



BMW Prevention of Significant Deterioration and Plant wide Applicability Limit Construction Permit

**BMW Manufacturing Corp.
1400 Highway 101 South
Spartanburg, SC 29304-4100**

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), and the 1976 Code of Laws of South Carolina, as amended, Regulation 61-62, the above named permittee is hereby granted permission to discharge air contaminants into the ambient air. The Bureau of Air Quality authorizes the operation of this facility and its applicable equipment specified herein in accordance with the plans, specifications and other information submitted in the construction permit application dated February 2, 2001.

This permit is subject to and conditioned upon the terms, limitations, standards, and schedules contained in or specified on the 47 pages, with the accompanying attachments, of this permit.

PERMIT NUMBER: 2060-0230-CY

DATE ISSUED: February 14, 2002

**Director, Engineering Services Division
Bureau of Air Quality**

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PART 1.0 GENERAL INFORMATION

A. APPLICABLE PERMIT DATES

ISSUE DATE	: February 14, 2002
EFFECTIVE DATE	: March 1, 2002

B. FACILITY INFORMATION

ENVIRONMENTAL CONTACT	: Gary N. Weinreich, P.E.
CONTACT TELEPHONE NUMBER	: (864) 989-5764
INTERNET E-MAIL ADDRESS	: Gary.Weinreich@bmwmc.com
FACILITY LOCATION	: 1400 Highway 101 South
COUNTY	: Spartanburg
SIC CODE(S)	: 3711
AFS CODE (IF KNOWN)	: SC0848079

C. FACILITY ADDRESS

FACILITY NAME	: BMW Manufacturing Corp.
ADDRESS	: P. O. Box 11000
CITY, STATE, ZIP	: Spartanburg, SC 29304-4100

D. FACILITY BILLING ADDRESS

FACILITY BILLING NAME	: BMW Manufacturing Corp.
ATTN	: Gary N. Weinreich, P.E.
ADDRESS	: P. O. Box 11000
CITY, STATE, ZIP	: Spartanburg, SC 29304-4100

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PART 2.0 CONSTRUCTION PERMIT APPROVAL

Permission is hereby granted to construct Air Contaminant Sources as described in the following Parts which will incorporate a Plant Wide Applicability Limit (PAL) for the facility to ensure compliance with Prevention of Significant Deterioration (PSD) - SC Regulation 61-62.5, Standard 7, and Lowest Achievable Emission Rate (LAER) - SC Regulation 61-62.5, Standard 5.1. Several of the processes covered by this permit are also subject to SC Regulation 61-62.63 National Emission Standards for Hazardous Air Pollutants and/or several different New Source Performance Standards.

PART 3.0 CONSTRUCTION PERMIT SPECIFICATIONS

- A. Pursuant to the provisions of Section 48-1-110, 1976 *Codes of South Carolina*, as amended, and the *South Carolina Air Quality Control Regulation 62.1*, Section II and the *Code of Federal Regulations*, Title 40, Part 60, Subpart A:
1. All official correspondence, plans, permit application forms, and written statements are relied on in the issuance of this permit.
 2. **THE DIRECTOR OF THE ENGINEERING SERVICES DIVISION MUST BE NOTIFIED IN WRITING OF THE DATE CONSTRUCTION BEGAN ON EACH EMISSION UNIT NOT IN EXISTENCE AS OF THE DATE THIS PERMIT IS ISSUED (POSTMARKED NO LATER THAN 30 DAYS AFTER SUCH DATE) AND THE ACTUAL DATE OF STARTUP OF SUCH UNITS (POSTMARKED WITHIN 15 DAYS AFTER SUCH DATE).**
 3. This construction permit shall expire 18 months from date issued unless construction of at least one project described in the February 2, 2001 application for this permit has commenced. Projects identified in the application are no longer authorized to proceed, except in accordance with the provisions of Part 6.0, if the construction is discontinued for a period of 18 months or more. Construction is not viewed as discontinued provided that at least one activity covered under this permit {as per SC Regulation 61-62.5, Standard No. 7, Section (b)(8), (9), or (11) occurs every 18 months on these projects. In accordance with this condition, construction pursuant to this permit may occur throughout the term of the PALs stated in condition 5.B.1. This permit may be extended upon approval by the Bureau following the written request from the permittee. This request must be made prior to the permit expiration.
 4. An expired construction permit may be reactivated within one year of the expiration only upon approval by the Bureau following the written request of the permittee. This request shall address all laws, regulations, and standards applicable at the time of request for reactivation.

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B. This permit supersedes all operating and construction permits previously issued by the Bureau for the air emission sources covered by this permit. Upon issuance, this permit shall serve as the facility's construction permit and as a temporary operating permit until the receipt of an issued and effective major source (Title V) operating permit.

PART 4.0 PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AND LOWEST ACHIEVABLE EMISSION RATE (LAER)

- A. The plant wide applicability limits (PALs) specified in Part 9.0 of this permit are based on the emission units' technical specifications and control technologies for emission units in Tables 8.1 – 8.26 in the application dated February 2, 2001 (along with subsequently submitted additional information in support of this permit), the actual emissions of existing sources, ambient air impact analysis, and facility production requirements.
- B. Prevention of Significant Deterioration (PSD) - The Bureau determines that the level of performance, and control technologies in the application dated February 2, 2001 (along with other additional information submitted in support of this permit) for the emission units identified in Tables 8.1-Tables 8.26 of this permit constitute BACT or LAER for this permitting review and are inherent in the PALs in Part 9.0 and the emission unit monitoring requirements in Part 11.0 of this permit. BMW must continue to use the control technology described in the submitted application material, or alternative control technology (including pollution prevention and alternative configurations) implemented through Part 6 of this permit and the Title V permit modification process agreed to by the Bureau. Compliance for each emissions unit in Tables 8.1- 8.26 with SC Regulation 61-62.5, Standard 7 is determined solely by compliance with the PALs specified in Part 9.0 and monitoring requirements in Part 11.0 of this permit.
- C. SC Regulation 61-62.5, Standard 5.1, Lowest Achievable Emission Rate (LAER) - This facility is subject to SC Regulation 61-62.5, Standard 5.1, Lowest Achievable Emission Rate (LAER) for VOCs. The facility has performed a LAER review on all VOC sources listed in this permit. Compliance for each emissions unit with SC Regulation 61-62.5, Standard 5.1 is determined solely by compliance with the PALs specified in Part 9.0 of this permit. This is a state only requirement.

PART 5.0 PLANT WIDE APPLICABILITY (PAL) PERMIT REQUIREMENTS

- A. The PAL for each regulated pollutant shall be reviewed and adjusted, if warranted by the Bureau, under the following circumstances:

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1. Within 180 days after achieving a 12-month total vehicle production level of 468,000 cars, the Bureau will revise the permit to reset the PALs specified in Part 9.0 of this permit to levels consistent with the actual facility emission levels achieved during the same 12-month period provided that the reset levels: do not exceed the PALs specified in Part 9.0 (except in accordance with 5.A.5); and, include an operating margin equivalent to the major modification threshold for each pollutant as identified in SC Regulation 61-62.5, Standard 7, (b)(23).
2. New regulatory requirements become applicable to the facility during the term of the permit. Adjustments to reflect new applicable requirements will be made through Title V permit revisions with the PALs being adjusted as of the compliance date of the new applicable requirement and the change in the PAL level reflecting the new applicable requirement would have had on the emissions sources affected. Within 12 months of EPA approval of South Carolina's SIP revision incorporating any new federal PAL regulations and in no case later than 2 years after their promulgation, SC DHEC and BMW will complete a review of the facility's Title V operating permit for consistency with the applicable South Carolina or federal PAL regulations. Should SC DHEC find that the Title V permit is inconsistent with the applicable South Carolina or federal PAL regulations, the permit will be reopened and the PAL conditions revised, after the opportunity for public review and comment, to reflect either the South Carolina or federal PAL requirements.
3. Changes in sampling, monitoring, or other similar procedures that impact reported emissions without changing actual emission rates.
4. The initial compliance date for meeting reset PALs under condition 5.A.1 and any adjusted PAL under condition 5.A.2 or 5.A.3 will be the first 12 months following the effective date of the reset or adjusted PAL.
5. BMW shall not construct new emission sources or modify existing emission sources such that any PALs identified in Part 9.0 of this permit are exceeded unless the PSD/PAL construction permit is revised in accordance with SC Regulation 61-62.1 Section II and SC Regulation 61-62.5, Standard 7 for a new or modified source that will require increasing the PALs, and the facility's Title V operating permit is revised in accordance with SC Regulation 61-62.70.

B. PAL Renewal and Termination

1. The PALs listed in Part 9.0 expire 10 years from the effective date of this permit unless an application to renew the PALs has been filed by BMW with the Bureau 180 days prior to the ten-year anniversary date of the effective date of this permit. PALs adjusted under condition 5.A will remain in effect for the duration of the initial 10 year permit term. The terms and conditions of this permit will remain in effect until the Bureau takes final action on an application for renewal.

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2. At any time during the term specified in condition 5.B.1, BMW may submit a written request that the Bureau terminate the PAL provisions of the PSD/PAL construction permit and issue revised permits pursuant to condition 5.B.3 within 180 days of such request.
3. In the event of a termination, the PALs shall remain in effect until the PSD/PAL construction permit and Title V operating permit are revised to specify unit specific control technology, emission limits and compliance determination requirements agreed upon by BMW and the Bureau. The revised permit shall be issued with New Source Review limits and conditions based on SC Regulation 61-62.5, Standard #7, as amended at the time of the permit revision. Emission units existing as of the effective date of this permit that have not been modified as of the termination date shall revert to any previously applicable unit specific requirements.
4. In the event of the termination of any PAL in this permit, the requirements under SC Regulation 61-62.1 Section II Permit Requirements will apply to any modification occurring after the termination request.

PART 6.0 PREAPPROVED NEW SOURCE REVIEW AND OPERATIONAL FLEXIBILITY

- A. “Existing emission unit” is defined in this permit as any equipment (or process) listed herein in Tables 8.1-8.26 or approved by the Bureau via the implementation of the processes outlined in Part 6. Any existing emission unit that is constructed, altered, modified and/or undergoes a physical change or change in method of operation where emissions are maintained within the PAL limits specified in Part 9.0 of this permit shall not trigger major modification applicability requirements of the South Carolina and federal New Source Review programs. Provided compliance with the PALs specified in Part 9.0 is demonstrated, BMW is in compliance with all South Carolina and federal major new source review requirements.
- B. For existing emission units, BMW is authorized to alter, modify and/or undertake any physical change or change in the method of operation (collectively referred to as “changes”) with reference to such units, provided that the emissions from the facility do not exceed emissions limitations in Part 9.0 of this permit and BMW continues to use the control technology (including pollution prevention) agreed to by the Bureau either in this permit or as alternatives with written Bureau approval. The level of performance and emission unit control technologies in the application dated February 2, 2001 and identified in Tables 8.1-8.26 of this permit are inherent in the PALs specified in Part 9.0 of this permit. Provided changes to existing emission units meet the following requirements, no new construction permits are required:

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1. The level of performance required by a Bureau approved alternative must be at least equal to the prior approved technology for that source.
 2. Any written Bureau approved changes either in alternative technologies or new BACT or LAER determinations will become an enforceable requirement for the facility.
 3. Any applicable Title V operating permit notification and revision procedures shall be followed as specified in SC Regulation 61-62.70. Any required notification shall be submitted to the Director of Engineering Services, EPA Region IV and the Appalachia III EQC District Office.
 4. Upon compliance with the above requirements, BMW may proceed with the changes without a requirement to revise the PSD/PAL construction permit or obtain a new construction permit. Changes made under this section are allowed as permitted items under the facility's PSD/PAL construction permit and the Title V operating permit.
- C. BMW can undertake the addition of new "small" emission units (not covered as existing emission units) without obtaining a new construction permit, provided that PAL emission levels are not exceeded and the following conditions are met:
1. The additions will not result in emissions that will exceed any limit in this permit and any existing emission unit associated with the addition will not become subject to regulation under 40 CFR Part 60 (Standards of Performance for New Stationary Sources), Part 61 (National Emission Standards for Hazardous Air Pollutants) or 63 (National Emission Standards for Hazardous Air Pollutants, also known as MACT Standards) unless the application of those regulations have already been addressed in this permit.
 2. Potential emissions, taking into account controls, restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, from the new emissions unit of each criteria pollutant will not exceed 1.0 lbs/hour and each toxic air pollutant will not exceed 1000 lbs/month, unless the Bureau determines that no such limits or control equipment are required under any granted exemption. Any associated control equipment shall be operated as proposed by BMW. Failure to operate, maintain, and appropriately monitor the control equipment may result in the retraction of this exemption and referral for enforcement action. Information shall be submitted to the Director of Engineering Services describing any control device, including engineering specifics and control/capture efficiencies.

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3. The added new “small” emissions unit is not part of a project involving the addition of multiple units which should comply collectively with condition 6.D. To this end BMW will address this issue in its “small” emission unit submittals to the Bureau for its review.
 4. Emissions from any new emission unit shall not cause or contribute to an exceedance of any National Ambient Air Quality Standard (NAAQS) - SC Regulation 61-62.5, Std 2, Prevention of Significant Deterioration (PSD) increment - SC Regulation 61-62.5, Std 7 or Toxic Air Pollutants (TAP) - SC Regulation 61-62.5, Std 8.
 5. Any applicable Title V operating permit notification and revision procedures shall be followed as specified in SC Regulation 61-62.70. Any required notification shall be submitted to the Director of Engineering Services, EPA Region IV and the Appalachia III EQC District Office.
 6. Upon compliance with the above requirements, BMW may proceed with the addition without a requirement to obtain a new construction permit or revise the PSD/PAL construction permit. Additions made under this condition are allowed as permitted items under the PSD/PAL construction permit and Title V operating permit.
 7. After new “small” emission units are added consistent with the conditions of 6.C.1 – 6.C.4, these sources shall be treated as “existing emission units” covered under Part 6.0.
 8. The owner/operator must cease implementation of any addition if it is found to be inconsistent with conditions 6.B.1 - 6.B.6 and may be subject to possible enforcement action(s). The permittee assumes the risk of any financial loss resulting from implementing the addition(s).
- D. BMW can undertake the addition of new “large” emission units (not covered as existing emission units) provided that PAL emission levels are not exceeded and the following additional conditions are met:
1. New emission units with potential emissions, taking into account controls, restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, of any criteria pollutant exceeding 1.0 lbs/hr and/or potential emissions, taking into account controls, restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, of any toxic air pollutant exceeding 1000 lbs/month shall:
 - a. include descriptions of control device reductions and limitations on operation or material usage and apply any level of emission control as required under applicable South Carolina air quality regulations as required for sources of pollutants that exceed 1.0 lbs/hour and each toxic air pollutant will exceed 1000 lbs/month, but do not exceed major NSR significance thresholds, unless the

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Bureau determines that alternative requirements apply pursuant to any available exemption. (LAER for VOC emissions may be required under SC Regulation 61-62.5, Standard 5.1.); and

- b. apply best available control technology (BACT) to the criteria pollutants (including any HAP emissions that are also included as VOCs) above the major NSR significance thresholds, unless the Bureau determines that alternative requirements apply pursuant to any available exemption. (LAER for VOC emissions may be required under SC Regulation 61-62.5, Standard 5.1.)
2. BACT/LAER shall be proposed by BMW and the Bureau will approve or deny the BACT/LAER analysis.
3. The Bureau issues a State minor new source review construction permit for the new “large” emission unit, or the Bureau determines that no such construction permit is required under any exemption. If a construction permit is required for the new “large” emission unit, the Bureau will approve or reject the application within a targeted time frame of 60 days from the date the complete application is submitted. The application must include the appropriate application forms, a brief process description, emission calculations, documentation of BACT/LAER as required, the VOC count as required by 11.D.15 and periodic monitoring parameters for any control equipment. BMW will place in a newspaper of local general circulation (at the time of the application submittal), a public notice that it has applied to the Bureau for a construction permit for a new large unit that requires BACT/LAER control. Once a construction permit has been issued (or a determination made that the emission unit does not require such permit), the facility may begin construction as allowed by SC Regulations.
4. Emissions from any new “large” emission unit shall not cause or contribute to an exceedance of any National Ambient Air Quality Standard (NAAQS) - SC Regulation 61-62.5, Std 2, Prevention of Significant Deterioration (PSD) increment - SC Regulation 61-62.5, Std 7 or Toxic Air Pollutants (TAP) - SC Regulation 61-62.5, Std 8.
5. Any applicable Title V operating permit notification and revision procedures shall be followed as specified in SC Regulation 61-62.70. Any required notification shall be submitted to the Director of Engineering Services, EPA Region IV and the Appalachia III EQC District Office.
6. After new “large” emission units are added consistent with the conditions 6.D.1 – 6.D.4, these units shall be treated as “existing emission units” covered Part 6.0.

