

**Statement of Basis**  
**Automotive Coating Operations General Permit**

**Permit to Construct P-2020.0009**  
**Project No. 62399**

**JSR Hefner Corp. dba Ruben's Body Shop**  
**City, Idaho**

**Facility ID No. 027-00181**

**Proposed for Public Comment/Final**

**February 27, 2020**  
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The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01. et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

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## ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AQCR	Air Quality Control Region
Btu	British thermal units
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
HAP	hazardous air pollutants
HVLP	high volume, low pressure (applies to paint guns)
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pounds per hour
MMBtu	million British thermal units
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standards
PM <sub>2.5</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PTC	permit to construct
PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
SDS	Safety Data Sheet
SM80	synthetic minor facility with emissions greater than or equal to 80% of a major source threshold
SO <sub>2</sub>	sulfur dioxide
T/yr	tons per consecutive 12-calendar month period
TAP	toxic air pollutants
VOC	volatile organic compounds

## **FACILITY INFORMATION**

### ***Description***

JSR Hefner Corp. dba Ruben's Body Shop is an auto body repair and refinishing facility with paint spray booths which are each equipped with a paint booth heater. The paint booths are pressurized downdraft booths with dry fiber filtration media for control of particulate emissions. Drying and paint curing is done in the paint booths. The booths are each equipped with a natural gas-fired burner to heat the paint booths. The process includes application of coatings via a HVLP (or equivalent) paint gun. In this case "or equivalent" means a paint gun that has a minimum 65% transfer efficiency as documented by the spray gun manufacturer.

### ***Permitting History***

This is the initial PTC for an existing facility that was constructed in February 2019 thus there is no permitting history.

### ***Application Scope***

This is the initial PTC for an existing facility that was constructed in February 2019.

### ***Application Chronology***

March 3, 2020	DEQ received an application and an application fee and the processing fee.
March 10 – March 25, 2020	DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.
March 6, 2020	DEQ determined that the application was complete.
March 12, 2020	DEQ made available the draft permit and statement of basis for peer review.
March 27, 2020	DEQ issued the final permit and statement of basis.

## **TECHNICAL ANALYSIS**

The facility utilizes dry fiber filtration media for control of particulate matter emissions from the automotive coating operation. In addition, HVLP paint guns (or equivalent) are used to minimize particulate matter and VOC emissions from painting. The HVLP (or equivalent) spray equipment will control all particulate matter and VOC emissions by having more paint transfer to the desired surfaces than traditional painting equipment.

## Emissions Units and Control Devices

Table 1 EMISSIONS UNIT AND CONTROL DEVICE INFORMATION

ID No.	Source Description	Control Equipment Description	Emissions Point ID No. and Description
Automotive Coating Operation	<p><u>Two Paint spray booth(s):</u></p> <p>Manufacturer(s): Nova Verta or equivalent Model(s): Super Prestige or equivalent Note: The number of booths installed at the facility is not limited by this permit.</p> <p><u>Two Paint booth heater(s):</u></p> <p><u>One heater for one spray booth</u></p> <p>Manufacturer(s): Nova Verta or equivalent Model(s): k40 or equivalent Total Heat input capacity(s): 10.0 MMBtu/hr Fuel: natural gas only</p>	<p><u>Paint spray booth(s) and/or preparation station filter system:</u> Booth Type(s): Down draft Particulate filtration method: Dry Filters Manufacturer(s): Air Filtration Co. or equivalent Model(s): PA/PG Series or equivalent PM/PM<sub>10</sub> Control Efficiency: 98.00% or greater</p> <p><u>Coating spray gun(s):</u> Manufacturer(s): Iwata or equivalent Model(s): LPH 400 or equivalent Type: HVLP or equivalent Transfer Efficiency: 65% or greater</p> <p>Manufacturer(s): Iwata or equivalent Model(s): WS 400 or equivalent Type: HVLP or equivalent Transfer Efficiency: 65% or greater</p> <p>Manufacturer(s): Iwata or equivalent Model(s): INTECH or equivalent Type: HVLP or equivalent Transfer Efficiency: 65% or greater</p> <p>Manufacturer(s): Iwata or equivalent Model(s): 5000 or equivalent Type: HVLP or equivalent Transfer Efficiency: 65% or greater</p>	Two paint booth exhaust stacks

## Emissions Inventories

### Potential to Emit

IDAPA 58.01.01.006 defines Potential to Emit as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state or federally enforceable. Secondary emissions do not count in determining the potential to emit of a facility or stationary source.

Using this definition of Potential to Emit an emission inventory was developed for the automotive coating operation associated with this proposed project (see Appendix A for detailed potential to emit calculations). Criteria pollutant and HAPs PTE were based on the worst-case VOC, particulate matter, and HAPs content for coatings as taken from the DEQ Automotive Coating EI spreadsheet (see the DEQ website).

### Uncontrolled Potential to Emit

Using the definition of Potential to Emit, uncontrolled Potential to Emit is then defined as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall **not** be treated as part of its design **since** the limitation or the effect it would have on emissions **is not** state or federally enforceable.

