operation in pounds of VOC per gallon of coating, excluding water and exempt solvents, or in pounds of VOC per gallon of deposited solids on a daily basis, using the overall capture and control efficiency for the control equipment, as determined during the most recent emissions test that demonstrated the emission unit was in compliance.

- (3) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the firebox of the thermal incinerator when the incinerator is in operation. Each temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications, with any modifications deemed necessary by the permittee and approved by the Toledo Division of Environmental Services. The device shall have an accuracy of the greater of 0.75 percent of the temperature being measured expressed in degrees Celsius or 4.0 Fahrenheit degrees. Each temperature measurement device shall be equipped with a recording device so that a permanent record is produced. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations.
- (4) The permittee shall collect and record the following information for each month for the coating line and control equipment to demonstrate compliance with the VOC limitations of OAC rule 3745-31-10 through 20:
 - a. the name and identification number of each coating, as applied;
 - b. the mass of VOC per volume of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating;
 - c. the monthly volume-weighted average VOC content (in mass of VOC per volume of applied coating solids) of all the coatings;
 - d. the calculated, controlled VOC emission rate, in mass of VOC per volume of applied coating solids. The controlled VOC emission rate shall be calculated using the daily volume-weighted VOC content and the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance;
 - e. the calculated, controlled VOC emissions, in tons of VOC per month and tons of VOC per rolling, 12-month period.
 - f. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

For purposes of compliance with the requirements of OAC rule 3745-31-10 through 20, alternate, equivalent record keeping methods may be used upon written approval by the Toledo Division of Environmental Services.

- (5) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 - (6) See 40 CFR Part 60, Subpart MM (60.390 through 60.398).
 - (7) See 40 CFR Part 63, Subpart IIII (63.3080 through 63.3176).
 - (8) See 40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575).
- e) Reporting Requirements
- (1) The permittee shall submit deviation (excursion) reports that identify any daily record showing that the water wash system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation.
 - (2) The permittee shall notify the Director (Toledo Division of Environmental Services) of any daily record in the calendar quarter during which the calculated, controlled VOC emission rate, in pounds of VOC per gallon of coating, excluding water and exempt solvents, or pounds of VOC per gallon of deposited solids on a daily basis exceeded the emissions limitation specified in OAC rule 3745-21-09(C)(1)(c), and the actual VOC emission rate for each such day. The notification shall include a copy of such record and shall be sent to the Director (Toledo Division of Environmental Services) within 45 days after the event occurs.
 - (3) The permittee shall submit quarterly deviation (excursion) reports that identify 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance. If no such periods of deviation occur, the permittee shall submit a negative report.
 - (4) The permittee shall submit quarterly deviation (excursion) reports that identify all records showing that the monthly pounds of VOC per gallon of applied coating solids exceeds the applicable limitation. The notification shall include a copy of such record.
 - (5) The permittee shall submit quarterly deviation (excursion) reports that identify all records showing that the tons of VOC per rolling, 12-month period exceeded the applicable limitation. The notification shall include a copy of such record.
 - (6) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
 - (7) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.



- (8) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (9) See 40 CFR Part 60, Subpart MM (60.390 through 60.398).
 - (10) See 40 CFR Part 63, Subpart IIII (63.3080 through 63.3176).
 - (11) See 40 CFR Part 63, Subpart DDDDD (63.7480 through 63.7575).
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
 - 5% opacity as a 6-minute average.
 - 20% opacity as a 6-minute average.Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 using the methods and procedures specified in OAC rule 3745-17-03(B)(1). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.
 - b. Emission Limitation:
 - 0.020 pound PE per mmBtu actual heat input.Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(9). Alternatively, other U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.
 - c. Emission Limitation:
 - 15.3 pounds of PM10 per hour from the paint booth and curing oven (RTO) stacks.Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix

M. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

d. Emission Limitation:

66.9 tons of PM10 as a rolling, 12-month summation.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the short term emission limitation (15.3 pounds of PM10 per hour), by the maximum annual hours of operation (8,760 hours) and then divide by 2,000 pounds per ton.

e. Emission Limitation:

emissions of VOC from this emissions unit shall not exceed 2.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, or 15.1 pounds VOC per gallon of deposited solids on a daily basis.

Applicable Compliance Method:

Compliance shall be demonstrated pursuant to the methods and procedures set forth in the "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations", EPA-450-3-88-018, dated December 1988, and any subsequent revision approved by the USEPA and the State of Ohio Environmental Protection Agency, as provided in OAC rule 3745-21-09(C)(4).

f. Emission Limitation:

1.47 kilograms of VOC per liter (12.3 pounds of VOC per gallon) of applied coating solids on a monthly basis.

Applicable Compliance Method:

The permittee shall use the procedures in 40 CFR Part 60.393 for determining the monthly volume-weighted average mass of VOC emitted per volume of applied solids.

g. Emission Limitation:

8.63 pounds of VOC per gallon of applied coating solids on a monthly basis.