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- E. In addition to the previous limitations in conditions 6.B - 6.D, BMW can undertake the addition of new emission units emitting HAPs provided that PAL emission levels are not exceeded and if the new emission unit has a potential to emit of greater than 10 TPY of a single HAP or 25 TPY of a combination of all HAPS, the facility must determine whether the unit is subject to SC Regulation 61-62.63 as a new process or production unit. If the facility is subject to SC Regulation 61-62.63, then the owner/operator shall follow the requirements of the regulation. If the facility wishes to take federally enforceable limitations, then the owner/operator must comply with the requirements of SC Regulation 61-62.1 Section II, Part H.
- F. Any construction or modification not covered in conditions 6.B - 6.E will require BMW to follow existing South Carolina major and minor new source review requirements and Title V operating permit requirements.

PART 7.0 FACILITY WIDE REQUIREMENTS

A. EMISSIONS LIMITS AND STANDARDS

Table 7.1 contains summaries of facility wide emission limits and standards.

TABLE 7.1 EMISSION LIMITS AND STANDARDS

Pollutant	Limit/Standard	Regulation	State Only Requirement	Condition Number
State New Source Review	As Specified in Attachment A	SC 61-62.1, Section II (A)	Yes	7.B.2 7.B.3
Toxic Air Pollutants	As Specified in Attachment A	SC 62.5, Std No. 8	Yes	7.B.3
Hazardous Air Pollution	Comply with Regulation	SC 61-62.4	No	N/A
Open Burning	Comply With Regulation	SC 61-62.2	No	N/A
Fugitive Emissions	Comply With Regulation	SC 61-62.6, Sec III	No	N/A
Ozone Depleting Substances	*	40 CFR Part 82, Subpart F	No	7.B.7
Asbestos	*	40 CFR Part 61.145	No	7.B.8

N/A = Not Applicable

* Specific To Subpart

The maximum allowable emission limits above are derived from the various Federal and State regulations that govern the operation of this type of facility. All applicable facility wide emission limits and corresponding regulations are listed above. Additional operating requirements which may be more stringent than those above are contained in Part 9.0, Part 10.0, Part 11.0 and Part 12.0 of this permit.

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B. FACILITY WIDE CONDITIONS

Condition Number	Condition
1.	In accordance with SC Regulation 61-62.1, Section II, the permittee must comply with all applicable statutes and regulations of the United States and the State of South Carolina. This permit does not relieve the permittee from compliance with applicable local laws, ordinances, and regulations.
2.	Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal standard. Any changes in the parameters used in the air dispersion modeling may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment A of this permit. Higher emission rates may be administratively incorporated into Attachment A of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded.
3.	The owner/operator shall maintain this facility in compliance with the pollutant limitations in Part 7 through Part 11, and/or the emission rates as listed in Attachment A of this permit, whichever is more restrictive. This is a State Only enforceable requirement. Should the facility wish to increase the emission rates listed in Attachment A, it may do so by the administrative process specified in condition 7.B.2.
4.	A list of equipment which are considered insignificant pursuant to SC Regulation 61-62.70.5(c) has been submitted with your Title V application and reviewed for BACT. The list, including source descriptions and citation for exemption, is summarized in Attachment B of the permit. Attachment B excludes those activities identified in Part A of the insignificant activities list. Written notification to the Bureau of Air Quality is required for the addition of any new equipment which may meet the definition of insignificant or exempt as described above, excluding those sources listed in Part A of the insignificant activities list.
5.	In accordance with SC Regulation 61-62.1 Section II, (C)(3), for all sources not required to have continuous emissions monitors, in the event of any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the local Environmental Quality Control (EQC) District office within twenty-four (24) hours after the beginning of the occurrence. The permittee shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ). The report shall contain as a minimum, the following: the identity of the emission unit and associated equipment where excess emissions occurred, the magnitude of excess emissions, the time and duration of excess emissions, the steps taken to remedy the malfunction and to prevent a recurrence, documentation that control equipment and processes were at all times maintained and operated, to the maximum extent practicable, in a manner that was consistent with good practice for minimizing emissions. Such a report shall in no way serve to excuse, otherwise justify, or in any manner affect any potential liability or enforcement action resulting from the occurrence. This defines the Department's definition of prompt in its relation to the degree of reporting as specified by SC Regulation 61-62.70.6(a)(3)(iii)(b).

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Condition Number	Condition
6.	In accordance with SC Regulation 61-62.1, Section III an emissions inventory will be completed for the previous calendar year and submitted by March 31 of every even calendar year to the Department. The above requirement notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any facility.
7.	The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Protection of Stratospheric Ozone, Recycling and Emissions Reduction, except as provided for motor vehicle air conditioners (MVAC's) in Subpart B. If the permittee performs a service on motor (fleet) vehicles that involves ozone-depleting substance refrigerant in MVAC's, the permittee is subject to all applicable requirements of 40 CFR Part 82, Subpart B, Servicing of MVAC's.
8.	The permittee shall comply with the standards of performance for asbestos abatement operations pursuant to 40 CFR Part 61.145 and SC Regulation 61-86.1, including, but not limited to, requirements governing training, licensing, notification, work practice, cleanup, and disposal.
9.	This emissions source is located in or is adjacent to an area that is projected to be designated as nonattainment for the National Ambient Air Quality Standard for ozone. This permit contains emissions limits for NO _x and/or VOCs based on the current attainment status of the area and consistent with other State and Federal requirements. Should the area be designated nonattainment for ozone, the Department may reopen this permit, and the current emissions limits or requirements may be revised to address attainment of the ozone standard, to the extent authorized by the approved State Implementation Plan. The owner or operator of this source is advised to take appropriate steps to assure that operations and/or control devices permitted herein can be readily modified, added to, or retrofitted as necessary.

PART 8.0 EMISSION UNIT REQUIREMENTS

The following Tables provide reference information about emissions units located at the facility at the time of permit issuance. The information in these tables are expected to change during the term of this permit, and the facility's Title V operating permit provides the mechanism for updating information listed in this table. Accordingly, this permit does not require that the tables be updated or revised for any reason.

A. EMISSION UNIT DESCRIPTION

Table 8.1 is a description of emission units located at this facility.

TABLE 8.1 EMISSION UNITS

Unit ID	Unit Description	Control Device Description
01	Energy Center 10.1 - Cogeneration Turbines	Selective Catalytic Reduction
02	Energy Center 10.2 - Cogeneration Turbines	Dry Low NO _x burners
03	Energy Center 10.1 - Auxiliary Boilers	Flue Gas Recirculation (FGR) with low-NO _x burners or equivalent
04	Energy Center 10.2 - Auxiliary Boilers	Flue Gas Recirculation (FGR) with low-NO _x burners or equivalent
05	Plant 10.1 - Paint Shop Combustion Sources	Low NO _x burners

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Unit ID	Unit Description	Control Device Description
06	Plant 10.2 - Paint Shop Combustion Sources	Low NO _x burners
07	Plant 10.1 - Paint Shop Primecoat (E-coat) Operations	Regenerative Thermal Oxidation (RTO)
08	Plant 10.2 - Paint Shop Primecoat (E-coat) Operations	Regenerative Thermal Oxidation (RTO)
09	Plant 10.1 - Paint Shop Guidecoat Operations	RTO, Water Curtain, Dry Filtration
10	Plant 10.2 - Paint Shop Guidecoat Operations	RTO, Water Curtain, Dry Filtration
11	Plant 10.1 - Paint Shop Topcoat Operations	RTO, Water Curtain, Dry Filtration, Rotary Carbon Adsorption
12	Plant 10.2 - Paint Shop Topcoat Operations	RTO, Water Curtain, Dry Filtration, Rotary Carbon Adsorption
13	Plant 10.1 - Paint Shop Purge Solvent Operations	N/A
14	Plant 10.2 - Paint Shop Purge Solvent Operations	N/A
15	Plant 10.1 - Multi-Function Testing / Cosmoline Application	Water Curtain
16	Plant 10.2 - Multi-Function Testing / Cosmoline Application	Water Curtain
17	Transpack Operations	N/A
18	ICP Dewax Unit	Hohmeier
19	Plastic Parts Combustion Sources	Low NO _x Burners
20	Plastic Parts Guidecoat Operations	RTO, Water Curtain
21	Plastic Parts Topcoat Operations	RTO, Water Curtain, Dry Filtration, Rotary Carbon Adsorption
22	Plastic Parts Paint Shop Purge Solvent Operations	N/A
23	Plant 10.1 - Body Shop Welding Areas	ESP
24	Plant 10.2 - Body Shop Welding Areas	ESP

B. CONTROL DEVICE DESCRIPTION

Table 8.2 is a description of control devices located at this facility.

TABLE 8.2 CONTROL DEVICES

Control Device ID	Unit ID	Control Device Description	Installation Date	Pollutant(s) Controlled
SCR	01	Selective Catalytic Reduction (when using natural gas only)	7/1994	NO _x
DLN	02	Dry Low NO _x Burners	2002*	NO _x
FGR	03,04	Flue Gas Recirculation	7/1994, 2002*	NO _x CO
LNB	03-06,19	Low NO _x Burners	7/1994, 2002*	NO _x
RTO1	07,09,11	Regenerative Thermal Oxidizer	7/1994	VOC
RTO2	08,10,12,20,21	Regenerative Thermal Oxidizer	2002*	VOC

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Control Device ID	Unit ID	Control Device Description	Installation Date	Pollutant(s) Controlled
KCR01	11	Rotary Carbon Adsorber Units #1 and #2, with desorb to RTO1	7/1994	VOC
KCR02	12,21	Rotary Carbon Adsorber Units #3 and #4, with desorb to RTO2	2002*	VOC
WV	09-12,20-21	Water Curtain System	7/1994, 2002*	PM
DF01	09-12, 21	Dry Filters	7/1994, 2002*	PM
DF02	11, 12	Dry Filters	7/1994	PM
H1	18	Hohmeier /Boiler System	7/1994	VOC
S1,S2	15,16	Cosmoline Water Curtain System	7/1994, 2002*	PM
ESP	23,24	Electrostatic Precipitators	7/1994, 2002*	PM

C. EQUIPMENT DESCRIPTION

A description of the equipment located at this facility is provided in the following tables:

TABLE 8.3 UNIT ID 01 – Energy Center 10.1 - Cogeneration Turbines

Equip ID	Equipment Description (Design Capacity in 10 ⁶ BTU/hr)	Installation Date	Control Device ID	Stack ID
GT01	Cogeneration Turbine #1 (35)	7/1994	SCR	U1
GT02	Cogeneration Turbine #2 (35)	7/1994	SCR	U2
GT03	Cogeneration Turbine #3 (35)	7/1994	SCR	U3
GT04	Cogeneration Turbine #4 (35)	7/1994	SCR	U4

TABLE 8.4 UNIT ID 02 - Energy Center 10.2 - Cogeneration Turbines

Equip ID	Equipment Description (Design Capacity in 10 ⁶ BTU/hr)	Installation Date	Control Device ID	Stack ID
GT05	Cogeneration Turbine #5 (59.2)	2002*	DLN	U1M
GT06	Cogeneration Turbine #6 (59.2)	2002*	DLN	U2M
GT07	Cogeneration Turbine #7 (59.2)	2002*	DLN	U3M
GT08	Cogeneration Turbine #8 (59.2)	2002*	DLN	U4M

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TABLE 8.5 UNIT ID 03 – Energy Center 10.1 - Auxiliary Boilers

Equip ID	Equipment Description (Design Capacity in 10⁶ BTU/hr)	Installation Date	Control Device ID	Stack ID
HB01	Auxiliary Boiler #1 (61)	7/1994	FGR, LNB	U5
HB02	Auxiliary Boiler #2 (61)	7/1994	FGR, LNB	U6
HB03	Auxiliary Boiler #3 (61)	7/1994	FGR, LNB	U7

TABLE 8.6 UNIT ID 04 – Energy Center 10.2 - Auxiliary Boilers

Equip ID	Equipment Description (Design Capacity in 10⁶ BTU/hr)	Installation Date	Control Device ID	Stack ID
HB04	Auxiliary Boiler #4 (76.5)	2002*	FGR, LNB	U5M
HB05	Auxiliary Boiler #5 (76.5)	2002*	FGR, LNB	U6M
HB06	Auxiliary Boiler #6 (76.5)	2002*	FGR, LNB	U7M
HB07	Auxiliary Boiler #7 (76.5)	2002*	FGR, LNB	U8M

TABLE 8.7 UNIT ID 05 – Plant 10.1 - Paint Shop Combustion Sources

Equip ID	Equipment Description (Design Capacity in 10⁶ BTU/hr)	Installation Date	Control Device ID	Stack ID
AS01	Air Supply House #1 (9.65)	7/1994	LNB	P27, P28, P31, P32, P33
AS02	Air Supply House #2 (13.44)	7/1994	LNB	P27, P28, P31, P32, P33
AS03	Air Supply House #3 (12.52)	7/1994	LNB	P50, P51, P52, P53
AS04	Air Supply House #4 (10.4)	7/1994	LNB	P57**, P58**, P59**, P61**
AS05	Air Supply House #5 (8.73)	7/1994	LNB	P13**, P14**
AS06	Air Supply House #6 (6.20)	7/1994	LNB	P13**, P14**
AS07	Air Supply House #7 (7.70)	7/1994	LNB	P13**, P14**
AS08	Air Supply House #8 (12.75)	7/1994	LNB	P19, P26
AS09	Air Supply House #9 (2.59)	7/1994	LNB	P15
AS10	Air Supply House #10 (17.23)	7/1994	LNB	P02, P03, P04
AS11	Air Supply House #11 (17.53)	7/1994	LNB	P06, P07
AS12	Air Supply House #12 (17.53)	7/1994	LNB	P05, P08, P09, P10
AS13	Air Supply House #13 (5.74)	7/1994	LNB	R02, R03, R04, R05
AS14	Air Supply House #14 (5.74)	7/1994	LNB	P27, P28, P31, P32, P33

