Statement of Basis
Automotive Coating Operations General Permit

Final

Coachman Auto Body

Coeur D'Alene, Idaho
Facility ID No. 055-00083
Permit to Construct No. P-2010.0087

September 9, 2010
Darrin Pampaian, P.E.
Permit Writer

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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APPENDIX A – EMISSIONS INVENTORIES
ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AQCR      Air Quality Control Region
Btu       British thermal units
CAS No.   Chemical Abstracts Service registry number
CE        Control Efficiency
CFR       Code of Federal Regulations
CO        carbon monoxide
DEQ       Department of Environmental Quality
EL        screening emission levels
EPA       U.S. Environmental Protection Agency
gal/day   gallons per calendar day
gal/hr    gallons per hour
gal/yr    gallons per consecutive 12 calendar month period
gr        grain (1 lb = 7,000 grains)
HAP       hazardous air pollutants
hr/yr     hours per year
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/gal    pounds per gallon
lb/hr     pounds per hour
LPG       Liquefied Petroleum Gas
MMBtu     million British thermal units
MSDS      Material Safety Data Sheet
NAICS     North American Industry Classification System
NESHAP    National Emission Standards for Hazardous Air Pollutants
NO₂       nitrogen dioxide
NOₓ       nitrogen oxides
NSPS      New Source Performance Standards
PC        permit condition
PM₁₀      particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm       parts per million
PTC       permit to construct
PTE       potential to emit
Rules     Rules for the Control of Air Pollution in Idaho
scf       standard cubic feet
SIC       Standard Industrial Classification
SM80      synthetic minor facility with emissions greater than or equal to 80% of a major source threshold
SO₂       sulfur dioxide
SOₓ       sulfur oxides
T/yr      tons per consecutive 12-calendar month period
T2        Tier II operating permit
TAP       toxic air pollutants
TE        Transfer Efficiency
UTM       Universal Transverse Mercator
VOC       volatile organic compounds
FACILITY INFORMATION

Description
Coachman Auto Body is an auto body repair and refinishing facility with paint spray booth(s) which is equipped with a paint booth heater. The paint booth(s) is a pressurized downdraft booth(s) with glass fiber filtration media for control of particulate emissions. Drying and paint curing is done in the paint booth(s). The booth(s) is equipped with a natural gas-fired burner to heat the paint booth. The process includes application of coatings via a HVLP (or equivalent) paint gun.

Permitting History
This is the initial PTC for an existing facility that was constructed in 1996 thus there is no permitting history.

Application Scope
This is the initial PTC for an existing facility that was constructed in 1996.

Application Chronology

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 29, 2010</td>
<td>DEQ received an application and an application fee and the processing fee.</td>
</tr>
<tr>
<td>August 12 – August 27, 2010</td>
<td>DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.</td>
</tr>
<tr>
<td>August 18, 2010</td>
<td>DEQ determined that the application was complete.</td>
</tr>
<tr>
<td>September 1, 2010</td>
<td>DEQ made available the draft permit and statement of basis for peer and regional office review.</td>
</tr>
<tr>
<td>September 9, 2010</td>
<td>DEQ issued the final permit and statement of basis.</td>
</tr>
</tbody>
</table>
TECHNICAL ANALYSIS

The facility utilizes glass 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 PM$_{10}$ and VOC emissions from painting. The HVLP (or equivalent) spray equipment will control PM$_{10}$ and VOC emissions by having more paint transfer to the desired surfaces than traditional painting equipment. The enclosed gun cleaner will control VOC emissions by not allowing VOC containing liquids used during gun cleaning to evaporate into the atmosphere.

**Emissions Units and Control Devices**

<table>
<thead>
<tr>
<th>ID No.</th>
<th>Source Description</th>
<th>Control Equipment Description</th>
<th>Emissions Point ID No. and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Paint spray booth(s):</strong></td>
<td><strong>Spray booth(s) filter system:</strong></td>
<td><strong>PAINT BOOTH EXHAUST STACK</strong></td>
</tr>
<tr>
<td></td>
<td>Manufacturer: Nova Verta</td>
<td>Booth Type: Downdraft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Model: Downdraft</td>
<td>Particulate filtration method: Dry Filters</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Paint spray booth heater:</strong></td>
<td>Manufacturer: Nova Verta or equivalent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacturer: N/A</td>
<td>Model: Downdraft or equivalent</td>
<td></td>
</tr>
<tr>
<td><strong>Automotive Coating Operation</strong></td>
<td>Heat input capacity: 0.900 MMBtu/hr</td>
<td>PM/PM$_{10}$ Efficiency: 98%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(worst-case was assumed to be 2.4 MMBtu/hr)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fuel: natural gas only</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Emissions Inventories**

An emission inventory was developed for the automotive coating operation (see Appendix A) associated with this proposed project. Emissions estimates of criteria pollutant PTE were based on worst-case VOC content as PM$_{10}$ content for coatings taken from the DEQ Automotive Coating E1 spreadsheet (see Appendix A). Uncontrolled emissions were based upon scaling the annual controlled PTE (based upon the daily coating use limit and typical operation of 2,080 hrs/yr) up to an uncontrolled annual PTE based upon operation of 8,760 hrs/yr.