Applicable Compliance Method:

The permittee shall use the procedures in 40 CFR Part 60.393 for determining the monthly volume-weighted average mass of VOC emitted per volume of applied solids. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

h. Emission Limitation:

768.68 tons of volatile organic compounds (VOC) as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the emission limitation shall be demonstrated by the record keeping requirements of d)(4)e.

i. Emission Limitation:

100 percent capture efficiency and a minimum of 95 percent control efficiency from the RTO.

Applicable Compliance Method:

If required, the permittee shall perform additional emission tests, conducted in accordance with USEPA Method 25 of 40 CFR Part 60, Appendix A, USEPA Methods 204 through 204F of 40 CFR Part 51, Appendix M, and the methods and procedures of OAC rule 3745-21-10(C). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

j. Emission Limitation:

combined HAP emissions shall not exceed 0.072 kilogram per liter (0.60 pound per gallon) of coating solids deposited during each month.

Applicable Compliance Method:

Compliance with the mass average organic HAP content for each compliance period shall be determined according to the methods and procedures of 40 CFR 63.3161.

k. Emission Limitation:

combined HAP emissions shall not exceed 0.132 kg/liter (1.10 lb/gal) of coating solids deposited during each month.

Applicable Compliance Method:

Compliance with the mass average organic HAP content for each compliance period shall be determined according to the methods and procedures of 40 CFR 63.3171.

l. Emission Limitation:

0.083 pound of CO per mmBtu actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98, as follows: divide the emission factor of 84 pounds of CO per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

m. Emission Limitations:

17.60 tons of CO per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.083 pound per mmBtu), by the maximum fuel heat input rate (48.4 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

n. Emission Limitation:

0.100 pound of NOx per mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98, as follows: divide the emission factor of 100 pounds of NOx per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

o. Emission Limitations:

21.20 tons of NOx per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations

performed as follows: multiply the technical emission limitation (0.100 pound of NOx per mmBtu), by the maximum fuel heat input rate (48.4 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

p. Emission Limitation:

0.0019 pound of PE per million Btu of actual heat input.

Applicable Compliance Method:

This emissions limitation is less than the result of calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 1.9 pounds of PE per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(9). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

q. Emission Limitations:

0.40 ton of PE per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.0019 pound of PE per mmBtu), by the maximum fuel heat input rate (48.4 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

r. Emission Limitation:

0.0075 pound of PM10 per mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 7.6 pounds of PM10 per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix

M. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

s. Emission Limitations:

1.59 tons of PM10 per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.0075 pound PM10 per mmBtu), by the maximum fuel heat input rate (48.4 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

t. Emission Limitation:

0.0075 pound of PM2.5 per mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 7.6 pounds of PM2.5 per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

u. Emission Limitations:

1.59 tons of PM2.5 per rolling, 12-month period..

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.0075 pound PM2.5 per mmBtu), by the maximum fuel heat input rate (48.4 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

v. Emission Limitation:

0.0006 pound of SO2/mmBtu actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 0.6 pound of SO₂ per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-18-04. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

w. Emission Limitations:

0.13 ton of SO₂ per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.0006 pound SO₂ per mmBtu), by the maximum fuel heat input rate (48.4 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

x. Emission Limitation:

0.0054 pound of VOC/mmBtu of actual heat input.

Applicable Compliance Method:

This emissions limitation was developed based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 5.5 pound of VOC per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and Method 25 or 25A of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-21-10. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

y. Emission Limitations:

1.15 tons of VOC per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. This emissions limitation was developed based on calculations performed as follows: multiply the technical emission limitation (0.0054 pound VOC per mmBtu), by the maximum fuel heat input rate (48.4 mmBtu per hour), and by the maximum annual hours of operation (8,760 hours), and then divide by 2,000 pounds per ton.

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. the emission testing shall be conducted within 30 days after achieving the maximum production rate at which the facility will be operated but not later than 180 days after the initial startup of the modified emissions unit;
 - b. the test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services;
 - c. the capture efficiency (i.e., the percent of total VOC which enters the control device) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.393. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services;
 - d. the control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.393. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services;
 - e. the permittee shall collect and record the 3-hour average combustion temperature within the thermal incinerator during testing; and
 - f. the permittee shall collect and record monitoring parameters established to demonstrate that the emissions unit is in compliance with the 100 percent capture efficiency requirement when the incinerator is in operation as a control device for VOC compliance purposes.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the local air agency' refusal to accept the results of the emission test(s).



Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

g) **Miscellaneous Requirements**

- (1) Should any coating formulations cause a nuisance odor, or process changes cause an increase in the quantity or intensity of odors emitted from this facility, as determined by the Toledo Division of Environmental Services, the company shall take corrective action to reduce the impact of the odors. The time schedule for the corrective action shall be approved by the Toledo Division of Environmental Services.