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Equip ID	Equipment Description (Design Capacity in 10⁶ BTU/hr)	Installation Date	Control Device ID	Stack ID
AS15	Air Supply House #15 (2.59)	7/1994	LNB	P66
AS16	Air Supply House #16 (TBD)	2001*	LNB	PCL51, PCL53
AS17	Air Supply House #17 (TBD)	2001*	LNB	PCL57**, PCL61**
KD01	KCR Desorb Heater (4.40)	7/1994	LNB	P16
BH01	Basecoat Heater (2.00)	7/1994	LNB	P65
BC01	Basecoat Cooler (2.00)	7/1994	LNB	P49, P54**
MH01	Major Repair BC Heater (0.43)	7/1994	LNB	P34
MH02	Major Repair CC Heater (0.43)	7/1994	LNB	P42
MC01	Major Repair BC Cooler (4.00)	7/1994	LNB	P21
MC02	Major Repair CC Cooler (3.00)	7/1994	LNB	P24
PH01	Primer Heater (2.00)	7/1994	LNB	P35
EB01	E-Coat Oven Burner #1 (3.00)	7/1994	LNB	R08
EB02	E-Coat Oven Burner #2 (2.00)	7/1994	LNB	R09
EB03	E-Coat Oven Burner #3 (2.00)	7/1994	LNB	R10
EB04	E-Coat Oven Burner #4 (2.00)	7/1994	LNB	R11
EB05	E-Coat Oven Burner #5 (2.00)	7/1994	LNB	R12
EC01	E-Coat Cooler (0.65)	7/1994	LNB	R14, R15
PB01	Primer Oven Burner #1 (3.00)	7/1994	LNB	R24
PB02	Primer Oven Burner #2 (2.00)	7/1994	LNB	R25
PB03	Primer Oven Burner #3 (2.00)	7/1994	LNB	R26
PB04	Primer Oven Burner #4 (2.00)	7/1994	LNB	R27
PB05	Primer Oven Burner #5 (2.00)	7/1994	LNB	R28
PC01	Primer Cooler (0.61)	7/1994	LNB	R30, R31
TB01	Topcoat Oven Burner #1 (3.00)	7/1994	LNB	R33
TB02	Topcoat Oven Burner #2 (2.00)	7/1994	LNB	R34
TB03	Topcoat Oven Burner #3 (2.00)	7/1994	LNB	R35
TB04	Topcoat Oven Burner #4 (2.00)	7/1994	LNB	R36
TB05	Topcoat Oven Burner #5 (2.00)	7/1994	LNB	R37

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Equip ID	Equipment Description (Design Capacity in 10⁶ BTU/hr)	Installation Date	Control Device ID	Stack ID
TC01	Topcoat Cooler (0.61)	7/1994	LNB	R39, R40
UB01	UB Oven Burner #1 (3.00)	7/1994	LNB	R17
UB02	UB Oven Burner #2 (3.00)	7/1994	LNB	R18
UB03	UB Oven Burner #3 (2.00)	7/1994	LNB	R19
UC01	UB Cooler (0.65)	7/1994	LNB	R21, R22
RTO1	RTO (3 towers) (15.00)	7/1994	LNB	RTO
ARB01	Assembly Repair #2 Oven Burners (1.20)	7/1994	LNB	IP09
CTB01	Combi-Line Topcoat Oven Burner #1 (TBD)	2001*	LNB	RCL33
CTB02	Combi-Line Topcoat Oven Burner #2 (TBD)	2001*	LNB	RCL34
CTB03	Combi-Line Topcoat Oven Burner #3 (TBD)	2001*	LNB	RCL35
CTB04	Combi-Line Topcoat Oven Burner #4 (TBD)	2001*	LNB	RCL36
CTB05	Combi-Line Topcoat Oven Burner #5 (TBD)	2001*	LNB	RCL37
CTC01	Combi-Line Topcoat Coolers (TBD)	2001*	LNB	RCL39

TABLE 8.8 UNIT ID 06 – Plant 10.2 - Paint Shop Combustion Sources

Equip ID	Equipment Description (Design Capacity in 10⁶ BTU/hr)	Installation Date	Control Device ID	Stack ID
AS201	10.2 Air Supply House #1 (12.70)	2002*	LNB	P27M, P28M, P31M, P32M, P33M
AS202	10.2 Air Supply House #2 (11.39)	2002*	LNB	P27M, P28M, P31M, P32M, P33M
AS203	10.2 Air Supply House #3 (12.20)	2002*	LNB	P50M, P51M, P52M, P53M
AS204	10.2 Air Supply House #4 (9.12)	2002*	LNB	P57M**, P58M**, P59M**, P61M**
AS205	10.2 Air Supply House #5 (7.66)	2002*	LNB	P13M**, P14M**
AS206	10.2 Air Supply House #6 (2.72)	2002*	LNB	P13M**, P14M**
AS207	10.2 Air Supply House #7 (5.78)	2002*	LNB	P13M**, P14M**
AS208	10.2 Air Supply House #8 (11.59)	2002*	LNB	P19M, P26M

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Equip ID	Equipment Description (Design Capacity in 10⁶ BTU/hr)	Installation Date	Control Device ID	Stack ID
AS209	10.2 Air Supply House #9 (2.27)	2002*	LNB	P15M
AS210	10.2 Air Supply House #10 (15.12)	2002*	LNB	P02M, P03M, P04M
AS211	10.2 Air Supply House #11 (17.05)	2002*	LNB	P06M, P07M
AS212	10.2 Air Supply House #12 (17.05)	2002*	LNB	P05M, P08M, P09M, P10M
AS213	10.2 Air Supply House #13 (5.04)	2002*	LNB	R02M, R03M, R04M, R05M
AS214	10.2 Air Supply House #14 (9.57)	2002*	LNB	P27M, P28M, P31M, P32M, P33M
AS215	10.2 Air Supply House #15 (2.27)	2002*	LNB	P66M
AS216	10.2 Air Supply House #16 (21.25)	2002*	LNB	PCL51M, PCL53M
AS217	10.2 Air Supply House #17 (21.25)	2002*	LNB	PCL57M**, PCL61M**
KD201	10.2 KCR Desorb Heater (2.98)	2002*	LNB	P16M
BH201	10.2 Basecoat Heater (2.94)	2002*	LNB	P65M
BC201	10.2 Basecoat Cooler (1.79)	2002*	LNB	P49M, P54M**
MH201	10.2 Major Repair BC Heater (1.69)	2002*	LNB	P34M
MH202	10.2 Major Repair CC Heater (3.62)	2002*	LNB	P42M
MC201	10.2 Major Repair BC Cooler (7.09)	2002*	LNB	P21M
MC202	10.2 Major Repair CC Cooler (7.09)	2002*	LNB	P24M
PH201	10.2 Prime Heater (6.75)	2002*	LNB	P35M
EB201	10.2 E-Coat Oven Burner #1 (2.77)	2002*	LNB	R08M
EB202	10.2 E-Coat Oven Burner #2 (2.85)	2002*	LNB	R09M
EB203	10.2 E-Coat Oven Burner #3 (2.29)	2002*	LNB	R10M
EB204	10.2 E-Coat Oven Burner #4 (2.63)	2002*	LNB	R11M
EB205	10.2 E-Coat Oven Burner #5 (3.23)	2002*	LNB	R12M
EC201	10.2 E-Coat Cooler (1.08)	2002*	LNB	R14M, R15M
PB201	10.2 Primer Oven Burner #1 (3.15)	2002*	LNB	R24M
PB202	10.2 Primer Oven Burner #2 (1.86)	2002*	LNB	R25M
PB203	10.2 Primer Oven Burner #3 (1.28)	2002*	LNB	R26M

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Equip ID	Equipment Description (Design Capacity in 10⁶ BTU/hr)	Installation Date	Control Device ID	Stack ID
PB204	10.2 Primer Oven Burner #4 (1.47)	2002*	LNB	R27M
PB205	10.2 Primer Oven Burner #5 (2.63)	2002*	LNB	R28M
PC201	10.2 Primer Cooler (1.02)	2002*	LNB	R30M, R31M
TB201	10.2 Topcoat Oven Burner #1 (2.83)	2002*	LNB	R33M
TB202	10.2 Topcoat Oven Burner #2 (2.06)	2002*	LNB	R34M
TB203	10.2 Topcoat Oven Burner #3 (1.12)	2002*	LNB	R35M
TB204	10.2 Topcoat Oven Burner #4 (1.39)	2002*	LNB	R36M
TB205	10.2 Topcoat Oven Burner #5 (2.65)	2002*	LNB	R37M
TC201	10.2 Topcoat Cooler (1.02)	2002*	LNB	R39M, R40M
UB201	10.2 UB Oven Burner #1 (3.13)	2002*	LNB	R17M
UB202	10.2 UB Oven Burner #2 (3.22)	2002*	LNB	R18M
UB203	10.2 UB Oven Burner #3 (2.46)	2002*	LNB	R19M
UC201	10.2 UB Cooler (1.08)	2002*	LNB	R21M, R22M
RTO2	10.2 RTO (3 towers) (25.00)	2002*	LNB	RTOM
ARB201	10.2 Assembly Repair #2 Oven Burners (2.00)	2002*	LNB	IP09M
CTB201	10.2 Topcoat 2 Oven Burner #1 (TBD)	2002*	LNB	RCL33M
CTB202	10.2 Topcoat 2 Oven Burner #2 (TBD)	2002*	LNB	RCL34M
CTB203	10.2 Topcoat 2 Oven Burner #3 (TBD)	2002*	LNB	RCL35M
CTB204	10.2 Topcoat 2 Oven Burner #4 (TBD)	2002*	LNB	RCL36M
CTB205	10.2 Topcoat 2 Oven Burner #5 (TBD)	2002*	LNB	RCL37M
CTC201	10.2 Topcoat 2 Cooler (TBD)	2002*	LNB	RCL39M

TABLE 8.9 UNIT ID 07 – Plant 10.1 - Paint Shop Primecoat (E-coat) Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
EP01	10.1 Primecoat (E-Coat) Dip (31.25)	7/1994	N/A	R6
EP02	10.1 Primecoat (E-Coat) Rinse (31.25)	7/1994	N/A	R7
EO01	10.1 Primecoat (E-Coat) Oven (31.25)	7/1994	RTO1	R13**

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TABLE 8.10 UNIT ID 08 – Plant 10.2 - Paint Shop Primecoat (E-coat) Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
EP201	10.2 Primecoat (E-Coat) Dip (50)	2002*	N/A	R6M
EP202	10.2 Primecoat (E-Coat) Rinse (50)	2002*	N/A	R7M
EO201	10.2 Primecoat (E-Coat) Oven (50)	2002*	RTO2	R13M**

TABLE 8.11 UNIT ID 09 – Plant 10.1 - Paint Shop Guidecoat Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
UP01	10.1 Underbody (UB) Sealer Deck (31.25)	7/1994	N/A	B3
UP02	10.1 UB Manual Booth (31.25)	7/1994	DF01	P03
UP03	10.1 UB Fixed Spray Booth (31.25)	7/1994	DF01	P02
UP04	10.1 UB Robotic & Manual Touchup Booth (31.25)	7/1994	DF01	P04
UO01	10.1 UB Oven (31.25)	7/1994	RTO1	R20**
PP01	10.1 Primer Tackoff (31.25)	7/1994	N/A	N/A
PP02	10.1 Primer Robot Pre-Spray (31.25)	7/1994	WV	P27
PP03	10.1 Primer Robot (31.25)	7/1994	WV	P28
PP04	10.1 Primer ESTA Zone (31.25)	7/1994	WV	P31, P32
PP05	10.1 Primer Manual Backup (31.25)	7/1994	WV	P33
PP06	10.1 Primer Quiet Zone (31.25)	7/1994	N/A	P48
PO01	10.1 Primer Oven (31.25)	7/1994	RTO1	P29**

TABLE 8.12 UNIT ID 10 – Plant 10.2 - Paint Shop Guidecoat Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
UP201	10.2 Underbody (UB) Sealer Deck (50)	2002*	N/A	B3M
UP202	10.2 UB Manual Booth (50)	2002*	DF01	P03M
UP203	10.2 UB Fixed Spray Booth (50)	2002*	DF01	P02M
UP204	10.2 UB Robotic & Manual Touchup Booth (50)	2002*	DF01	P04M
UO201	10.2 UB Oven (50)	2002*	RTO2	R20M**
PP201	10.2 Primer Tackoff (50)	2002*	N/A	N/A

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Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
PP202	10.2 Primer Robot Pre-Spray (50)	2002*	WV	P27M
PP203	10.2 Primer Robot (50)	2002*	WV	P28M
PP204	10.2 Primer ESTA Zone (50)	2002*	WV	P31M, P32M
PP205	10.2 Primer Manual Backup (50)	2002*	WV	P33M
PP206	10.2 Primer Quiet Zone (50)	2002*	N/A	P48M
PO201	10.2 Primer Oven (50)	2002*	RTO2	P29M**

TABLE 8.13 UNIT ID 11 – Plant 10.1 - Paint Shop Topcoat Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
BA01	10.1 Basecoat Tackoff (27.125)	7/1994	N/A	N/A
BA02	10.1 Basecoat ESTA (27.125)	7/1994	WV	P50
BA03	10.1 Basecoat Robot (27.125)	7/1994	WV	P51
BA04	10.1 Basecoat Reciprocator (27.125)	7/1994	WV	P52
BA05	10.1 Basecoat Manual Backup (27.125)	7/1994	WV	P53
BI01	10.1 Basecoat IR Zone (27.125)	7/1994	KCR1	P54**
BI02	10.1 Basecoat Convection Zone (27.125)	7/1994	N/A	P49
CL01	10.1 Clearcoat Robot (27.125)	7/1994	WV, KCR1	P13**, P14**, P57**, P58**
CL02	10.1 Clearcoat ESTA (27.125)	7/1994	WV, KCR1	P59**
CL03	10.1 Clearcoat Manual Backup (27.125)	7/1994	WV	P61
CL04	10.1 Clearcoat Quiet Zone (27.125)	7/1994	N/A	P61
TI01	10.1 Topcoat IR Zone (27.125)	7/1994	KCR1	P62**
TO01	10.1 Topcoat Oven (27.125)	7/1994	RTO1	R38**
BB01, BB02	10.1 Blackout Booths (31.25)	7/1994	DF01	P06, P07
CW01, CW02, CW03, CW04	10.1 Cavity Wax Booths (31.25)	7/1994	DF01	P05, P08, P09, P10
SP01, SP02	10.1 Spot Repair Booths (0.31)	7/1994	DF01	P15, P66
MA01	10.1 Major Repair Basecoat Spray Booths (1.7)	7/1994	WV	P26
MA02	10.1 Major Repair Clearcoat Spray Booths (1.7)	7/1994	WV	P30

