



Company Name:	BMW Performance Center	Permit Writer:	Amanda N. Cruley
Agency Air Number:	2060-0321	Date:	DRAFT
Permit Number:	TV-2060-0321 v2.0		

DATE APPLICATION RECEIVED: March 13, 2024
DATE OF LAST INSPECTION: March 12, 2024
 No violations were observed.

PROJECT DESCRIPTION

Issuance of a renewal of the facility's Title V operating permit. The facility currently operates under a Title V operating permit issued on August 28, 2019, that expired on September 30, 2024. The renewal application was received on March 13, 2024. The facility is covered under an application shield.

FACILITY DESCRIPTION

SIC CODE: 5012 (Automobiles and Other Motor Vehicles)
 NAICS CODE: 423110 (Automobile and Other Motor Vehicle Merchant Wholesalers)

The BMW PC includes the following types of operations:

- Technical and operational training classrooms with attached workshops to demonstrate vehicle features and repairs;
- Paint and Body shop to provide hands-on training and repair of fleet vehicles;
- Above ground storage tanks (4 total) for fueling training and delivery needs;
- A Driving School including a driver training road course; and,
- A Customer Delivery Center

SINGLE SOURCE DETERMINATION

The facility is considered a single source with BMW Manufacturing Co. LLC (Plant Spartanburg) (2060-0230) for Title III only (see determination from statement of basis dated August 28, 2019).

CHANGES DURING THE RENEWAL

During the renewal, the facility corrected the maximum throughput from 2 cars per day to 6 cars per day which led to an increase in VOCs, particulate matter, and HAP emissions.

EMISSIONS

BMW calculates emissions from painting using an operating schedule of 11 hours a day, 23 days a month. This is based on historical operating data as well as the facility operations being closer to a mechanic shop with regular hours, not a manufacturing facility. This approach has previously been reviewed and determined to be appropriate for this operation. Emissions from painting are calculated using the HAP and VOC concentrations from the paint and the % non-volatile for particulate matter emissions.

Emissions from all fuel burning operations are calculated at 8760 hours. Emissions factors are from AP-42, Chapter 1, Section 1.4, Tables 1, 2, 3, and 4.

In the SOB for the previous Title V renewal, the emissions for NOx and SO₂ were swapped leading to the appearance of an increase in NOx and a decrease in SO₂. Lead was also quantified incorrectly.



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FACILITY WIDE EMISSIONS			
Pollutant	Uncontrolled	Controlled	PTE
	TPY	TPY	TPY
PM (filterable)	5.04	0.121	5.04
PM ₁₀	5.1	0.183	5.1
PM _{2.5}	5.1	0.183	5.1
SO ₂	0.007	--	0.007
NO _x	1.09	--	1.09
CO	0.91	--	0.91
VOC	8.78	--	8.78
Xylene (H, T, V)	2.77	--	2.77
Toluene (H, T, V)	1.64	--	1.64
Ethylbenzene (H, T, V)	0.79	--	0.79
Phthalates*	0.83	--	0.83
Total HAPs**	6.44	--	6.44

* Phthalates are a family of compounds. Classification depends on the specific chemical used.

** Only HAPs with a PTE of over 0.1 tpy are speciated in the table. For a complete list of HAPs, see the application.

Aggregated EMISSIONS			
Pollutant	Uncontrolled	Controlled	PTE
	TPY	TPY	TPY
Formaldehyde (H, T, V)	1.97	--	1.97
Hexane (H, T, V)	10.7	--	10.7
Hydrochloric Acid (H, T)	3.42	--	3.42
Total Painting HAPs* (H, T, V)	18,685	940.7	940.7
Phthalates**	0.83	--	0.83
Total HAP***	18,661	956.79	956.79

BMW Manufacturing Emissions are taken from the August 2011 Permit Renewal Application.

* BMW set the controlled equal to the allowable under 40 CFR 63 Subpart IIII and back calculated the uncontrolled assuming a 95% control efficiency (minimum required for the RTO). They have been combined with the speciated painting HAPs from the Performance Center. Controlled is equal to the PTE due to requirements of Subpart IIII.

** Phthalates are a family of compounds. Classification depends on the specific compound used.

*** HAPs with a PTE of over 0.5 tpy are quantified in the table above. For a complete list, see the application.

SPECIAL CONDITIONS, MONITORING, LIMITS

BMW may maintain required records for the Performance Center at BMW Manufacturing - Plant Spartanburg or the BMW Training Center. The facility will still be required to make the records available upon request.

REGULATIONS

Not Applicable - Section II(E) (Synthetic Minor)

The facility has not requested any limits.



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Applicable - Standard No. 1 (Emissions from Fuel Burning Operations)

The burners are subject to a 20% opacity limit.