The uncontrolled Potential to Emit is used to determine if a facility is a “Synthetic Minor” source of emissions. Synthetic Minor sources are facilities that have an uncontrolled Potential to Emit for criteria pollutants or HAPs above the applicable Major Source threshold without permit limits.

The following table presents the uncontrolled Potential to Emit for criteria pollutants as determined by DEQ staff. See Appendix A for a detailed presentation of the calculations and the assumptions used to determine emissions for each emissions unit. For this automotive coating operation uncontrolled Potential to Emit is based upon a worst-case for operation of the facility of 2,080 hrs/yr (8 hrs/day x 260 days/yr) with all coating operations occurring during this time. Since there is prep time (the time spent preparing the automobile for the application of coating) and paint drying time (the time the automobile spends in the booth with the burner operating to facilitate hardening of the coating) associated with applying coatings, this was considered to be the worst-case maximum for which emissions would occur.

**Table 2 UNCONTROLLED POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS**

Emissions Unit	PM <sub>10</sub> /PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC	Lead
	T/yr	T/yr	T/yr	T/yr	T/yr	lb/quarter
<b>Point Sources</b>						
Spray Paint Booth(s)	3.74	0.0	0.0	0.0	12.24	0.0
Paint Booth Heater(s)	0.079	0.03	1.77	0.88	0.06	0.0120
<b>Total, Point Sources</b>	<b>3.82</b>	<b>0.03</b>	<b>1.77</b>	<b>0.88</b>	<b>12.30</b>	<b>0.01</b>

The following table presents the uncontrolled Potential to Emit for HAP pollutants as determined by DEQ staff. The table only lists those individual HAPs that are emitted in the greatest quantities; see Appendix A for a complete listing of all HAPs emitted. For this automotive coating operation uncontrolled HAP emissions were calculated by using the DEQ Automotive Coating EI spreadsheet (see the DEQ website) and setting paint use to 4.0 gallons per day (as limited by the permit). Then, the worst-case maximum HAPs Potential to Emit was determined for all paints listed in the spreadsheet. As discussed previously, HAP emissions were assumed to occur during the worst-case for operation of the facility of 2,080 hrs/yr.

**Table 3 UNCONTROLLED POTENTIAL TO EMIT FOR HAPs<sup>a)</sup>**

HAP Pollutants	PTE (T/yr)
Ethyl benzene	0.61
Methyl Isobutyl Ketone (MIBK)	1.26
Naphthalene	2.34
Toluene	1.92
Styrene	2.51
Xylene (o-, m-, p-isomers)	2.22
<b>Total</b>	<b>11.95</b>

a) The table does not list all individual HAPs, however the total PTE value reflects all HAPs.

### **Pre-Project Potential to Emit**

Pre-project Potential to Emit is used to establish the change in emissions at a facility as a result of this project.

This is an existing facility. However, since this is the first time the facility is receiving a permit, pre-project emissions are set to zero for all criteria pollutants.

### **Post Project Potential to Emit**

Post project Potential to Emit is used to establish the change in emissions at a facility and to determine the facility’s classification as a result of this project. Post project Potential to Emit includes all permit limits resulting from this project.

The following table presents the post project Potential to Emit for criteria pollutants from all emissions units at the facility as determined by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

**Table 4 POST PROJECT POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS**

Emissions Unit	PM <sub>10</sub> /PM <sub>2.5</sub>		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC		Lead	
	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr	T/yr
<b>Point Sources</b>												
Paint spray booth(s)	0.02	0.07	0.00	0.00	0.00	0.00	0.00	0.00	2.79	12.24	0.00	0.00
Paint booth heater(s)	0.08	0.08	0.01	0.03	1.70	1.77	0.84	0.88	0.06	0.06	0.000005	0.000006
<b>Post-Project Totals</b>	<b>0.10</b>	<b>0.15</b>	<b>0.01</b>	<b>0.03</b>	<b>1.70</b>	<b>1.77</b>	<b>0.84</b>	<b>0.88</b>	<b>2.85</b>	<b>12.30</b>	<b>0.000005</b>	<b>0.000006</b>

- a) Controlled average emission rate in pounds per hour is a daily average, based on the proposed daily operating schedule and daily limits.
- b) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

The following table presents the post project Potential to Emit for HAP pollutants from all emissions units at the facility as determined by DEQ staff. The table only lists those individual HAPs that are emitted in the greatest quantities; see Appendix A for a complete listing of all HAPs.

**Table 5 POST PROJECT POTENTIAL TO EMIT FOR HAPs<sup>(a)</sup>**

HAP Pollutants	PTE (T/yr)
Ethyl benzene	0.61
Methyl Isobutyl Ketone (MIBK)	1.26
Naphthalene	2.34
Toluene	1.92
Styrene	2.51
Xylene (o-, m-, p-isomers)	2.22
<b>Total</b>	<b>11.95</b>

- a) The table does not list all individual HAPs, however the total PTE value reflects all HAPs.

**Change in Potential to Emit**

The project’s change in Potential to Emit is used to determine if a public comment period may be required or if emissions modeling may be required, and to determine the processing fee per IDAPA 58.01.01.225.