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Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
MI01	10.1 Major Repair Basecoat IR/Convection Zone (1.7)	7/1994	N/A	P19
MI02	10.1 Major Repair Clearcoat IR/Convection Zone (1.7)	7/1994	N/A	P22
IP02	10.1 Assembly Basecoat Repair Booths (3)	7/1994	WV	S4, S5
II01	10.1 Assembly Basecoat IR Dryer (3)	7/1994	N/A	S6
IP03	10.1 Assembly Clearcoat Repair Booths (3)	7/1994	WV	S7, S8
II02	10.1 Assembly Clearcoat IR Dryer (3)	7/1994	N/A	S9
IP04	10.1 Assembly Spot Repair Booths (3)	7/1994	DF01	S10, S11
IP05	10.1 Assembly Spot Repair Booths (6)	1999	DF02	IP05
IP06	10.1 Assembly Spot Repair IR Dryer (6)	1999	N/A	IP06
IP07	10.1 Assembly Panel Repair Booth (2)	1999	DF02	IP07
IP08	10.1 Assembly Panel Repair Convection Dryer (2)	1999	N/A	IP08
BA06	10.1 Combi-Line Basecoat Tackoff (12)	2001*	N/A	N/A
BA07	10.1 Combi-Line Basecoat ESTA Robot (12)	2001*	WV	PCL53
BA08	10.1 Combi-Line Basecoat Robot (12)	2001*	WV	PCL51
BI03	10.1 Combi-Line Basecoat Low-Temp. Flash (12)	2001*	KCR01	PCL49**
CL05	10.1 Combi-Line Clearcoat Manual Booth (12)	2001*	WV, KCR01	PCL59**
CL06	10.1 Combi-Line Clearcoat Robot (12)	2001*	WV, KCR01	PCL59**
CL07	10.1 Combi-Line Clearcoat Demask and Unheated Flash (12)	2001*	(Combustion air for TO02)	RCL38**
TO02	10.1 Combi-Line Topcoat Oven (12)	2001*	RTO1	RCL38**

TABLE 8.14 UNIT ID 12 – Plant 10.2 - Paint Shop Topcoat Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
BA201	10.2 Basecoat Tackoff (35)	2002*	N/A	N/A
BA202	10.2 Basecoat ESTA (35)	2002*	WV	P50M
BA203	10.2 Basecoat Robot (35)	2002*	WV	P51M
BA204	10.2 Basecoat Reciprocator (35)	2002*	WV	P52M
BA205	10.2 Basecoat Manual Backup (35)	2002*	WV	P53M

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Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
BI201	10.2 Basecoat IR Zone (35)	2002*	KCR2	P54M**
BI202	10.2 Basecoat Convection Zone (35)	2002*	N/A	P49M
CL201	10.2 Clearcoat Robot (35)	2002*	WV, KCR2	P13M**, P14M**, P57M**, P58M**
CL202	10.2 Clearcoat ESTA (35)	2002*	WV, KCR2	P59M**
CL203	10.2 Clearcoat Manual Backup(35)	2002*	WV	P61M
CL204	10.2 Clearcoat Quiet Zone (35)	2002*	N/A	P61M
TI201	10.2 Topcoat IR Zone (35)	2002*	KCR2	P62M**
TO201	10.2 Topcoat Oven (35)	2002*	RTO2	R38M**
BB201, BB202	10.2 Blackout Booths (50)	2002*	DF01	P06M, P07M
CW201, CW202, CW203, CW204	10.2 Cavity Wax Booths (50)	2002*	DF01	P05M, P08M, P09M, P10M
SP201, SP202	10.2 Spot Repair Booths (0.5)	2002*	DF01	P15M, P66M
MA201	10.2 Major Repair Basecoat Spray Booths (1.5)	2002*	WV	P26M
MA202	10.2 Major Repair Clearcoat Spray Booths (1.5)	2002*	WV	P30M
MI201	10.2 Major Repair Basecoat IR/Convection Zone (1.5)	2002*	N/A	P19M
MI202	10.2 Major Repair Clearcoat IR/Convection Zone (1.5)	2002*	N/A	P22M
IP202	10.2 Assembly Basecoat Repair Booths (5)	2002*	WV	S4M, S5M
II201	10.2 Assembly Basecoat IR Dryer (5)	2002*	N/A	S6M
IP203	10.2 Assembly Clearcoat Repair Booths (5)	2002*	WV	S7M, S8M
II202	10.2 Assembly Clearcoat IR Dryer (5)	2002*	N/A	S9M
IP204	10.2 Assembly Spot Repair Booths (5)	2002*	DF01	S10M, S11M
IP205	10.2 Assembly Spot Repair Booths (10)	2002*	DF02	IP05M
IP206	10.2 Assembly Spot Repair IR Dryer (10)	2002*	N/A	IP06M
IP207	10.2 Assembly Panel Repair Booth (3.33)	2002*	DF02	IP07M
IP208	10.2 Assembly Panel Repair Convection Dryer (3.33)	2002*	N/A	IP08M
BA206	10.2 Topcoat 2 Basecoat Tackoff (17.5)	2002*	N/A	PCL53M

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Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
BA207	10.2 Topcoat 2 Basecoat ESTA Robot (17.5)	2002*	WV	PCL53M
BA208	10.2 Topcoat 2 Basecoat Robot (17.5)	2002*	WV	PCL51M
BI203	10.2 Topcoat 2 Basecoat Low-Temp. Flash (17.5)	2002*	KCR02	PCL49M**
CL205	10.2 Topcoat 2 Clearcoat Manual Booth (17.5)	2002*	WV, KCR02	PCL59M**
CL206	10.2 Topcoat 2 Clearcoat Robot (17.5)	2002*	WV, KCR02	PCL59M**
CL207	10.2 Topcoat 2 Clearcoat Demask and Unheated Flash (17.5)	2002*	(combustion air for TO202)	RCL38M**
TO202	10.2 Topcoat 2 Oven (17.5)	2002*	RTO2	RCL38M**

TABLE 8.15 UNIT ID 13 – Plant 10.1 - Paint Shop Purge Solvent Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
SL01	10.1 Spent Paint Solids Recovery Room	7/1994	N/A	P56
	Cleaning and body-wipe activities in Plant 10.1	7/1994	N/A	***

TABLE 8.16 UNIT ID 14 – Plant 10.2 - Paint Shop Purge Solvent Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
SL201	10.2 Spent Paint Solids Recovery Room	2002*	N/A	P56M
	Cleaning and body-wipe activities in Plant 10.2	2002*	N/A	***

TABLE 8.17 UNIT ID 15 – Plant 10.1 - Multi-Function Testing / Cosmoline Application

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
MF01, MF03	10.1 Assembly Roll Test Booths (31.25)	7/1994, 1999	N/A	D1, D3
MF02	10.1 ICP Roll Test Booth (31.25)	7/1994	N/A	D2
CNW01	Conservation Wax Application Booth and IR Dryer (31.25)	7/1994	S1	

TABLE 8.18 UNIT ID 16 – Plant 10.2 - Multi-Function Testing/ Cosmoline Application

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
MF04, MF05	10.2 Assembly Roll Test Booths (50)	2002*	N/A	D1M, D3M
CNW02	Conservation Wax Application Booth and IR Dryer (50)	2002*	S2	

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TABLE 8.19 UNIT ID 17 - Transpack Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
Transpack	Transpack Burners and Laminating System (81.25)	2000	N/A	Transpack

TABLE 8.20 UNIT ID 18 - ICP Dewax Unit

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
IP01	ICP Conservation Wax Removal System (25)	7/1994	H1	H1

TABLE 8.21 UNIT ID 19 – Plastic Parts Combustion Sources

Equip ID	Equipment Description (Design Capacity in 10⁶ BTU/hr)	Installation Date	Control Device ID	Stack ID
PPASH	Plastic Parts Air Supply Houses (TBD)	2002*	LNB	P27(PP), P50(PP), P53(PP), P57(PP)**, P61(PP)**
PPOB	Plastic Parts Oven Burners (TBD)	2002*	LNB	R24(PP)
PPH	Plastic Parts Heaters (TBD)	2002*	LNB	R35(PP)
PPC	Plastic Parts Coolers (TBD)	2002*	LNB	R30(PP)

TABLE 8.22 UNIT ID 20 – Plastic Parts Guidecoat Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
PP207	Plastic Parts Primer Tackoff (81.25)	2002*	N/A	N/A
PP208	Plastic Parts Primer Robot (81.25)	2002*	WV	P27(PP)
PO202	Plastic Parts Primer Oven (81.25)	2002*	RTO2	P29(PP)**
PP209	Plastic Parts Primer Quiet Zone and Manual Backup (81.25)	2002*	N/A	P48(PP)

TABLE 8.23 UNIT ID 21 – Plastic Parts Topcoat Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
BA209	Plastic Parts Basecoat Tackoff (97.5)	2002*	N/A	N/A
BA210	Plastic Parts Basecoat ESTA (97.5)	2002*	WV	P50(PP)
BA211	Plastic Parts Basecoat Manual Backup(97.5)	2002*	WV	P53(PP)
BI204	Plastic Parts Basecoat Flash Zone (97.5)	2002*	KCR02	P54(PP)*
CL208	Plastic Parts Clearcoat Robot (97.5)	2002*	KCR02	P57(PP)*

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Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
CL209	Plastic Parts Clearcoat Manual Backup/Quiet Zone (97.5)	2002*	KCR02	P61(PP)*
CL210	Plastic Parts Topcoat Flash Zone (97.5)	2002*	KCR02	P62(PP)*
TO203	Plastic Parts Topcoat Oven (97.5)	2002*	RTO2	R38(PP)*
MA203	Plastic Parts Major Repair Basecoat Spray Booth (2.44)	2002*	WV	P26(PP)
MI203	Plastic Parts Major Repair Basecoat Dryer (2.44)	2002*	N/A	P19(PP)
MA204	Plastic Parts Major Repair Clearcoat Spray Booth (2.44)	2002*	WV	P30(PP)
MI204	Plastic Parts Major Repair Clearcoat Dryer (2.44)	2002*	N/A	P22(PP)
SP203	Plastic Parts Spot Repair Booths (0.81)	2002*	DF01	P15(PP)

TABLE 8.24 UNIT ID 22 – Plastic Parts Paint Shop Purge Solvent Operations

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
SL301	Plastic Parts Spent Paint Solids Recovery Room	2002*	N/A	P56M
	Cleaning and body-wipe activities in plastic parts shop	2002*	N/A	***

TABLE 8.25 UNIT ID 23 – Plant 10.1 - Body Shop Welding Areas

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
BW1	Plant 10.1 Body Shop Welding Areas (31.25)	7/1994	ESP	

TABLE 8.26 UNIT ID 24 – Plant 10.2 - Body Shop Welding Areas

Equip ID	Equipment Description (Design Capacity in units/hr)	Installation Date	Control Device ID	Stack ID
BW2	Plant 10.2 Body Shop Welding Areas (31.25)	2002*	ESP	

* These are approximate installation dates.

** Emergency bypass stacks only; equipment is normally routed to control device.

PART 9.0 PLANT WIDE APPLICABILITY LIMITS (PAL)

A. EMISSION LIMITS AND STANDARDS

Table 9.1 contains summaries of emission unit emission limits and standards.

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TABLE 9.1 PLANT WIDE APPLICABILITY LIMITS (VOC)

Unit ID	Limit	Production Level	Regulation	State Only	Condition Number
Facility wide	984 TPY	> 324,000 units and the plastic parts shop	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	855 TPY	> 324,000 units	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	733 TPY	Between 324,000 and 180,000 units and the plastic parts shop	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	604 TPY	Between 324,000 and 180,000 units	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	469 TPY	< 180,000 units and plastic parts shop	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	340 TPY	< 180,000 units	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2

TABLE 9.2 PLANT WIDE APPLICABILITY LIMITS (SO2)

Unit ID	Limit	Production Level	Regulation	State Only	Condition Number
Facility wide	20 TPY	> 180,000 units and the plastic parts shop	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	20 TPY	> 180,000 units	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	17TPY	< 180,000 units and plastic parts shop	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	17 TPY	< 180,000 units	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2

TABLE 9.3 PLANT WIDE APPLICABILITY LIMITS (NOx)

Unit ID	Limit	Production Level	Regulation	State Only	Condition Number
Facility wide	363 TPY	> 180,000 units and the plastic parts shop	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	356 TPY	> 180,000 units	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	131 TPY	< 180,000 units and plastic parts shop	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	124 TPY	< 180,000 units	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2

TABLE 9.4 PLANT WIDE APPLICABILITY LIMITS (CO)

Unit ID	Limit	Production Level	Regulation	State Only	Condition Number
Facility wide	1054 TPY	> 180,000 units and the plastic parts shop	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	1042 TPY	> 180,000 units	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	513 TPY	< 180,000 units and plastic parts shop	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	500 TPY	< 180,000 units	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2

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TABLE 9.5 PLANT WIDE APPLICABILITY LIMITS (PM/PM-10)

Unit ID	Limit	Production Level	Regulation	State Only	Condition Number
Facility wide	102 TPY	> 180,000 units and the plastic parts shop	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	96 TPY	> 180,000 units	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	46 TPY	< 180,000 units and plastic parts shop	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2
	41 TPY	< 180,000 units	SC Regulation 62.5 Std 7	No	9.B.1, 9.B.2

B. EMISSION UNIT CONDITIONS

- Compliance with the above limits in Tables 9.1-9.5 shall be determined by calculating each month's actual emissions from the units subject to each PAL and adding the actual total emissions from the previous eleven (11) months to obtain a twelve (12) months rolling total. Compliance shall be determined within 30 days of the end of each month and shall be based on the total actual emissions from the site for the immediately preceding 12-month period.
- Individual monthly emission rates from the units subject to each PAL shall be compiled for each source as specified in Section 11.A and 11.B Monitoring and Record keeping. Compliance for each emissions unit with SC Regulation 61-62.5, Standard 7 is determined solely by compliance with the PALs specified in Part 9.0 of this permit.

PART 10.0 SOURCE SPECIFIC EMISSION LIMITS AND STANDARDS

A. EMISSION LIMITS AND STANDARDS

Table 10.1 contains summaries of emission unit emission limits and standards.

TABLE 10.1 EMISSION LIMITS AND STANDARDS

Unit ID	Pollutant/ Standard	Limit	Reference Method	Regulation	State Only	Condition Number
01-02	NO _x	< 0.015% by volume at 15% oxygen and on a dry basis per turbine	20	40CFR60 Subpart GG; Stationary Gas Turbines	No	10.B.2, 10.B.3, 10.B.6
01-02	Fuel Sulfur Content	< 0.8 percent by weight	N/A	40CFR60 Subpart GG; Stationary Gas Turbines	No	10.B.2, 10.B.4, 10.B.6

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Unit ID	Pollutant/Standard	Limit	Reference Method	Regulation	State Only	Condition Number
01-02	Opacity	20% per source	9	S.C. Regulation 61-62.5, Std. 4.0, Section IX.(B)	No	10.B.5
01-04	Waste Combustion	As Specified Below	As Approved by BAQ	S.C. Regulation 61-62.5, Std. 3.0, Section J (Boilers) and I (Turbines)	Yes	10.B.7
03-04	NSPS	As Specified	N/A	40CFR60 NSPS Subpart A & Subpart Dc	No	10.B.8, 10.B.9
03-06, 19	Opacity	20% per fuel burning operation	9	S.C. Regulation 61-62.5, Std. 1, Section I.(B)	No	10.B.10
05-06, 19	Opacity	20% per source	9	S.C. Regulation 61-62.5, Std. 4.0, Section IX.(B)	No	10.B.11
07-08	VOC	1.42 lb/gallon ACS, total	As Approved by BAQ	40CFR60 NSPS Subpart A & Subpart MM	No	10.B.12, 10.B.13
08, 10, 12	VOHAP	1.605 lb/gallon ACS, total	As Approved by BAQ	S.C. Regulation 62.63.40-44, NESHAP	No	10.B.14
09-10	VOC	11.67 lb/gallon ACS, total	As Approved by BAQ	40CFR60 NSPS Subpart A & Subpart MM	No	10.B.12, 10.B.15
11-12	VOC	12.25 lb/gallon ACS, total	As Approved by BAQ	40CFR60 NSPS Subpart A & Subpart MM	No	10.B.12, 10.B.16
07-12, 20-21	Opacity	20%	9	S.C. Regulation 61-62.5, Standard 3.0, Section III, Part H.(1)	Yes	10.B.17
07-18, 20-24	Opacity	20% per source	9	S.C. Regulation 61-62.5, Std. 4.0, Section IX.(B)	No	10.B.18
14, 22	VOHAP	Work Practices	As Approved by BAQ	S.C. Regulation 62.63.40-44, NESHAP	No	10.B.19
18	Waste Combustion	As Specified Below	As Approved by BAQ	S.C. Regulation 61-62.5, Std. 3.0, Section I	Yes	10.B.20
20, 21	VOHAP	2.556 lb/gallon ACS, total	As Approved by BAQ	S.C. Regulation 62.63.40-44, NESHAP	No	10.B.21
07,08	Combined Capture and Destruction Efficiency	76%	As Approved by BAQ	S.C. Regulation 61-62.5, Std. 7	No	10.B.22
09,10	Combined Capture and Destruction Efficiency	9.5%	As Approved by BAQ	S.C. Regulation 61-62.5, Std. 7	No	10.B.23
11,12	Combined Capture and Destruction Efficiency	9.5%	As Approved by BAQ	S.C. Regulation 61-62.5, Std. 7	No	10.B.24

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N/A = Not Applicable

ACS = Applied Coating Solids

Compliance with SC Regulation 61-62.5, Standard 1, 3 and 4 PM and SO₂ emission limitations is determined solely by compliance with the PALs specified in Part 9.0 of this permit.