ID	PM Allowable (lb/hr)	SO ₂ Allowable (lb/hr)	Uncontrolled Emissions		Controlled Emissions	
			PM (lb/hr)	SO ₂ (lb/hr)	PM (lb/hr)	SO ₂ (lb/hr)
IA-PC-01	0.76 (each)	2.91 (each)	4.81E-3 (total)	1.49E-3 (total)	--	--

Not Applicable - Standard No. 3 (state only) (Waste Combustion and Reduction)

The facility does not combust waste.

Applicable - Standard No. 4 (Emissions from Process Industries)

Section IX: The paint booths are subject to a 20% opacity limit.

Process	Max Process Weight Rate (tons/hr)	PM Allowable at Max (lb/hr)	Uncontrolled Emissions PM (lb/hr)	Controlled Emissions PM (lb/hr)	Monitoring
IA-PC-02	0.25	1.62	3.2	0.064	Weekly checks of the paint booth filters

Not Applicable - Standard No. 5 (Volatile Organic Compounds)

The facility was not in operation in 1979 or 1980.

Not Applicable - Standard No. 5.2 (Control of Oxides of Nitrogen (NOx))

The burners are exempt due to having a PTE for NOx of below 5 tpy.

Not Applicable - Standard No. 7 (Prevention of Significant Deterioration)

The facility is not a single source for PSD purposes with the Manufacturing Center. Aggregated emissions calculations only apply to HAPs. The facility is not part of a 28 source category and does not have a PTE over 250.0 tpy for any criteria pollutant.

Applicable - 61-62.6 (Control of Fugitive Particulate Matter)

The facility is subject to the statewide requirements of Section III.

40 CFR 60 and 61-62.60 (New Source Performance Standards (NSPS))

Not Applicable - Subpart MM (Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations for which Construction, Modification or Reconstruction Commenced After October 5, 1979, and On or Before May 18, 2022) - This subpart applies to automobile assembly plants. As the Performance Center does not assemble vehicles, they are exempt from this subpart.

40 CFR 61 and 61-62.61 (National Emission Standards for Hazardous Air Pollutants (NESHAP))

Not Applicable - This facility does not emit the pollutants in a way that is subject to this standard (asbestos, benzene, beryllium, coke oven emissions, arsenic, mercury, radio nuclide, radon, or vinyl chloride).



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40 CFR 63 and 61-62.63 (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories)

(technically) **Applicable - Subpart MMMM** (*National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*) – The painting operations are technically subject to this regulation. However, 40 CFR 63 Subpart IIII is the applicable MACT for the manufacturing center. Subpart IIII states that operations typically subject to MMMM can instead be regulated under IIII as part of the affected source (§ 63.3082(c)). Using this, BMW submitted a notification asking to incorporate the painting operations under IIII; which was approved.

Applicable - Subpart IIII (*National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks*) – As discussed above, the facility has decided to include the painting operations under this regulation. The facility uses compliant coatings and has a work practice plan to minimize emissions.

Not Applicable - 61-62.68 (Chemical Accident Prevention Provisions)

The facility does not use or store subject materials above threshold values.

Not Applicable - 40 CFR 64 (Compliance Assurance Monitoring)

This facility is Title V due to being a single source under Title III. However, the facility itself does not have emissions above major source thresholds.

AMBIENT AIR STANDARDS REVIEW

Not Applicable - Standard No. 2 (Ambient Air Quality Standards)

All criteria pollutants subject to modeling are below exemption levels. VOCs are not required to be modeled.

Not Applicable - Standard No. 8 (state only) (Toxic Air Pollutants)

Painting operations are subject to 40 CFR 63 Subpart MMMM (compliance demonstrated through complying with Subpart IIII) and are therefore exempt from modeling. The burners combust natural gas which is not required to be modeled for HAPs or TAPs.

PERIODIC MONITORING					
ID	Regulatory Requirement	Measured Parameter	Required Monitoring Frequency	Reporting Frequency	Monitoring Basis/ Justification
IA-PC-01	Standard 1	None	None	None	Use of natural gas will ensure compliance with all Standard 1 limits.



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ID	Regulatory Requirement	Measured Parameter	Required Monitoring Frequency	Reporting Frequency	Monitoring Basis/ Justification
IA-PC-02	Standard 4, Section VIII	Presence of filters	Weekly	Semiannual	Uncontrolled emissions are close to the allowable so weekly inspections are sufficient to ensure compliance with the limits
IA-PC-02	Standard 4, Section IX	Opacity	Semiannual	Semiannual	Minimal opacity expected with the paint filters as a control device

PUBLIC NOTICE

This Title V Permit will undergo a 30-day public notice period and a 45-day EPA comment period in accordance with SC Regulation 61-62.1, Section II(N) and SC Regulation 61-62.70.7(h).

SUMMARY AND CONCLUSIONS

It has been determined that this source, if operated in accordance with the submitted application, will meet all applicable requirements and emission standards.