The following table presents the change in the Potential to Emit for criteria pollutants as a result of this project.

**Table 6 CHANGES IN POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS**

	PM <sub>10</sub> /PM <sub>2.5</sub>		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC		Lead	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
<b>Point Sources</b>												
Pre-Project Potential to Emit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Post Project Potential to Emit	0.09	0.15	0.01	0.03	1.70	1.77	0.84	0.88	2.85	12.30	0.00	0.00
<b>Changes in Potential to Emit</b>	<b>0.09</b>	<b>0.15</b>	<b>0.01</b>	<b>0.03</b>	<b>1.70</b>	<b>1.77</b>	<b>0.84</b>	<b>0.88</b>	<b>2.85</b>	<b>12.30</b>	<b>0.00</b>	<b>0.00</b>

**Non-Carcinogenic and Carcinogenic TAPs Potential to Emit**

Because of the daily coating material use limits imposed by DEQ, and agreed to by the facility in applying for this Automotive Coating “General Permit”, no ELs specified in IDAPA 58.01.01.585 or 586 are expected to be exceeded by the facility (see the DEQ Automotive Coating EI spreadsheet on the DEQ website).

## Ambient Air Quality Impact Analyses

Because of the daily coating material use limits imposed by DEQ, and agreed to by the facility in applying for this Automotive Coating “General Permit”, it needs to be determined if the PTE for the automotive coating operation exceeds the DEQ modeling guideline thresholds. The following table compares the post-project facility-wide annual emissions to the DEQ modeling guideline thresholds (per the State of Idaho Air Quality Modeling Guideline, September 2013).

**Table 7 PTE FOR CRITERIA POLLUTANTS COMPARED TO THE DEQ MODELING GUIDELINE THRESHOLDS**

Pollutant	PTE (T/yr)	DEQ Modeling Guideline Thresholds (T/yr)	Exceeds Modeling Guideline Threshold?
PM <sub>10</sub>	0.15	1.5	No
PM <sub>2.5</sub>	0.15	1.0	No
SO <sub>2</sub>	0.03	4.0	No
NO <sub>x</sub>	1.77	4.0	No
CO	0.88	10.0	No
Lead	0.00	0.06	No

Therefore, the installation of the new automotive coating operation does not require criteria pollutant modeling.

As presented previously in the DEQ Automotive Coatings EI Spreadsheet (see the DEQ website) there are no TAPs that required facility modeling for exceeding the pounds per hour screening levels provided in IDAPA 58.01.01.585 and .586. Therefore, the installation of a new automotive coating operation does not require TAPs modeling.

## REGULATORY ANALYSIS

### **Attainment Designation (40 CFR 81.313)**

JSR Hefner Corp. dba Ruben’s Body Shop is located in Canyon County, which is designated as attainment or unclassifiable for PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

### **Facility Classification AIRS/AFS**

As demonstrated in Table 2 the facility has an uncontrolled potential to emit for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC emissions are less than the Major Source thresholds of 100 T/yr for each pollutant. In addition, as demonstrated in Table 3 the facility has an uncontrolled potential for each HAP less than the Major Source threshold of 10 T/yr and for all HAPs combined less than the Major Source threshold of 25 T/yr. Therefore, this facility is classified as a natural minor source and is classified as a “B” source.

### **PTC Permit to Construct (IDAPA 58.01.01.201)**

IDAPA 58.01.01.201                      Permit to Construct Required

The PTC rules under IDAPA 58.01.01.201 require that “No owner or operator may commence construction or modification of any stationary source, facility, major facility, or major modification without first obtaining a permit to construct from the Department which satisfies the requirements of Sections 200 through 228 unless the source is exempted in any of Sections 220 through 223.” Therefore, DEQ staff analyzed the data from the permit application for the installation of this automotive coating operation to determine if it is exempt from obtaining a PTC according to Sections 220 through 223.

IDAPA 58.01.01.220

General Exemption Criteria for Permit to Construct Exemptions

In accordance with IDAPA 58.01.01.220.01.a, the maximum capacity of the source to emit an air pollutant under its physical and operational design without consideration of limitations on emissions such as air pollution control equipment, restrictions on hours of operation and restrictions on the type and amount of material combusted, stored, or processed shall not equal or exceed 100 tons/yr for all regulated air pollutants. As previously presented in Table 2, the proposed project results in uncontrolled potential emissions of less than 100 tons/yr for all regulated air pollutants. Therefore, the project meets the criteria set forth in Section 220 and may be exempt from PTC requirements. In addition, the criteria set forth in Section 221, 222, or 223 must be met to be exempt from PTC requirements.

IDAPA 58.01.01.221

Category I Exemption Criteria

In accordance with IDAPA 58.01.01.221.01, the maximum capacity of a source to emit an air pollutant under its physical and operational design considering limitations on emissions such as air pollution control equipment, restrictions on hours of operation and restrictions on the type and amount of material combusted, stored or processed shall be less than ten percent (10%) of the significant emission rates set out in the definition of significant at Section 006. The following table compares the post-project facility-wide annual PTE to 10% of the significance threshold listed in IDAPA 58.01.01.006 in order to determine if the project may qualify for a Category I exemption.