The maximum allowable emission limits above are derived from the various Federal and State regulations that govern the operation of this type of source. All applicable facility wide emission limits and corresponding regulations are listed above. Additional operating requirements which may be more stringent than those above are contained in Part 7.0, Part 9.0 and Part 11.0 of this permit.

B. EMISSION UNIT CONDITIONS

General (Emission Units 01-24)

1. These sources are subject to SC Regulation No. 61-62.5, Standard No. 7, Prevention of Significant Deterioration (PSD) for NO_x, CO, PM, PM₁₀, and Volatile Organic Compound (VOC) Emissions.

Emission Units 01

2. The turbines are subject to the provisions of *New Source Performance Standards* (NSPS, 40CFR60), Subpart GG for Stationary Gas Turbines and Subpart A for General Provisions.
3. In accordance with 40CFR60.332(a)(2), no owner/operator subject to the provisions of this Subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 * (14.4)/Y + F$$

where:

STD=allowable NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y=manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt-hour.

F= NO_x emission allowance for fuel-bound nitrogen as defined in paragraph §60.332(a)(3).

4. In accordance with §60.333(a), no owner/operator subject shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 % by weight.
5. The turbines are direct-fired combustion sources subject to SC Regulation No. 61-62.5, Standard No. 4, Emissions from Process Industries, Section IX (Visible Emissions). Emissions from each of these units, including fugitive emissions, shall not exhibit an opacity greater than 20%.

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Emission Units 01-02

6. Each turbine is permitted to burn only diesel fuel, natural gas or landfill gas as fuel. The firing of diesel fuel shall be limited to startup when the unit will be burning landfill gas. This period of firing diesel fuel should only take place for less than 5 minutes during start up. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.

Emission Units 01-04

7. Each turbine or boiler, which burns landfill gas, is subject to SC Regulation 61-62.5, Std 3, Waste Combustion and Reduction. The boilers are subject as Industrial Boilers and the turbines are subject as Industrial Incinerators. The boilers are subject to the following emission limitations listed in Standard 3:

Nickel	6.0×10^{-3} lb/10 ⁶ BTU total heat input
Cadmium	1.0×10^{-4} lb/10 ⁶ BTU total heat input
Chromium	5.0×10^{-4} lb/10 ⁶ BTU total heat input
Arsenic	2.5×10^{-4} lb/10 ⁶ BTU total heat input
Lead	5.0×10^{-3} lb/10 ⁶ BTU total heat input
Hydrochloric Acid	0.45 lb/10 ⁶ BTU total heat input

Where the total heat input shall include the BTU's from the waste and virgin fuel used for production. Compliance with these emission limitations is guaranteed based on the fuels combusted in these sources. Source testing is waived for these sources based on SC Regulation 61-62.5, Std 3 Sec VIII (A) and operator training is waived based on SC Regulation 61-62.5, Std 3 Sec IX (D).

Emission Units 03-04

8. These sources are subject to the provisions of the *New Source Performance Standards* (NSPS, 40CFR60) Subpart Dc for Small Industrial-Commercial-Institutional Steam Generating Units and Subpart A for General Provisions.

Emission Units 03-04

9. Each boiler is permitted to burn only natural gas or landfill gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.

Emission Units 03-06, 19

10. The auxiliary boilers, heaters and oven burners are indirect-fired combustion sources subject to SC Regulation No. 61-62.5, Standard No. 1, Emissions from Fuel Burning Operations. These sources are permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality. These sources shall not discharge into the ambient air smoke which exceeds an opacity of 20%. The opacity standard set forth above does not apply during startup or shutdown. The owner/operator shall, to the extent practicable, maintain and operate any source including

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associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. In addition, the owner/operator shall, for a period of at least five (5) years maintain a log of the time, magnitude, duration, and any other pertinent information to determine periods of startup and shutdown and make these records available to a Department representative upon request.

Emission Units 05-06, 19

11. The coolers and air supply houses are direct-fired combustion sources subject to SC Regulation No. 61-62.5, Standard No. 4, Emissions from Process Industries, Section IX (Visible Emissions). These sources are permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality. Emissions from each of these units, including fugitive emissions, shall not exhibit an opacity greater than 20%.

Emission Units 07-12

12. These sources are subject to the provisions of the *New Source Performance Standards* (NSPS, 40CFR60) Subpart MM for Automobile and Light Duty Truck Surface Coating Operations and Subpart A for General Provisions.

Emission Units 07-08

13. As stated in 40CFR60.392, no owner or operator shall discharge or cause the discharge into the atmosphere VOC emissions in excess of 1.42 lb/gACS (0.17 kg VOC / lACS). Monitoring provisions of Part 11 also demonstrate compliance with this NSPS requirement.

Emission Units 08, 10, & 12

14. Plant 10.2 vehicle paint shop primecoat (E-Coat), shop guidecoat operations including both primer and underbody sealer, and topcoat operations are subject to SC Regulation No. 62.63.40-44 (112(g)), National Emission Standards for Hazardous Air Pollutants (NESHAP). In accordance with the MACT analysis, emissions of volatile organic hazardous air pollutants (VOHAP) are limited to 1.605 lb VOHAP/gallon ACS.

Emission Units 09-10

15. As stated in 40CFR60.392, no owner or operator shall discharge or cause the discharge into the atmosphere VOC emissions in excess of 11.67 lb/gACS (1.40 kg VOC / lACS). Monitoring provisions of Part 11 also demonstrate compliance with this NSPS requirement.

Emission Units 11-12

16. As stated in 40CFR60.392, no owner or operator shall discharge or cause the discharge into the atmosphere VOC emissions in excess of 12.25 lb/gACS (1.47 kg VOC /lACS). Monitoring provisions of Part 11 also demonstrate compliance with this NSPS requirement.

Emission Units 07-12, 20-21 (RTO1 & RTO2)

17. In accordance with SC Regulation No. 61-62.5, Standard No. 3.0, Section III, Part H. "Industrial Incinerators"; the opacity will be limited to 20 (%) percent. Compliance with

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these emission limitations is guaranteed based on the fuels combusted in these sources. Source testing is waived for these sources based on SC Regulation 61-62.5, Std 3 Sec VIII (A) and operator training is waived based on SC Regulation 61-62.5, Std 3 Sec IX (D).

Emission Units 07-18, 20-21

- 18.** These sources are subject to SC Regulation No. 61-62.5, Standard No. 4, Emissions from Process Industries, Section IX (Visible Emissions). Emissions from each of these units, including fugitive emissions, shall not exhibit an opacity greater than 20%.

Emission Units 14 and 22

- 19.** The vehicle paint shop purge, clean and body wipe activities are subject to SC Regulation No. 62.63.40-44 (112(g)), National Emission Standards for Hazardous Air Pollutants (NESHAP). In accordance with the MACT analysis, emissions of VOHAP are limited by following a set of work practices. Initially, these practices shall include:
- a. Vehicle Body Wipe Practices – Disposal and recovery of wipes in closed containers when not in use. Use of tack wipe materials whenever practical.
 - b. Purging Paint Line Practices – Capture and reclaim or recovery of purge materials for solvent borne coatings (except applicator nozzles and tips). Minimize paint and solvent supply hose length.
 - c. Flushing Paint Systems Practices – Recover and recycle solvents.
 - d. Cleaning Spraybooth Grates Practices – Rinse with high-pressure water in place or offline. Use of spray-on masking or other type of masking.
 - e. Cleaning External Spraybooth Areas Practices – Use of spray-on masking or other type of masking. Use of removable floor coverings.

Emission Units 18

- 20.** The Hohmeier unit is permitted to use natural gas and recovered kerosene and conservation wax as fuels. The Hohmeier unit which burns recovered kerosene and conservation wax is subject to SC Regulation 61-62.5, Std 3, Waste Combustion and Reduction. The Hohmeier unit is subject as an Industrial Boiler with the following emission limitations from Standard 3:

Nickel	6.0×10^{-3} lb/ 10^6 BTU total heat input
Cadmium	1.0×10^{-4} lb/ 10^6 BTU total heat input
Chromium	5.0×10^{-4} lb/ 10^6 BTU total heat input
Arsenic	2.5×10^{-4} lb/ 10^6 BTU total heat input
Lead	5.0×10^{-3} lb/ 10^6 BTU total heat input
Hydrochloric Acid	0.45 lb/ 10^6 BTU total heat input

Where the total heat input shall include the BTU's from the waste and virgin fuel used for production. Compliance with these emission limitations is guaranteed based on the fuels combusted in these sources. Source testing is waived for these sources based on SC Regulation 61-62.5, Std 3 Sec VIII (A) and operator training is waived based on SC Regulation 61-62.5, Std 3 Sec IX (D).

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Emission Units 20 and 21

21. The plastic parts paint shop guidecoat and topcoat operations are subject to SC Regulation No. 62.63.40-44 (112(g)), National Emission Standards for Hazardous Air Pollutants (NESHAP). In accordance with the MACT analysis, emissions of VOHAP are limited to 2.556 lb VOHAP/gallon ACS.

Emission Units 07 and 08

22. The E-coat operations shall maintain a combined capture and control efficiency of 76%.

Emission Units 09 and 10

23. The guidecoat operations shall maintain a combined capture and control efficiency of 9.5%.

Emission Units 11 and 12

24. The topcoat operations shall maintain a combined capture and control efficiency of 9.5%. Booths that are not vented to the control devices are not subject this combined capture and control efficiency.

PART 11.0 MONITORING AND REPORTING REQUIREMENTS

[SC Regulation 61-62.1, Section II]; [SC Regulation 61-62.70.6(a)(3)(i)(B)]

A. MONITORING AND REPORTING SUMMARY TABLE FOR THE PAL

Table 11.1 contains summaries of the monitoring and reporting required of this facility.

TABLE 11.1 PAL MONITORING AND REPORTING

Unit ID	Pollutant/Parameter	Limit	Required Monitoring	Monitoring Frequency	Reporting Frequency	Condition Number
Facility wide	VOC	As Specified in Table 9.1	As Specified Below	Monthly	Semi-annually	11.B.1, 11.B.4, 11.B.5
Facility wide	PM/PM-10	As Specified in Table 9.5	As Specified Below	Monthly	Semi-annually	11.B.1, 11.B.2, 11.B.5
Facility wide	NO _x	As Specified in Table 9.3	As Specified Below	Monthly	Semi-annually	11.B.1, 11.B.3, 11.B.5
Facility wide	CO	As Specified in Table 9.4	As Specified Below	Monthly	Semi-annually	11.B.1, 11.B.3, 11.B.5
Facility wide	SO ₂	As Specified in Table 9.2	As Specified Below	Monthly	Semi-annually	11.B.1, 11.B.5

N/A = Not Applicable

B. MONITORING AND REPORTING CONDITIONS FOR THE PAL

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1. BMW must record on a monthly basis all fuel consumption at the facility including all virgin and non-virgin fuels. These records of fuel consumption shall be used to calculate the combustion emissions of the units listed in Unit ID 01-06 and 19 and shall be maintained for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days. Using the records of fuel consumption and emission factors, the facility shall determine monthly the emissions of PM/PM-10, SO₂, NO_x, CO and VOCs from the fuel combustion. For Unit ID 17 - 18, BMW may at its discretion either assume the worst case emissions as determined by the PAL level or calculate using the records of fuel consumption and emission factors. Reports shall be submitted as required in 11.B.5.
2. For the rest of the PM/PM-10 emissions at the facility, the following monitoring and recordkeeping shall be required and reports shall be submitted as required in 11.B.5.

For Unit ID 07-12 and 20-21 - BMW must record on a monthly basis all paint usage. These records of paint usage shall be used to calculate the PM emissions and shall be maintained for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days. Using the records of paint usage, the following equation and emission factors, the facility shall determine monthly the emissions of PM/PM-10 from coating operations.

$$\text{PM emissions (lbs/mo)} = \text{Paint usage (gal/mo)} \times \text{Solids density (lbs./gal)} \times (1 - \text{TE}/100) \times (1 - \text{DE}/100)$$

where TE is the transfer efficiency as based on the EPA Publication 450/3-88-018 *Protocol for Determining the Daily VOC Emission Rate of Automobile and Light Duty Truck Topcoat Operations*, and revisions thereafter and DE is the destruction or control efficiency if applicable.

For Unit ID 15-16 – BMW may at its discretion either assume the worst case emissions, as calculated in the permit application, or must record on a monthly basis all wax usage at the facility. These records of wax usage shall be used to calculate the PM emissions and shall be maintained for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days. Using the records of wax usage, appropriate control efficiencies and emission factors, the facility shall determine monthly the emissions of PM/PM-10 from cosmoline operations.

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For Unit ID 23-24 - BMW may at its discretion either assume the worst case emissions, as calculated in the permit application, or must record on a monthly basis the production level of the body shops. These production records shall be used to calculate the PM emissions and shall be maintained for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days. Using the production records, control efficiencies and emission factors, the facility shall determine monthly the emissions of PM/PM-10 from body shop operations.

3. For Unit ID 15-16 – BMW may at its discretion either assume the worst case emissions, as calculated in the permit application, or must record on a monthly basis the production level of the multifunction testing area. These production records shall be used to calculate the emissions of the units listed in Unit ID 15-16 and shall be maintained for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days. Using the production records and emission factors, the facility shall determine monthly the emissions of NO_x, CO and VOCs from this area. Reports shall be submitted as required in 11.B.5.
4. For the rest of the VOC emissions at the facility, the following monitoring and recordkeeping shall be required and reports shall be submitted as required in 11.B.5.

For Unit ID 07-14 and 20-22 - BMW must record on a monthly basis all paint and solvent usage. These records of paint and solvent usage shall be used to calculate the VOC emissions and shall be maintained for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days. Using the records of paint and solvent usage, the following equations, capture and control efficiencies and emission factors, the facility shall determine monthly the emissions of VOC from coating operations. Where applicable, the permittee shall use the EPA Publication 450/3-88-018 *Protocol for Determining the Daily VOC Emission Rate of Automobile and Light Duty Truck Topcoat Operations* and revisions thereafter as the basis to determine transfer efficiencies for compliance with all VOC limits.

Notes: CE = Capture Efficiency; DE = Destruction Efficiency – both as determined by the last Bureau approved source test

VOC Emission Rate in lbs/mo = gal used/mo x VOC content (lb/gal) x (1 - (CE x DE))

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For Unit ID 17 - BMW may at its discretion either assume the worst case emissions, as calculated in the permit application, or must record on a monthly basis all laminate usage at the Transpack operations. These records of laminate usage shall be used to calculate the VOC emissions and shall be maintained for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days. Using the records of laminate usage, control efficiencies and emission factors, the facility shall determine monthly the emissions of VOCs from the Transpack operations.

5. Semi-annual reports are required for all of the above monitoring and recordkeeping. The reports shall include the monitored parameters, the method of calculation with appropriate spreadsheets, any emission factors used, the capture and control efficiencies used and the calculated emissions. The total facility wide emissions should be based on a twelve-month rolling sum. Reports shall be submitted semi-annually to the Manager of the Technical Management Section within 30 days of the end of the reporting period. In the event an exceedance occurs, a quarterly report will be submitted.

C. ADDITIONAL MONITORING AND REPORTING SUMMARY TABLE

Table 11.2 contains summaries of the monitoring and reporting required of this facility.

TABLE 11.2 MONITORING AND REPORTING

Unit ID	Pollutant/Parameter	Limit	Required Monitoring	Monitoring Frequency	Reporting Frequency	Condition Number
07-12	VOC	As Specified in Table 10.1	As Specified Below	Monthly	Semi-annually	11.D.1, 11.D.2
08,10,12	VOHAP	As Specified in Table 10.1	As Specified Below	Monthly	Semi-annually	11.D.1
14, 22	VOHAP	As Specified in Table 10.1	As Specified Below	Monthly	Semi-annually	11.D.1
20, 21	VOHAP	As Specified in Table 10.1	As Specified Below	Monthly	Semi-annually	11.D.1
01-02	Nitrogen and Sulfur Content	As Specified in Table 10.1	Recordkeeping	As required by condition	Semi-annually	11.D.3
01-22	Opacity	As Specified in Table 10.1	As Specified Below	As Specified Below	On site	11.D.4
01-04, 07-12, 18,20,21	Waste Analysis	N/A	As Specified Below	As Specified Below	As Specified Below	11.D.5
03-04	Fuel Usage	N/A	Recordkeeping	Monthly	Semi-annually	11.D.6

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Unit ID	Pollutant/Parameter	Limit	Required Monitoring	Monitoring Frequency	Reporting Frequency	Condition Number
07-12, 20,21	RTO Destruction Efficiency	N/A	Source Testing	Every four years	As required by condition	11.D.7
11-12, 21	KCR Capture Efficiency	N/A	Source Testing	Every four years	As required by condition	11.D.8
07-12, 20,21	Booth Capture Efficiency	N/A	Source Testing	As required by condition	As required by condition	11.D.9
02 and 04	NOx and CO	As Specified in Table 10.1	Source Testing	As required by condition	As required by condition	11.D.10
07-12, 20,21	RTO Operation	As Specified in Condition	Recordkeeping	As Specified by Condition	Semi-annually	11.D.11
11-12, 21	KCR Operation	As Specified in Condition	Recordkeeping	As Specified by Condition	Semi-annually	11.D.12
09-12, 15-16, 20,21	Water Curtain Operation	As Specified in Condition	Recordkeeping	As Specified by Condition	Semi-annually	11.D.13
09-12, 20,21	Dry Filter Operation	As Specified in Condition	Recordkeeping	As Specified by Condition	Semi-annually	11.D.14
Facility wide	VOC Ledger	As Specified in Condition	Recordkeeping	As Specified by Condition	As Specified by Condition	11.D.15

N/A = Not Applicable

D. ADDITIONAL MONITORING AND REPORTING CONDITIONS

- For Unit ID 07-14 and 20-22 - BMW must record on a monthly basis all paint and solvent usage. These records of paint and solvent usage shall be used to calculate the VOC emissions and shall be maintained on site for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days. Using the records of paint and solvent usage, the following equations, capture and control efficiencies and emission factors, the facility shall determine monthly the emissions of VOC or VOHAP from coating operations as required in Table 10.1. Where applicable, the permittee shall use the EPA Publication 450/3-88-018 *Protocol for Determining the Daily VOC Emission Rate of Automobile and Light Duty Truck Topcoat Operations*, and revisions thereafter as the basis to determine transfer efficiencies for compliance with all VOC/VOHAP limits.

For each calendar month, the permittee shall determine the following for each coating and/or solvent used, utilizing data supplied by the manufacturer or by analysis of each coating and/or solvent using an approved EPA Reference Method:

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Notes: CE = Capture Efficiency; DE = Destruction Efficiency – both as determined by the last Bureau approved source test

For Emission Points subject to lb/GACS limit for VOC or VOHAP:

Lbs VOC or VOHAP/gal Solids Applied = Total VOC or VOHAP Emitted/Total Solids Applied

Lbs VOC or VOHAP emitted for each coating = gal coating used x VOC or VOHAP content (lb/gal) x (1 - (CE x DE)). Alternatively, lbs VOHAP emitted = lbs VOC emitted x VOHAP/VOC ratio (lb VOHAP/lb VOC).

Gallons of Solids applied for each coating = gal coating used x vol % solids x transfer efficiency

For units subject to a tons per year emission rate (TPY) of VOC or VOHAP:

VOC Emission Rate in lbs/mo = gal used/mo x VOC content (lb/gal) x (1 - (CE x DE))

For Emission Points subject to Work Practice Standards for VOHAP:

The facility may implement changes to these work practices if the change results in no increase in emissions. In such case, no notification to the Bureau will be required, and the facility will record the change internally and make it available for inspection at the request of the Bureau. The facility may demonstrate compliance with these work practices by keeping a monthly checklist noting which practices were used, which were not, and reasons why practices were not used. If alternative work practices are substituted, the checklist shall be updated accordingly. These checklists shall be maintained for a period of at least five (5) years from the date generated, with data generated in the last 24 calendar months maintained on site. Older data may be stored off site, but shall be available within five business days.

Semi annual reports are required for the above monitoring and recordkeeping. The reports shall include the monitored parameters, the method of calculation with appropriate spreadsheets, the emission factors used, the capture and control efficiencies used and the calculated emissions. For units with a ton per year emission limitation, the emissions shall be calculated as a twelve-month rolling sum. Reports shall be submitted semi-annually to the Manager of the Technical Management Section within 30 days of the end of the reporting period.

2. For Unit ID 07-12, in accordance with 40CFR§60.395(b), the owner/operator of an affected

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facility shall identify, record and submit a written report every calendar quarter of each instance in which the volume weighted average of the total mass of VOCs emitted to the atmosphere per volume of applied solids is greater than the limits listed in Table 10.1 on a 30 day average. If no such instances have occurred during a particular quarter, a report stating this shall be submitted semi-annually. Where compliance is achieved through the use of a capture system and control device, the volume weighted average after the control device should be reported to the Manager of Technical Management Section. Reports shall be submitted semi-annually to the Manager of the Technical Management Section within 30 days of the end of the reporting period.

3. For Unit ID 01-02, the owner or operator shall monitor the sulfur content and nitrogen content of each fuel being fired in the turbines as approved through the Alternative Fuel Usage Recordkeeping Plan (AFURP). EPA and the Bureau have approved this plan (26 November 2001 and revisions thereafter).
4. For Unit ID 01-22, the facility shall conduct annual visual inspections on the indicated sources in Table 11.2 for monitoring opacity limits during periods of source operation and while burning fuels other than natural gas or landfill gas. Visual Inspection means a qualitative observation of opacity during daylight hours where the inspector records results in a log, noting color, duration, density (heavy or light), cause and corrective action taken for any abnormal emissions. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water. The readings shall be maintained in logs, along with any corrective action taken when deviations occur. These logs shall be maintained on site for a period of at least five (5) years from the date generated and shall be made available to Department personnel upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days.
5. For Unit ID 1-4, 7-12, 18, 20-21, these sources are subject to SC Regulation 61-62.5, Standard 3, Waste Combustion and Reduction, Section V – Waste Analysis. These sources shall complete a waste analysis as defined in the above referenced Section for the waste streams (which includes any stream that is not a commercial virgin fuel) to be burned in these units. An initial waste analysis is required to be submitted within 180 days of permit issuance or startup, whichever is later, to the Manager of the Technical Management Section for all streams. If the stream is not deemed consistent a new waste analysis will be required for each batch or shipment of the waste stream. If at any time a waste, which was deemed consistent, is changed in any way to affect the analysis or emissions from the process, then a new waste analysis is required. If the facility believes that a waste stream can be exempted from the waste analysis as allowed by 61-62.5, Std 3, Section V, G then the facility shall keep records of the justification for the exemption. An initial analysis has previously been submitted for the recovered kerosene, conservation wax, and landfill gas. For Unit ID 07-12,

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20, and 21, material safety data sheets for the paints and solvents used will suffice as a waste analysis.

6. The owner or operator shall record and maintain records of the amounts of each fuel combusted by each boiler. The amount of fuel combusted shall be recorded monthly, as approved by the Department through the alternative fuel usage recordkeeping plan (AFURP). These records shall be maintained for a period of at least five (5) years from the date generated. All records shall be made available to Department personnel upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days. Fuel usage reports shall be submitted semi-annually to the Manager of the Technical Management Section within 30 days of the end of the reporting period. EPA and the Bureau have approved an alternative fuel monitoring plan (26 November 2001 and revisions thereafter).
7. For Unit ID 07-12 and 20-21, an initial destruction source test must be performed on each regenerative thermal oxidizer within 60 days after achieving maximum production but not later than 180 days after initial start-up. This requirement has previously been satisfied for Unit ID 07, 09, and 11. If the process changes in such a way that the control efficiencies would change, then retesting would be required for the control efficiencies within 180 days after the change. After the initial testing, per SC Regulation 61-62.5, Standard No. 5.1, a source testing schedule of every four years is required. Source test methodology must be approved by the Bureau and comply with SC Regulation 62.1, Section IV, Source testing. Notification of intent to source test, performance of source tests, and the reporting of source test results shall comply with section 60.8 of Subpart A, New Source Performance Standards (NSPS) as applicable for all NSPS sources and all other appropriate sections of NSPS Subpart MM for the automobile surface coating units.
8. For Unit ID 11-12 and 21, an initial control efficiency source test must be performed on each KCR unit (carbon adsorption concentrator) within 60 days after achieving maximum production but not later than 180 days after initial start-up. This requirement has previously been satisfied for Unit ID 11. If the process changes in such a way that the control efficiencies would change, then retesting would be required for the control efficiencies within 180 days after the change. After the initial testing, per SC Regulation 61-62.5, Standard No. 5.1, a source testing schedule of every four years is required. Source test methodology must be approved by the Bureau and comply with SC Regulation 62.1, Section IV, Source testing. Notification of intent to source test, performance of source tests, and the reporting of source test results shall comply with section 60.8 of Subpart A, New Source Performance Standards (NSPS) as applicable for all NSPS sources and all other appropriate sections of NSPS Subpart MM for the automobile surface coating units.
9. For Unit ID 07-12 and 20-21, per SC Regulation 61-62.5, Standard No. 5.1, an initial capture efficiency source test must be performed within 60 days after achieving maximum production but not later than 180 days after initial start-up. This requirement has previously been satisfied for Unit ID 07, 09, and 11. Upon demonstrating compliance through the

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initial source test, BMW shall conduct capture efficiency testing on an annual basis provided there are no physical changes made to the capture system. If the process changes in such a way that the capture efficiencies would change, then retesting would be required for the capture efficiencies within 180 days after the change. Source test methodology must be approved by the Bureau and comply with SC Regulation 62.1, Section IV, Source testing. Notification of intent to source test, performance of source tests, and the reporting of source test results shall comply with SC Regulation 61-62.1, Section IV, "Source Testing", section 60.8 of Subpart A, New Source Performance Standards (NSPS) as applicable for all NSPS sources and all other appropriate sections of NSPS Subpart MM for the automobile surface coating units. Annual source testing of capture efficiency can be waived provided:

- a. capture system flow rate indicators (e.g. magnehelic gauges, manometers) are operated, calibrated, and maintained;
 - b. the indicated values are maintained at a level no less than that recorded during the last source test during which compliance was verified;
 - c. the type and location of the flow rate indicators are approved by this Department;
 - d. no process, capture system, or VOC abatement equipment modifications are made.
10. For Unit ID 02 and 04, an initial source test for NO_x and CO emissions from the turbines and boilers will be required while running on both landfill and natural gas. The tests shall be performed within 60 days after achieving maximum production but not later than 180 days after initial start-up. For the initial source test, BMW shall conduct testing on one of the turbines in ID02 and one of the boilers in ID04. The Bureau must be notified at least two weeks prior to a source test so that a Bureau representative may be present. Source test methodology must be approved by the Bureau and comply with SC Regulation 62.1, Section IV, Source testing.
11. For Unit ID 07-12 and 20-21, the owner/operator shall calibrate, maintain, and operate temperature measurement devices on the RTOs. A temperature measurement device shall be installed, if not already located, in the firebox. Each temperature measurement device shall be calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degree Celsius or ± 2.5 degrees Celsius. Each temperature measurement device shall be equipped with a recording device so that a permanent record is produced. The owner/operator shall continuously record the incinerator combustion temperature during coating operations for thermal incineration (see §60.395(c)).

All temperature indicators shall be readily accessible for verification by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Temperature

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readings shall be recorded continuously, at least every fifteen (15) minutes, and maintained for a period of at least five (5) years from the date generated and shall be made available to Department personnel upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days. The readings shall be maintained in logs (written or electronic (i.e., computerized data system)), along with any corrective action taken when operations outside of indicator monitoring ranges occur. The permittee shall establish indicator monitoring ranges for the monitored parameters, which provide a reasonable assurance of compliance. These indicator ranges for the monitored parameters shall be derived from stack test data as required above. These ranges, with supporting documentation, shall be submitted to the Bureau for approval within 180 days of the issuance of this permit or start-up of operations whichever is later. The operating ranges may be updated using this procedure, following Bureau approval.

Incinerator monitoring reports shall be submitted semi-annually to the Manager of the Technical Management Section within 30 days of the end of the reporting period. Incinerator monitoring data shall be maintained for a period of at least five (5) years from the date generated and shall be made available to Department personnel upon request within five business days. If monitored parameters are outside the established indicator ranges, the permittee shall initiate investigation and corrective action, as appropriate. The semi-annual reports submitted to the Department shall include, in addition to other required information, all deviations outside of the established indicator monitoring range. Any deviation from an indicator range shall not in and of itself constitute a violation of this permit.

Any alternative method for monitoring Incinerator performance must be approved by the Bureau and shall be incorporated into the permit as set forth in S. C. Regulation [62.70.7/62.1 Section II].