**Table 8 PTE FOR CRITERIA POLLUTANTS COMPARED TO THE SIGNIFICANCE THRESHOLDS**

Pollutant	PTE (T/yr)	10% of the Significance Threshold (T/yr)	Exceeds 10% of the Significance Threshold?
PM <sub>10</sub>	0.15	1.5	No
PM <sub>2.5</sub>	0.15	1.0	No
SO <sub>2</sub>	0.03	4.0	No
NO <sub>x</sub>	1.77	4.0	No
CO	0.88	10.0	No
VOC	12.30	4.0	Yes

The potential VOC emission rate of the proposed project is indicated in Table 10 above, which is above 10% of the significant emission rate listed in IDAPA 58.01.01.006. Therefore, the installation of a new automotive coating operation does not qualify for a Category I exemption.

**Tier II Operating Permit (IDAPA 58.01.01.401)**

IDAPA 58.01.01.401

Tier II Operating Permit

The application was submitted for a permit to construct (refer to the Permit to Construct section), and an optional Tier II operating permit has not been requested. Therefore, the procedures of IDAPA 58.01.01.400–410 were not applicable to this permitting action.

**Visible Emissions (IDAPA 58.01.01.625)**

IDAPA 58.01.01.625

Visible Emissions

The emissions from the automotive coating process are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Condition 6.

## **Rules for the Control of Odors (IDAPA 58.01.01.775-776)**

IDAPA 58.01.01.775-776 Rules for the Control of Odors

The facility is subject to the general restrictions for the control of odors from the facility. This requirement is assured by Permit Conditions 7 and 12.

## **Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)**

IDAPA 58.01.01.301 Requirement to Obtain Tier I Operating Permit

IDAPA 58.01.01.006 defines a Tier I source as “Any source located at a major facility as defined in Section 008.”

IDAPA 58.01.01.008 defines a Major Facility as either:

- For HAPS a facility with the potential to emit ten (10) tons per year (T/yr) or more of any hazardous air pollutant, other than radionuclides, or
- The facility emits or has the potential to emit twenty-five (25) T/yr or more of any combination of any hazardous air pollutants, other than radionuclides.

Or, for non-attainment areas:

- The facility is located in a “serious” particulate matter (PM<sub>10</sub>) nonattainment area and the facility has the potential to emit seventy (70) T/yr or more of PM<sub>10</sub>, or
- The facility is located in a “serious” carbon monoxide nonattainment area in which stationary sources are significant contributors to carbon monoxide levels and the facility has the potential to emit fifty (50) T/yr or more of carbon monoxide, or
- The facility is located in an ozone transport region established pursuant to 42 U.S.C. Section 7511c and the facility has the potential to emit fifty (50) T/yr or more of volatile organic compounds, or
- The facility is located in an ozone nonattainment area and, depending upon the classification of the nonattainment area, the facility has the potential to emit the following amounts of volatile organic compounds or oxides of nitrogen; provided that oxides of nitrogen shall not be included if the facility has been identified in accordance with 42 U.S.C. Section 7411a(f)(1) or (2) if the area is “marginal” or “moderate,” one hundred (100) T/yr or more, if the area is “serious,” fifty (50) T/yr or more, if the area is “severe,” twenty-five (25) T/yr or more, and if the area is “extreme,” ten (10) T/yr or more.
- The facility emits or has the potential to emit one hundred (100) T/yr or more of any regulated air pollutant. The fugitive emissions shall not be considered in determining whether the facility is major unless the facility is a “Designated Facility.”

Uncontrolled HAP emissions were calculated by using the DEQ Automotive Coating EI spreadsheet (see the DEQ website) and setting paint use to 4.0 gallons per day (as limited by the permit). Then worst-case HAP emissions were determined for all paints listed in the spreadsheet. Then emissions were assumed to occur 2,080 hours per year as a worst-case assumption.

As presented in Table 5 the PTE for each HAP is less than 10 T/yr and the PTE for all HAPs combined is less than 25 T/yr. Therefore, this facility is not a HAPs Major Source subject to Tier I permitting requirements.

As discussed previously JSR Hefner Corp. dba Ruben’s Body Shop is located in Canyon County (AQCR 64), which is designated as unclassifiable/attainment for PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, and Ozone for federal and state criteria air pollutants.

As presented in Table 4 the PTE for each criteria pollutant is less than 100 T/yr. Therefore, this facility is not a criteria pollutant Major Source subject to Tier I permitting requirements.

### **PSD Classification (40 CFR 52.21)**

40 CFR 52.21

Prevention of Significant Deterioration of Air Quality

The facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change at a stationary source, not otherwise qualifying under paragraph 40 CFR 52.21(b)(1) as a major stationary source, that would constitute a major stationary source by itself as defined in 40 CFR 52. Therefore, in accordance with 40 CFR 52.21(a)(2), the PSD requirements do not apply.

### **NSPS Applicability (40 CFR 60)**

The facility is not subject to any NSPS requirements.

### **NESHAP Applicability (40 CFR 61)**

The facility is not subject to any NESHAP requirements in 40 CFR 61.

### **MACT Applicability (40 CFR 63)**

40 CFR 63, Subpart HHHHHH

**National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources**

§ 63.11169

What is the purpose of this subpart?

In accordance with §63.11169, subpart HHHHHH establishes national emission standards for hazardous air pollutants (HAP) for area sources involved in auto body refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations.

§ 63.11170

Am I subject to this subpart?

In accordance with §63.11170(a), this automotive coating operation is subject to this subpart because the facility will be operated as an area source of HAP. The facility is a source of HAP that is not a major source of HAP, is not located at a major source, and is not part of a major source of HAP emissions. In addition, the facility will perform one or more activities listed in this section, including spray application of coatings, as defined in §63.11180, to motor vehicles and mobile equipment including operations that are located in stationary structures at fixed locations.

§ 63.11171

How do I know if my source is considered a new source or an existing source?

In accordance with §63.11171(b), the automotive coating operation is the collection of mixing rooms and equipment; spray booths, curing ovens, and associated equipment; spray guns and associated equipment; spray gun cleaning equipment; and equipment used for storage, handling, recovery, or recycling of cleaning solvent or waste paint. Paint stripping was not proposed as a business activity.

In accordance with §63.11171(c), this automotive coating operation is a new source because it will commence construction after September 17, 2007, by installing new paint stripping or surface coating equipment, and the new surface coating equipment will be used at a source that was not actively engaged in paint stripping and/or miscellaneous surface coating prior to September 17, 2007.

§ 63.11172

When do I have to comply with this subpart?

In accordance with §63.11172(a)(2), because the initial startup of the facility will occur after January 9, 2008, the compliance date is the date of initial startup of the automotive coating operation.

§ 63.11173

What are my general requirements for complying with this subpart?

Because the facility has not proposed paint-stripping activities, the requirements of §63.11173(a) through (f) are not applicable. Because the facility is an automotive coating operation, in accordance with §63.11173(e), the permittee must meet the requirements of paragraphs (e)(1) through (e)(5) of this section.



In accordance with §63.11177, because the permittee is the owner or operator of a surface coating operation, the permittee must keep the records specified in paragraphs (a) through (d) and (g) of this section. Because the permittee has not proposed to conduct paint stripping operations, the requirements of paragraphs (e) and (f) of this section are not applicable. Compliance with these requirements is assured by permit condition 17.

§ 63.11178 In what form and for how long must I keep my records?

In accordance with 40 CFR 63.11178(a) because the permittee is the owner or operator of an affected source, the permittee must maintain copies of the records specified in §63.11177 for a period of at least five years after the date of each record. Copies of records must be kept on site and in a printed or electronic form that is readily accessible for inspection for at least the first two years after their date, and may be kept off-site after that two year period. Compliance with these requirements is assured by permit condition 17.

§ 63.11179 Who implements and enforces this subpart?

In accordance with §63.11179(a), this subpart can be implemented and enforced by the U.S. Environmental Protection Agency (EPA), or a delegated authority. EPA has delegated authority to the State of Idaho. IDAPA 58.01.01.107.03.i incorporates by reference all Federal Clean Air Act requirements including 40 CFR 63, Subpart HHHHHH. Therefore, the requirements of this subpart have been placed in the permit.

§ 63.11180 What definitions do I need to know?

Terms used in this subpart are defined in accordance with §63.11180.

### ***Permit Conditions Review***

This section describes the permit conditions for this initial permit.

Permit Condition 1 establishes the permit to construct scope.

Permit Condition 2 provides a description of the purpose of the permit and the regulated sources, the process, and the control devices used at the facility.

Permit Condition 3 provides a process description of the facility.

Permit Condition 4 provides a description of the control devices used at the facility.

Permit Condition 5 establishes hourly and annual emissions limits for PM<sub>10</sub> and VOC emissions from the automotive coating operation.

As mentioned previously, Permit Condition 6 establishes a 20% opacity limit for the paint booth stacks, vents, or functionally equivalent openings associated with the automotive coating operation.

As mentioned previously, Permit Condition 7 establishes that the permittee shall not allow, suffer, cause, or permit the emission of odorous gasses, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

Permit Condition 8 establishes that only natural gas is allowed to be used as fuel in the paint booth heater as proposed by the applicant.

Permit Condition 9 establishes that the facility will not use MeCl to remove paint from vehicles at the facility. This was done because MeCl was not proposed to be used at this facility by the applicant and the emissions were not included in the DEQ Automotive Coating EI Spreadsheet (see the DEQ website). In addition, Subpart HHHHHH has additional requirements for facilities that use MeCl to remove paint as mentioned previously in the discussion of Subpart HHHHHH in the MACT Applicability Section.

Permit Condition 10 establishes a daily use limit for all coating materials used in the automotive coating process as proposed by the applicant. This limit was established because it was the easiest way for the applicant to demonstrate compliance with the PM<sub>10</sub> and VOC emissions limit specified in permit condition 5 and the TAPs emissions limits specified in the DEQ Automotive Coating EI Spreadsheet (see the DEQ website).