12. For Unit ID 11-12 and 21, the owner/operator shall install, operate, and maintain thermocouples on the entrance and exit ports on each Carbon Adsorber at the desorption stage. Both gauges shall be readily accessible for verification by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). The temperature differential readings shall be recorded once per day and shall be made available to Department personnel upon request. The readings shall be maintained in logs (written or electronic (i.e., computerized data system)), along with any corrective action taken when deviations occur. The permittee shall establish indicator ranges for the monitored parameters, which provide a reasonable assurance of compliance. These indicator monitoring ranges for the monitored parameters shall be derived from stack test data, vendor certification, operational history, and visual inspections, the combination of which demonstrate the proper operation of the equipment in compliance. These ranges, with supporting documentation, shall be submitted to the Bureau for approval within 180 days of the issuance of this permit or start-up of operations whichever is later. The indicator monitoring ranges may be updated using this procedure, following Bureau approval.

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Carbon adsorber monitoring reports shall be submitted semi-annually to the Manager of the Technical Management Section within 30 days of the end of the reporting period. Carbon adsorber monitoring data shall be maintained for a period of at least five (5) years from the date generated and shall be made available to Department personnel upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days. If monitored parameters are outside the established indicator ranges, the permittee shall initiate investigation and corrective action, as appropriate. The semi-annual reports submitted to the Department shall include, in addition to other required information, all deviations outside of the established indicator monitoring range. Any deviation from an indicator range shall not in and of itself constitute a violation of this permit.

Any alternative method for monitoring Carbon Adsorber performance must be approved by the Bureau and shall be incorporated into the permit as set forth in S. C. Regulation [62.70.7/62.1 Section II].

13. For Unit ID 09-12, 15-16, and 20-21, water wash baffles shall be operational and in place at all times when equipment or processes controlled by these baffles are operating. A schedule shall be implemented for the weekly inspection and regular cleaning of the baffles. The inspection and cleaning shall be documented and maintained in logs (written or electronic (i.e., computerized data system)), along with any corrective action taken when deviations occur. Water wash baffle monitoring reports shall be submitted semi-annually to the Manager of the Technical Management Section within 30 days of the end of the reporting period. The semi-annual reports submitted to the Department shall include all deviations. All monitoring data shall be maintained for a period of at least five (5) years from the date generated and shall be made available to Department personnel upon request. Data generated in the last 24 calendar months must be maintained on site; older data may be stored off site but shall be available within five business days.

Any alternative method for monitoring water wash baffle performance must be approved by the Bureau and shall be incorporated into the permit as set forth in S. C. Regulation [62.70.7/62.1 Section II].

14. For Unit ID 09-12 and 20-21, dry filter(s) shall be operational and in place at all times when equipment or processes controlled by filter(s) are operating. A schedule, which shall be available upon request, shall be implemented for the inspection and regular cleaning or replacement of the dry filter(s). Dry filter monitoring reports shall be submitted semi-annually to the Manager of the Technical Management Section within 30 days of the end of the reporting period. The semi-annual reports submitted to the Department shall include all deviations. Records of these events shall be entered in a permanent media and maintained for a period of at least five (5) years from the date of record and made available to Department representatives upon request. Data generated in the last 24 calendar months

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must be maintained on site; older data may be stored off site but shall be available within five business days.

15. For sources added or operational changes made to this facility under the provisions of Part 6.0 that have VOC emissions, but for which the applicant elects not to install LAER, a ledger of maximum controlled annual quantity of VOC emissions from these sources must be kept. This annual quantity will include all VOC emissions at the facility that have not had LAER applied. The annual quantity of VOCs from these sources must not exceed 100 TPY without additional analysis being required under SC Regulation 61-62.5, Standard 5.1.
16. This permit contains compliance certification, testing, monitoring, reporting, and record keeping requirements sufficient to assure compliance with the terms and conditions of this permit. All submittals required by these conditions, with the exception of source testing, shall be sent to the South Carolina Department of Health and Environmental Control - Bureau of Air Quality (SC DHEC - BAQ) at the following address:

SC DHEC - BAQ
Technical Management Section
2600 Bull Street
Columbia, SC 29201

Source testing submittals shall be sent to the South Carolina Department of Health and Environmental Control - Bureau of Air Quality (SC DHEC - BAQ) at the following address:

SC DHEC - BAQ
Source Evaluation Section
2600 Bull Street
Columbia, SC 29201

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SOURCE ID	TSP (LBS/HR)	PM₁₀ (LBS/HR)	SO₂ (LBS/HR)	NO₂ (LBS/HR)	CO (LBS/HR)
B1	0.0412	0.0412	0	0	0
B1M	0.0659	0.0659	0	0	0
B2	0.0412	0.0412	0	0	0
B2M	0.0659	0.0659	0	0	0
B3	2.45E-03	2.45E-03	0	0	0
B3M	4.09E-03	4.09E-03	0	0	0
B4	1.50E-03	1.50E-03	0	0	0
B4M	2.50E-03	2.50E-03	0	0	0
B5	2.00E-03	2.00E-03	0	0	0
B5M	3.33E-03	3.33E-03	0	0	0
B6	9.99E-04	9.99E-04	0	0	0
B6M	1.66E-03	1.66E-03	0	0	0
B7	9.99E-04	9.99E-04	0	0	0
B7M	1.66E-03	1.66E-03	0	0	0
B8M	1.50E-03	1.50E-03	0	0	0
B9M	2.00E-03	2.00E-03	0	0	0
B10M	0.171	0.171	0	0	0
F2	0.0504	0.0504	0	0	0
H1	0.072	0.072	0.103	0.611	0.613
P02	0.616	0.616	1.76E-03	0.147	0.247
P02M	0.988	0.988	2.94E-03	0.245	0.411
P03	0.0374	0.0374	1.76E-03	0.147	0.247

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SOURCE ID	TSP (LBS/HR)	PM₁₀ (LBS/HR)	SO₂ (LBS/HR)	NO₂ (LBS/HR)	CO (LBS/HR)
P03M	0.0613	0.0613	2.94E-03	0.245	0.411
P04	1.89	1.89	1.76E-03	0.147	0.247
P04M	3.03	3.03	2.94E-03	0.245	0.411
P05	0.083	0.083	1.49E-03	0.124	0.209
P05M	0.134	0.134	2.48E-03	0.207	0.348
P06	0.0440	0.0440	2.98E-03	0.248	0.417
P06M	0.0729	0.0729	4.97E-03	0.414	0.695
P07	0.0440	0.0440	2.98E-03	0.248	0.417
P07M	0.0729	0.0729	4.97E-03	0.414	0.695
P08	0.083	0.083	1.49E-03	0.124	0.209
P08M	0.134	0.134	2.48E-03	0.207	0.348
P09	0.083	0.083	1.49E-03	0.124	0.209
P09M	0.134	0.134	2.48E-03	0.207	0.348
P10	0.083	0.083	1.49E-03	0.124	0.209
P10M	0.134	0.134	2.48E-03	0.207	0.348
P15	0.0172	0.0172	7.93E-04	0.0661	0.111
P15M	0.0282	0.0282	1.32E-03	0.11	0.185
P16	0.0132	0.0132	1.04E-03	0.0868	0.146
P16M	0.0220	0.0220	1.74E-03	0.145	0.243
P19	0.0257	0.0257	2.03E-03	0.169	0.284
P19M	0.0428	0.0428	3.38E-03	0.281	0.473
P21	3.14E-03	3.14E-03	2.48E-04	0.0207	0.0347
P21M	5.23E-03	5.23E-03	4.13E-04	0.0344	0.0578
P24	3.14E-03	3.14E-03	2.48E-04	0.0207	0.0347
P24M	5.23E-03	5.23E-03	4.13E-04	0.0344	0.0578
P26	0.0927	0.0927	2.03E-03	0.169	0.284
P26M	0.15	0.15	3.38E-03	0.281	0.473

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SOURCE ID	TSP (LBS/HR)	PM₁₀ (LBS/HR)	SO₂ (LBS/HR)	NO₂ (LBS/HR)	CO (LBS/HR)
P27	0.207	0.207	2.35E-03	0.196	0.329
P27M	0.334	0.334	3.92E-03	0.327	0.549
P28	0.207	0.207	2.35E-03	0.196	0.329
P28M	0.334	0.334	3.92E-03	0.327	0.549
P30	0.0314	0.0314	0	0	0
P30M	0.0502	0.0502	0	0	0
P31	0.198	0.198	2.35E-03	0.196	0.329
P31M	0.319	0.319	3.92E-03	0.327	0.549
P32	0.198	0.198	2.35E-03	0.196	0.329
P32M	0.319	0.319	3.92E-03	0.327	0.549
P33	0.198	0.198	2.35E-03	0.196	0.329
P33M	0.319	0.319	3.92E-03	0.327	0.549
P34	7.47E-03	7.47E-03	5.89E-04	0.0491	0.0825
P34M	0.0124	0.0124	9.82E-04	0.0819	0.138
P35	0.0299	0.0299	2.36E-03	0.197	0.33
P35M	0.0498	0.0498	3.93E-03	0.328	0.551
P42	0.0160	0.0160	1.26E-03	0.105	0.177
P42M	0.0267	0.0267	2.11E-03	0.176	0.295
P48	0.228	0.228	0	0	0
P48M	0.364	0.364	0	0	0
P49	5.29E-03	5.29E-03	4.18E-04	0.0348	0.0585
P49M	8.82E-03	8.82E-03	6.96E-04	0.058	0.0975
P50	0.224	0.224	1.07E-03	0.0888	0.149
P50M	0.298	0.298	1.78E-03	0.148	0.249
P51	0.214	0.214	1.07E-03	0.0888	0.149
P51M	0.281	0.281	1.78E-03	0.148	0.249
P52	0.214	0.214	1.07E-03	0.0888	0.149

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SOURCE ID	TSP (LBS/HR)	PM₁₀ (LBS/HR)	SO₂ (LBS/HR)	NO₂ (LBS/HR)	CO (LBS/HR)
P52M	0.281	0.281	1.78E-03	0.148	0.249
P53	0.0135	0.0135	1.07E-03	0.0888	0.149
P53M	0.0225	0.0225	1.78E-03	0.148	0.249
P65	0.0130	0.0130	1.03E-03	0.0856	0.144
P65M	0.0217	0.0217	1.71E-03	0.143	0.24
P66	0.0205	0.0205	7.93E-04	0.0661	0.111
P66M	0.0335	0.0335	1.32E-03	0.11	0.185
P72	0.171	0.171	0	0	0
P72M	0.286	0.286	0	0	0
R01	0.35	0.35	0	0	0
R01M	0.35	0.35	0	0	0
R02	5.58E-03	5.58E-03	4.40E-04	0.0367	0.0617
R02M	9.30E-03	9.30E-03	7.34E-04	0.0612	0.103
R03	5.58E-03	5.58E-03	4.40E-04	0.0367	0.0617
R03M	9.30E-03	9.30E-03	7.34E-04	0.0612	0.103
R04	5.58E-03	5.58E-03	4.40E-04	0.0367	0.0617
R04M	9.30E-03	9.30E-03	7.34E-04	0.0612	0.103
R05	5.58E-03	5.58E-03	4.40E-04	0.0367	0.0617
R05M	9.30E-03	9.30E-03	7.34E-04	0.0612	0.103
R08	0.0122	0.0122	9.67E-04	0.0806	0.135
R08M	0.0204	0.0204	1.61E-03	0.134	0.226
R09	0.0126	0.0126	9.98E-04	0.0831	0.14
R09M	0.0211	0.0211	1.66E-03	0.139	0.233
R10	0.0101	0.0101	8.01E-04	0.0667	0.112
R10M	0.0169	0.0169	1.33E-03	0.111	0.187
R11	0.0116	0.0116	9.19E-04	0.0766	0.129
R11M	0.0194	0.0194	1.53E-03	0.128	0.215

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SOURCE ID	TSP (LBS/HR)	PM₁₀ (LBS/HR)	SO₂ (LBS/HR)	NO₂ (LBS/HR)	CO (LBS/HR)
R12	0.0143	0.0143	1.13E-03	0.0941	0.158
R12M	0.0238	0.0238	1.88E-03	0.157	0.263
R14	2.40E-03	2.40E-03	1.89E-04	0.0158	0.0265
R14M	4.00E-03	4.00E-03	3.16E-04	0.0263	0.0442
R15	2.40E-03	2.40E-03	1.89E-04	0.0158	0.0265
R15M	4.00E-03	4.00E-03	3.16E-04	0.0263	0.0442
R17	0.0138	0.0138	1.09E-03	0.091	0.153
R17M	0.0231	0.0231	1.82E-03	0.152	0.255
R18	0.0143	0.0143	1.13E-03	0.0938	0.158
R18M	0.0238	0.0238	1.88E-03	0.156	0.263
R19	0.0109	0.0109	8.59E-04	0.0716	0.12
R19M	0.0181	0.0181	1.43E-03	0.119	0.2
R21	2.40E-03	2.40E-03	1.89E-04	0.0158	0.0265
R21M	4.00E-03	4.00E-03	3.16E-04	0.0263	0.0442
R22	2.40E-03	2.40E-03	1.89E-04	0.0158	0.0265
R22M	4.00E-03	4.00E-03	3.16E-04	0.0263	0.0442
R24	0.0139	0.0139	1.10E-03	0.0917	0.154
R24M	0.0232	0.0232	1.83E-03	0.153	0.257
R25	8.23E-03	8.23E-03	6.50E-04	0.0541	0.0909
R25M	0.0137	0.0137	1.08E-03	0.0902	0.152
R26	5.67E-03	5.67E-03	4.48E-04	0.0373	0.0627
R26M	9.45E-03	9.45E-03	7.46E-04	0.0622	0.104
R27	6.50E-03	6.50E-03	5.13E-04	0.0428	0.0719
R27M	0.0108	0.0108	8.56E-04	0.0713	0.12
R28	0.0116	0.0116	9.17E-04	0.0765	0.128
R28M	0.0194	0.0194	1.53E-03	0.127	0.214
R30	2.25E-03	2.25E-03	1.78E-04	0.0148	0.0249

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SOURCE ID	TSP (LBS/HR)	PM₁₀ (LBS/HR)	SO₂ (LBS/HR)	NO₂ (LBS/HR)	CO (LBS/HR)
R30M	3.75E-03	3.75E-03	2.96E-04	0.0247	0.0415
R31	2.25E-03	2.25E-03	1.78E-04	0.0148	0.0249
R31M	3.75E-03	3.75E-03	2.96E-04	0.0247	0.0415
R33	0.0125	0.0125	9.87E-04	0.0823	0.138
R33M	0.0208	0.0208	1.65E-03	0.137	0.23
R34	9.11E-03	9.11E-03	7.19E-04	0.06	0.101
R34M	0.0152	0.0152	1.20E-03	0.0999	0.168
R35	4.93E-03	4.93E-03	3.90E-04	0.0325	0.0545
R35M	8.22E-03	8.22E-03	6.49E-04	0.0541	0.0909
R36	6.13E-03	6.13E-03	4.84E-04	0.0404	0.0678
R36M	0.0102	0.0102	8.07E-04	0.0673	0.113
R37	0.0117	0.0117	9.25E-04	0.0771	0.129
R37M	0.0195	0.0195	1.54E-03	0.128	0.216
R39	2.25E-03	2.25E-03	1.78E-04	0.0148	0.0249
R39M	3.75E-03	3.75E-03	2.96E-04	0.0247	0.0415
R40	2.25E-03	2.25E-03	1.78E-04	0.0148	0.0249
R40M	3.75E-03	3.75E-03	2.96E-04	0.0247	0.0415
RTO	1.07	1.07	0.0241	2.01	3.38
RTOM	2.23	2.23	0.0532	4.43	7.44
S1	0.0761	0.0761	0	0	0
S1M	0.122	0.122	0	0	0
S2	0.0761	0.0761	0	0	0
S2M	0.122	0.122	0	0	0
S4	3.46E-03	3.46E-03	0	0	0
S4M	4.78E-03	4.78E-03	0	0	0
S5	3.46E-03	3.46E-03	0	0	0
S5M	4.78E-03	4.78E-03	0	0	0