Permit Condition 11 establishes that the permittee conduct all automotive coating operations in the paint booth or preparation station with the filters in place, exhaust fan(s) operating, and door(s) or curtain(s) closed, that the operation shall use a HVLP spray gun, and that the permittee shall maintain and operate the paint booth and preparation station exhaust filter system in accordance with the manufacturer's specifications. This condition also defines what a booth and preparation station used for applying coating is.

Permit Condition 12 establishes that the permittee shall maintain records of all odor complaints received, perform appropriate corrective actions, and maintain records of corrective actions taken at the facility for the automotive coating process. This was required because automotive operation operations are expected to have odors that might be offensive to their immediate neighbors.

Permit Condition 13 establishes that the permittee shall maintain material purchase records and Safety Data Sheets (SDSs) for the automotive coating process. This condition was placed in the permit to ensure compliance with the Coating Materials Use Limit Permit Condition.

Permit Condition 14 establishes that the permittee shall maintain daily usage records of pre-treatment wash primer, primer, topcoat, clear coat, and thinner/reducer materials used for the automotive coating process. This condition was placed in the permit to ensure compliance with the Coating Materials Use Limit permit condition.

Permit Condition 15 establishes that the permittee shall maintain records as required by the General Provision recordkeeping requirements.

Permit Condition 16 establishes parameters that will allow the facility to comply with the general operating requirements of 40 CFR 63, Subpart HHHHHH – MACT Standards and Management Practices for Paint Stripping and Miscellaneous Coating Operations unless the facility is exempt from HHHHHH.

Permit Condition 17 establishes parameters that will allow the facility to comply with the monitoring and recordkeeping requirements of 40 CFR 63, Subpart HHHHHH – MACT Standards and Management Practices for Paint Stripping and Miscellaneous Coating Operations unless the facility is exempt from HHHHHH.

Permit Condition 18 establishes parameters that will allow the facility to comply with the initial notification and reporting requirements of 40 CFR 63, Subpart HHHHHH – MACT Standards and Management Practices for Paint Stripping and Miscellaneous Coating Operations unless the facility is exempt from HHHHHH.

Permit Condition 19 establishes parameters that will allow the facility to comply with the annual notification and reporting requirements of 40 CFR 63, Subpart HHHHHH – MACT Standards and Management Practices for Paint Stripping and Miscellaneous Coating Operations unless the facility is exempt from HHHHHH.

Permit Condition 20 establishes that the federal requirements of 40 CFR Part 63 are incorporated by reference into the requirements of this permit per current DEQ guidance.

## **PUBLIC REVIEW**

### ***Public Comment Opportunity***

An opportunity for public comment period on the application was provided in accordance with IDAPA 58.01.01.209.01.c or IDAPA 58.01.01.404.01.c. During this time, there was not a request for a public comment period on DEQ's proposed action. Refer to the chronology for public comment opportunity dates.

### ***Public Comment Period***

A public comment period was made available to the public in accordance with IDAPA 58.01.01.209.01.c. During this time, comments were not submitted in response to DEQ's proposed action. Refer to the chronology for public comment period dates.

## APPENDIX A – EMISSIONS INVENTORIES

**General PTC Emission Inventories for Automotive Coating Operations**  
**maximum emission estimates of all coatings analyzed and including booth heater emissions**

Criteria Air Pollutants	Booth Emissions	Heater Emissions	Combined Emissions	Booth Emissions	Heater Emissions	Combined Emissions	BRC Threshold		Below Threshold?
	lb/hr	lb/hr	lb/hr	T/yr	T/yr	T/yr			
NO <sub>2</sub>	0.000	1.700	1.700	0.00	1.77	1.77	4	T/yr	Yes
CO	0.000	0.840	0.840	0.00	0.88	0.88	10	T/yr	Yes
PM <sub>2.5</sub> /PM <sub>10</sub>	0.0171	0.0760	0.0931	0.0749	0.0791	0.1540	1	T/yr	Yes
SO <sub>x</sub>	0.000	0.006	0.006	0.00	0.03	0.03	4	T/yr	Yes
VOC	2.794	0.055	2.849	12.24	0.06	12.30	4	T/yr	No
Lead	0.E+00	5.E-06	5.E-06	0.E+00	6.E-06	6.E-06	0.06	T/yr	Yes
	lb/mo	lb/mo	lb/mo						
PM <sub>2.5</sub> / PM <sub>10</sub> (uncontrolled)	0.000	0.004	0.004						
	0.8550	0.0760	0.9310	3.7449	0.08	3.8240			

**Hazardous Air Pollutants (HAP) and Toxic Air Pollutants (TAP)**

	Booth Emissions	Heater Emissions	Combined Emissions	Combined Emissions	Modeling Threshold	Below Threshold?
	lb/hr	lb/hr	lb/hr	T/yr	EL (lb/hr)	
<b>Organic HAP PAH</b>						
2-Methylnaphthalene	0.00E+00	5.70E-08	5.70E-08	5.93E-08	9.10E-05	Yes
3-Methylchloranthrene	0.00E+00	4.27E-09	4.27E-09	4.44E-09	2.50E-06	Yes
Acenaphthene	0.00E+00	4.27E-09	4.27E-09	4.44E-09	9.10E-05	Yes
Acenaphthylene	0.00E+00	4.27E-09	4.27E-09	4.44E-09	9.10E-05	Yes
Anthracene	0.00E+00	5.70E-09	5.70E-09	5.93E-09	9.10E-05	Yes
Benzo(a)anthracene	0.00E+00	4.27E-09	4.27E-09	4.44E-09	See POM	
Benzo(a)pyrene	0.00E+00	2.85E-09	2.85E-09	2.96E-09	2.00E-06	See POM
Benzo(b)fluoranthene	0.00E+00	4.27E-09	4.27E-09	4.44E-09	See POM	
Benzo(g,h,i)perylene	0.00E+00	2.85E-09	2.85E-09	2.96E-09	9.10E-05	Yes
Benzo(k)fluoranthene	0.00E+00	4.27E-09	4.27E-09	4.44E-09	See POM	
Chrysene	0.00E+00	4.27E-09	4.27E-09	4.44E-09	See POM	
Dibenzo(a,h)anthracene	0.00E+00	2.85E-09	2.85E-09	2.96E-09	See POM	
7,12-Dimethylbenzo(a)anthracene	0.00E+00	1.60E-07	1.60E-07	1.66E-07	9.10E-05	Yes
Fluoranthene	0.00E+00	7.12E-09	7.12E-09	7.41E-09	9.10E-05	Yes
Fluorene	0.00E+00	6.65E-09	6.65E-09	6.91E-09	9.10E-05	Yes
Indeno(1,2,3-cd)pyrene	0.00E+00	4.27E-09	4.27E-09	4.44E-09	See POM	
Naphthalene	5.34E-01	1.45E-06	5.34E-01	2.34E+00	3.33E+00	Yes
Phenanthrene	0.00E+00	4.04E-08	4.04E-08	4.20E-08	9.10E-05	Yes
Pyrene	0.00E+00	1.19E-08	1.19E-08	1.23E-08	9.10E-05	Yes
Polycyclic Organic Matter (POM, 7-PAH)	0.00E+00	2.71E-08	2.71E-08	2.82E-08	2.00E-06	Yes
<b>Organic HAP Non-PAH</b>						
1,4-Dichlorobenzene	0.00E+00	2.85E-06	2.85E-06	2.96E-06	3.00E+01	Yes
Ethyl Benzene	1.40E-01	0.00E+00	1.40E-01	6.14E-01	2.90E+01	Yes
Hexamethylene Diisocyanate	2.00E-03	0.00E+00	2.00E-03	8.74E-03	2.00E-03	Yes
n-Hexane	4.00E-01	1.80E-02	4.18E-01	1.77E+00	1.20E+01	Yes
Hexane	3.72E-02	0.00E+00	3.72E-02	1.63E-01	1.73E+01	Yes
1-Methoxy-2-Propanol Acetate	3.21E-01	0.00E+00	3.21E-01	1.41E+00	2.40E+01	Yes
Methyl Chloroform	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E+02	Yes
Methyl Isobutyl Ketone	2.87E-01	0.00E+00	2.87E-01	1.26E+00	1.37E+01	Yes
Methyl Methacrylate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E+01	Yes
Phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E+00	Yes
Styrene	5.73E-01	0.00E+00	5.73E-01	2.51E+00	6.67E+00	Yes
Toluene	4.38E-01	3.40E-05	4.38E-01	1.92E+00	2.50E+01	Yes
Xylene	5.07E-01	0.00E+00	5.07E-01	2.22E+00	2.90E+01	Yes
<b>Organic Non-HAP</b>						
Acetone	5.58E-01	0.00E+00	5.58E-01	2.44E+00	1.19E+02	Yes
n-Amyl Acetate	1.66E-02	0.00E+00	1.66E-02	7.29E-02	3.53E+01	Yes
2-Butoxyethanol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.00E+00	Yes
Butyl Acetate	1.19E+00	0.00E+00	1.19E+00	5.21E+00	4.73E+01	Yes
Carbon Black	8.33E-04	0.00E+00	8.33E-04	3.65E-03	2.30E-01	Yes
Cyclohexane	1.29E-02	0.00E+00	1.29E-02	5.64E-02	7.00E+01	Yes
Cyclohexanone	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.67E+00	Yes
Diethyl Phthalate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-01	Yes
Dimethyl Phthalate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-01	Yes
Ethyl Alcohol	6.66E-02	0.00E+00	6.66E-02	2.92E-01	1.25E+02	Yes
Heptane	9.30E-02	0.00E+00	9.30E-02	4.07E-01	1.09E+02	Yes
Isobutanol	3.55E-01	0.00E+00	3.55E-01	1.56E+00	1.00E+01	Yes
Isobutyl Acetate	7.33E-02	0.00E+00	7.33E-02	3.21E-01	4.67E+01	Yes
Isobutyl Alcohol	3.55E-01	0.00E+00	3.55E-01	1.56E+00	1.00E+01	Yes
Isophorone Diisocyanate	2.50E-03	0.00E+00	2.50E-03	1.10E-02	6.00E-03	Yes
Isopropyl Alcohol (IPA)	6.63E-01	0.00E+00	6.63E-01	2.91E+00	6.53E+01	Yes