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SOURCE ID	TSP (LBS/HR)	PM₁₀ (LBS/HR)	SO₂ (LBS/HR)	NO₂ (LBS/HR)	CO (LBS/HR)
S7	0.0102	0.0102	0	0	0
S7M	0.0170	0.0170	0	0	0
S8	0.0102	0.0102	0	0	0
S8M	0.0170	0.0170	0	0	0
S10	6.34E-03	6.34E-03	0	0	0
S10M	0.0106	0.0106	0	0	0
S11	6.34E-03	6.34E-03	0	0	0
S11M	0.0106	0.0106	0	0	0
TRANSPA C	0.0378	0.0378	2.98E-03	0.249	0.418
U1	1.7	1.7	1.08	6.74	17.8
U1M	2.47	2.47	1.55	10.5	26.4
U2	1.7	1.7	1.08	6.74	17.8
U2M	2.47	2.47	1.55	10.5	26.4
U3	1.7	1.7	1.08	6.74	17.8
U3M	2.47	2.47	1.55	10.5	26.4
U4	1.7	1.7	1.08	6.74	17.8
U4M	2.47	2.47	1.55	10.5	26.4
U5	0.909	0.909	1.54	3.66	2.49
U5M	1.25	1.25	1.71	5.77	6.12
U6	0.909	0.909	1.54	3.66	2.49
U6M	1.25	1.25	1.71	5.77	6.12
U7	0.909	0.909	1.54	3.66	2.49
U7M	1.25	1.25	1.71	5.77	6.12
IP05	0.0254	0.0254	0	0	0
IP05M	0.0422	0.0422	0	0	0
IP07	0.1	0.1	0	0	0
IP07M	0.167	0.167	0	0	0

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SOURCE ID	TSP (LBS/HR)	PM₁₀ (LBS/HR)	SO₂ (LBS/HR)	NO₂ (LBS/HR)	CO (LBS/HR)
OB1	8.85E-03	8.85E-03	6.99E-04	0.0583	0.0979
OB1M	0.0148	0.0148	1.17E-03	0.0971	0.163
PCL53	0.279	0.279	3.16E-03	0.263	0.442
PCL53M	0.429	0.429	6.19E-03	0.516	0.867
PCL51	0.269	0.269	3.16E-03	0.263	0.442
PCL51M	0.412	0.412	6.19E-03	0.516	0.867
RCL33	9.36E-03	9.36E-03	7.39E-04	0.0616	0.103
RCL33M	0.0135	0.0135	1.07E-03	0.089	0.15
RCL34	9.36E-03	9.36E-03	7.39E-04	0.0616	0.103
RCL34M	0.0135	0.0135	1.07E-03	0.089	0.15
RCL35	9.36E-03	9.36E-03	7.39E-04	0.0616	0.103
RCL35M	0.0135	0.0135	1.07E-03	0.089	0.15
RCL36	9.36E-03	9.36E-03	7.39E-04	0.0616	0.103
RCL36M	0.0135	0.0135	1.07E-03	0.089	0.15
RCL37	9.36E-04	9.36E-04	7.39E-04	0.0616	0.103
RCL37M	0.0135	0.0135	1.07E-03	0.089	0.15
RCL39	0.0148	0.0148	1.17E-03	0.0974	0.164
RCL39M	3.75E-03	3.75E-03	2.96E-04	0.0247	0.0415
P15 (PP)	0.0702	0.0702	0	0	0
P15 (PP2)	0.134	0.134	0	0	0
P27 (PP)	0.361	0.361	1.70E-03	0.142	0.238
P30 (PP)	0.0161	0.0161	0	0	0
P35 (PP)	0.0646	0.0646	5.10E-03	0.425	0.714
P50 (PP)	0.358	0.358	8.50E-04	0.0708	0.119
P53 (PP)	0.0108	0.0108	8.50E-04	0.0708	0.119
P26 (PP)	8.42E-03	8.42E-03	0	0	0
R24 (PP)	0.0646	0.0646	5.10E-03	0.425	0.714

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SOURCE ID	TSP (LBS/HR)	PM₁₀ (LBS/HR)	SO₂ (LBS/HR)	NO₂ (LBS/HR)	CO (LBS/HR)
R30 (PP)	0.0646	0.0646	5.10E-03	0.425	0.714
D1	0	0	0	0.0918	1.01
D1M	0	0	0	0.147	1.62
D3	0	0	0	0.0459	0.505
D3M	0	0	0	0.0734	0.808
D2	0	0	0	0.0765	0.841

The toxic air pollutants at the facility were modeled for operational flexibility using a worst-case scenario stack. Each stack was assumed to have an emission rate of 1 lb/hr; the stacks were modeled and the worst-case concentration was determined. The maximum concentration at 1 lb/hr was 12.131 $\mu\text{g}/\text{m}^3$ for stack P71; all air toxics were assumed to exit through stack P71. A maximum emission rate (MER) for each air toxic was then back calculated to determine the emission rate each pollutant would have and remain below the respective MAAC standard. The MER was calculated by dividing each respective MAAC standard by the worst-case concentration of 12.131 $\mu\text{g}/\text{m}^3$; maximum modeled concentrations were determined using the MER. These facility-wide emission rates are shown in the following table.

POLLUTANT	MAXIMUM FACILITY WIDE EMISSION RATE (LB/HR)
Antimony Compounds	0.206
Cobalt Compounds	0.0206
Ethyl Benzene	358.585
Formaldehyde	1.237
Manganese Compounds	2.061
Methyl Isobutyl Ketone	168.989
Xylene	358.585

Hexamethylene diisocyanate and nickel compounds were modeled individually because the calculated MER for those pollutants would result in a concentration higher than the MAAC Standard. These emission rates are shown in the following table.

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SOURCE ID	Hexamethylene Diisocyanate (LBS/HR)	Nickel Compounds (LBS/HR)
P22	4.00E-04	0
P22M	4.00E-04	0
P30	0.003	0
P30M	0.003	0
P66	0.0011	0
P66M	0.0011	0
S7	0.009	0
S7M	0.009	0
S8	0.009	0
S8M	0.009	0
S9	0.002	0
S9M	0.002	0
S10	0.0011	0
S10M	0.0011	0
S11	0.0011	0
S11M	0.0011	0
IP05	0.004	0
IP05M	0.004	0
IP06	4.00E-04	0
IP06M	4.00E-04	0
IP07	0.013	0
IP07M	0.013	0
IP08	0.001	0
IP08M	0.001	0
RTO	8.00E-04	0
RTOM	8.00E-04	0

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SOURCE ID	Hexamethylene Diisocyanate (LBS/HR)	Nickel Compounds (LBS/HR)
P13	0.0136	0
P13M	0.0136	0
P14	0.0136	0
P14M	0.0136	0
P57	0.0136	0
P57M	0.0136	0
P58	0.0136	0
P58M	0.0136	0
P59	0.0136	0
P59M	0.0136	0
P61	0.0136	0
P61M	0.0136	0
P06	0	0.009
P06M	0	0.009
P07	0	0.009
P07M	0	0.009
R01	0	0.058
R01M	0	0.058

AIR TOXIC EMISSION RATES			
Other TAPs	CAS	MAAC (µg/m³)	Max. Emission Rate to Pass Modeling (lb/hr)
Acrylic Acid	79-10-7	147.50	11.98
Ammonium Chloride	12125-02-9	250.00	20.31
Arsenic		1.00	0.08
Benzene	71-43-2	150.00	12.19
Bis-(2-Ethylhexyl) Phthalate	117817	25.00	2.03
Cadmium		0.25	0.02

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AIR TOXIC EMISSION RATES			
Other TAPs	CAS	MAAC (µg/m³)	Max. Emission Rate to Pass Modeling (lb/hr)
Chlorine	7782-50-5	75.00	6.09
Chromium (+6) Compounds		2.50	0.20
Cumene	98-82-8	9.00	0.73
Cyanide Compounds		TBD	TBD
Dibutylphthalate	84-74-2	25.00	2.03
Diethanolamine	111-42-2	129.00	10.48
EpoxyButane (1,2-)	106887	TBD	BD
Ethanethiol	75-08-1	10.00	0.81
Ethanolamine	141-43-5	200.00	16.25
Formic Acid	64-18-6	225.00	18.28
Hexane	110-54-3	200.00	16.25
Hydrochloric Acid	7647010	175.00	14.22
Hydroquinone	123-31-9	20.00	1.62
Lead (+2) Arsenate	7784409	0.75	0.06
Lead Arsenate	7645252	0.75	0.06
Mercury	7439-97-6	0.25	0.02
Methanol	67-56-1	1310.00	106.42
Methyl Chloroform	71-55-6	9550.00	775.79
Methyl Ethyl Ketone (2-Butone)	78-93-3	14750.00	1198.21
Methyl Methacrylate	80-62-6	10250.00	832.66
Methylene Biphenyl Isocyanate	101688	2.00	0.16
Methyl-T-Butyl Ether	1634-04-4	TBD	TBD
Mineral Oil Mist (Paraffinic)	8012951	25.00	2.03
Naphthalene	91-20-3	1250.00	101.54
Nickel		0.50	0.04
Nickel Oxide	1313991	5.00	0.41
Nitric Acid	7697-37-2	125.00	10.15
Octadecanoic Acid(N-)	57114	TBD	TBD
Phenol	108-95-2	190.00	15.43
Phosphoric Acid	7664-38-2	25.00	2.03
Phthalic Anhydride	85449	30.30	2.46
Sodium Hydroxide	1310-73-2	50.00	4.06
Styrene	100-42-5	5325.00	432.58
Sulfuric Acid	7664-93-9	10.00	0.81
Toluene	108-88-3	2000.00	162.47
Toluene Diisocyanate	584-84-9	0.40	0.03
Triethylamine	121-44-8	207.00	16.82
Trifluralin	1582098	TBD	TBD

BMW MANUFACTURING CORP.**2060-0230-CY****PAGE 1 OF 2****ATTACHMENT B****Insignificant Activities**

The following table contains a list of activities which are considered insignificant pursuant to South Carolina Regulation 61-62.70.5(c). Sources listed below are not exempt from any otherwise applicable state or federal requirements including, but not limited to, opacity standards, ambient air quality standards, and air toxic standards.

ID	General Description	Basis
SS	Stamping Operations	Emissions total to < 5 TPY of VOC
BB, BG	Body Shop Brazing Areas, Grinding Sanding Booths – Plant 10.1 and 10.2	Emissions total to < 5 TPY of PM and VOC
PC	Phosphate Cleaning Operations	Emissions total to < 5 TPY of PM
	Wet Sand, Sealer, Tack-off & Polish Operations	Emissions total to < 5 TPY of PM
PMR	Paint Mixing Operations	Emissions total to < 5 TPY of VOC
AB	Assembly Shops (Windshield Installation)	Emissions total to < 5 TPY of VOC
IP09	ICP Polishing	Emissions total to < 5 TPY of PM
TK-202	10,000 gallon Gasoline Storage Tank	Emissions total to < 5 TPY of
TK-203	10,000 gallon Differential Fluid Storage Tank	Emissions total to < 5 TPY of VOC
TK-204	2,000 gallon Power Steering Fluid Storage Tank	Insignificant Activity B.3
TK-206	5,000 gallon Brake Fluid Storage Tank	Insignificant Activity B.3
TK-209	10,000 gallon Gasoline Storage Tank	Emissions total to < 5 TPY of VOC
TK-210	20,000 Gasoline Storage Tank	Emissions total to < 5 TPY of VOC
TK-211	8,000 gallon Power Steering Storage Tank	Insignificant Activity B.3
TK-212	10,000 gallon Ethanol Storage Tank	Emissions total to < 5 TPY of VOC
TK-213	10,000 gallon Ethylene Glycol Storage tank	Emissions total to < 5 TPY of VOC
TK-214	10,000 gallon Diesel Storage Tank	Emissions total to < 5 TPY of VOC
TK-Exxsol	8,000 gallon Exxsol Storage Tank	Insignificant Activity B.3
TK-2-202	10,000 gallon Gasoline Storage Tank	Emissions total to < 5 TPY of VOC
TK-2-203	10,000 gallon Differential Fluid Storage Tank	Emissions total to < 5 TPY of VOC
TK-2-204	2,000 gallon Power Steering Fluid Storage Tank	Insignificant Activity B.3
TK-2-206	5,000 gallon Brake Fluid Storage Tank	Insignificant Activity B.3
TK-2-209	10,000 gallon Gasoline Storage Tank	Emissions total to < 5 TPY of VOC
TK-2-210	20,000 Gasoline Storage Tank	Emissions total to < 5 TPY of VOC
TK-2-211	8,000 gallon Power Steering Storage Tank	Insignificant Activity B.3
TK-2-212	10,000 gallon Ethanol Storage Tank	Emissions total to < 5 TPY of VOC

BMW MANUFACTURING CORP.**2060-0230-CY****PAGE 2 OF 2**

ID	General Description	Basis
TK-2-213	10,000 gallon Ethylene Glycol Storage tank	Emissions total to < 5 TPY of VOC
TK-2-214	10,000 gallon Diesel Storage Tank	Emissions total to < 5 TPY of VOC
TK-2-Exxsol	8,000 gallon Exxsol Storage Tank	Insignificant Activity B.3
EG	Emergency Generators	< 150 KW (Insignificant Activity B.2) or Operate < 250 hours/year
FF-1	Fluid Fill at 10.1	Emissions total to < 5 TPY of VOC
FF-2	Fluid Fill at 10.2	Emissions total to < 5 TPY of VOC

February 14, 2002

BMW Manufacturing Corp.
P.O. Box 11000
Spartanburg, South Carolina 29304-4100

ATTENTION: Gary Weinreich

Dear Mr. Weinreich:

Your permit application has been reviewed by our technical staff. Enclosed is Construction Permit No. 2060-0230-CY. Please note the conditions on this permit by reading it carefully. In order to comply with the Department regulation 61-72, this construction permit is not effective until 15 calendar days after the date of issue listed on the permit.

In addition to this permit to construct, a permit to operate is required in accordance with the Air Pollution Control Regulations and Standards for the State of South Carolina. The regulations require a written request to obtain an operating permit be submitted to this Department no later than 15 days prior to placing the new, increased, or altered source in operation.

Please examine this new permit carefully for errors or omissions and notify the appropriate staff member, Kevin J. Clark, of this office at (803) 898-4074 or clarkkj@columb31.dhec.state.sc.us within 15 days of receipt of this letter.

Sincerely,

Carl W. Richardson, P.E., Director
Engineering Services Division
Bureau of Air Quality

CWR:KJC:pe

Enclosure

cc: Ron Garrett, Appalachia III District EQC Office
Permit File: 2060-0230
Main File: 2060-0230