Isopropyl Acetate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E+01	Yes
Methyl Acetate	3.32E-01	0.00E+00	3.32E-01	1.45E+00	4.07E+01	Yes
Methyl Ethyl Ketone	2.76E-01	0.00E+00	2.76E-01	1.21E+00	3.93E+01	Yes
Methyl Isobutyl Ketone	1.02E-01	0.00E+00	1.02E-01	4.49E-01	1.60E+01	Yes
Methyl Isobutyl Carbonyl	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E+00	Yes
Methyl Propyl Ketone	1.58E-01	0.00E+00	1.58E-01	6.90E-01	4.67E+01	Yes
Propionic Acid	1.51E-02	0.00E+00	1.51E-02	6.61E-02	2.00E+00	Yes
Propyl Acetate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.60E+01	Yes
Propyl Alcohol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E+01	Yes
Trimethyl Benzene	1.88E-01	0.00E+00	1.88E-01	8.24E-01	8.20E+00	Yes
<b>Metal HAP</b>						
Antimony	1.86E-03	0.00E+00	1.86E-03	8.17E-03	3.30E-02	Yes
Arsenic	0.00E+00	4.75E-07	4.75E-07	4.94E-07	1.50E-06	Yes
Beryllium	0.00E+00	2.85E-08	2.85E-08	2.96E-08	2.80E-05	Yes
Calcium	0.00E+00	2.61E-06	2.61E-06	2.72E-06	3.70E-06	Yes
Chromium	5.63E-04	1.40E-05	5.77E-04	2.48E-03	3.30E-02	Yes
Cobalt	0.00E+00	8.40E-07	8.40E-07	8.74E-07	3.30E-03	Yes
Copper	0.00E+00	8.50E-06	8.50E-06	8.84E-06	1.30E-02	Yes
Iron Oxide Fume	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-01	Yes
Manganese	0.00E+00	3.80E-06	3.80E-06	3.95E-06	3.33E-01	Yes
Nickel	0.00E+00	4.99E-06	4.99E-06	5.19E-06	2.70E-05	Yes
Vanadium	0.00E+00	2.30E-05	2.30E-05	2.39E-05	3.00E-03	Yes
<b>Metal Non-HAP</b>						
Aluminum - Metal & Oxide	3.26E-03	0.00E+00	3.26E-03	1.43E-02	6.67E-01	Yes
Aluminum - Soluble Salts	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-01	Yes
Barium	2.17E-04	4.40E-05	2.61E-04	9.96E-04	3.30E-02	Yes
Molybdenum	0.00E+00	1.10E-05	1.10E-05	1.14E-05	3.33E-01	Yes
<b>Inorganic HAP</b>						
Selenium	0.00E+00	2.40E-07	2.40E-07	2.50E-07	1.30E-02	Yes
<b>Inorganic Non-HAP</b>						
Calcium Carbonate	1.30E-03	0.00E+00	1.30E-03	5.70E-03	6.67E-01	Yes
Kaolin	3.93E-03	0.00E+00	3.93E-03	1.72E-02	1.33E-01	Yes
Maonesite	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.67E-01	Yes
Mica	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-01	Yes
Silica - Amorphous	1.67E-03	0.00E+00	1.67E-03	7.30E-03	6.67E-01	Yes
Silica - Crystalline Cristobalite	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-03	Yes
Silica - Crystalline Quartz	2.35E-03	0.00E+00	2.35E-03	1.03E-02	6.70E-03	Yes
Zinc and Zinc Oxide Dust	0.00E+00	2.90E-04	2.90E-04	3.02E-04	6.67E-01	Yes
		HAP <sub>TOT</sub>	2.727	11.95		
		HAP <sub>MAX</sub>	0.574	2.52		

**TAP EL Modeling Threshold Multiple** 100% Level II / Level III

**Assumptions when estimating spray booth heater emissions:**

- Maximum gas-fired heater size 10.00 MMBtu/hr
- Maximum oil-fired heater size 0.00 MMBtu/hr
- Annual heater operation 2080 hr/yr
- Natural gas heat content 1,000 MMBtu/MMscf
- Natural gas sulfur content 15 air/100 ft<sup>3</sup> sulfur weight content
- Fuel type natural gas only
- Heaters single/maximum

**Assumptions when estimating spray booth emissions:**

- Maximum coating use rates 4.00 gal/day for all coatings (excluding "B" component)
- Averaging period 24 hr/day average
- Annual booth operation 8,760 hr/yr
- Safety factor 1.20 allowance for coatings not analyzed
- Transfer efficiency 65% control for particulates
- Filter removal efficiency 98% control for particulates
- Isocyanate reaction factor 85% control for isocyanates (not applied to MDI)
- Maximum coating density 16.76 lb/gal
- % of monomer in mixture 1% for diisocyanates in hardener mixture
- If no % of TAP was listed in the MSDS, then 1.0% was assumed