**Uncontrolled Emissions:**

The following table presents the post project uncontrolled emissions for criteria pollutants as submitted by the Applicant and verified by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM$_{10}$</th>
<th>SO$_2$</th>
<th>NO$_X$</th>
<th>CO</th>
<th>VOC</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T/yr</td>
<td>T/yr</td>
<td>T/yr</td>
<td>T/yr</td>
<td>T/yr</td>
<td>lb/quarter</td>
</tr>
<tr>
<td><strong>Point Sources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paint Spray Booth</td>
<td>18.90</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>51.49</td>
<td>0.0</td>
</tr>
<tr>
<td>Paint Booth Heater</td>
<td>0.080</td>
<td>0.006</td>
<td>0.988</td>
<td>0.42</td>
<td>0.058</td>
<td>0.0000053</td>
</tr>
<tr>
<td><strong>Total, Point Sources</strong></td>
<td>18.98</td>
<td>0.01</td>
<td>0.99</td>
<td>0.42</td>
<td>51.55</td>
<td>0.00</td>
</tr>
</tbody>
</table>

As demonstrated in Table 2, the facility has an uncontrolled potential to emit for PM$_{10}$, SO$_2$, NO$_X$, CO, and VOC emissions less than the Major Source threshold of 100 T/yr. Therefore, this facility is not designated as a Synthetic Minor facility. As demonstrated in Table 3 as follows the facility’s PTE for all criteria pollutants is less than 80% of the Major Source thresholds of 100 T/yr. Therefore, this facility will not be designated as a SM-80 facility.

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

The following table presents the post project potential to emit for criteria pollutants from all emissions units at the facility/for the unit being modified as submitted by the Applicant and verified by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM$_{10}$</th>
<th>SO$_2$</th>
<th>NO$_X$</th>
<th>CO</th>
<th>VOC</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/hr</td>
<td>T/yr$^b$</td>
<td>lb/hr</td>
<td>T/yr$^b$</td>
<td>lb/hr</td>
<td>T/yr$^b$</td>
</tr>
<tr>
<td>Automotive Coating Operation</td>
<td>0.02</td>
<td>0.09</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Paint Booth Heater</td>
<td>0.0182</td>
<td>0.080</td>
<td>0.0014</td>
<td>0.006</td>
<td>0.226</td>
<td>0.988</td>
</tr>
<tr>
<td>Pre-Project Totals</td>
<td>0.04</td>
<td>0.17</td>
<td>0.00</td>
<td>0.01</td>
<td>0.23</td>
<td>0.99</td>
</tr>
</tbody>
</table>

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.

As demonstrated in Tables 2 and 3, this facility has an uncontrolled potential to emit for all criteria pollutant emissions less than the Major Source threshold of 100 T/yr and a controlled potential to emit for all criteria pollutant emissions less than the Major Source threshold of 100 T/yr. Therefore, this facility is designated as a Minor facility. As demonstrated in Table 3 the facility’s PTE for all criteria pollutants is less than 80% of the Major Source thresholds of 100 T/yr. Therefore, this facility will not be designated as a SM-80 facility.

Change in Potential to Emit

The change in facility-wide 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 facility-wide change in the potential to emit for criteria pollutants.

<table>
<thead>
<tr>
<th></th>
<th>PM$_{10}$</th>
<th>SO$_2$</th>
<th>NO$_X$</th>
<th>CO</th>
<th>VOC</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/hr</td>
<td>T/yr</td>
<td>lb/hr</td>
<td>T/yr</td>
<td>lb/hr</td>
<td>T/yr</td>
</tr>
<tr>
<td>Pre-Project Potential to Emit</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Post Project Potential to Emit</td>
<td>0.04</td>
<td>0.17</td>
<td>0.00</td>
<td>0.01</td>
<td>0.23</td>
<td>0.99</td>
</tr>
<tr>
<td>Changes in Potential to Emit</td>
<td>0.04</td>
<td>0.17</td>
<td>0.00</td>
<td>0.01</td>
<td>0.23</td>
<td>0.99</td>
</tr>
</tbody>
</table>

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 Appendix A). In addition, because daily coating use is limited to 4.0 gal/day facility-wide HAPs emissions are inherently limited to less than 10 T/yr for any one HAP and 25 T/yr for all HAPs combined (see Appendix A).

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, 12/31/2002).
Table 5 PTE FOR CRITERIA POLLUTANTS COMPARED TO THE DEQ MODELING GUIDELINE THRESHOLDS

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PTE (T/yr) or lb/hr if listed</th>
<th>DEQ Modeling Guideline Thresholds (T/yr) or lb/hr if listed</th>
<th>Exceeds Modeling Guideline Threshold?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM10</td>
<td>0.17</td>
<td>1 or 0.2 lb/hr</td>
<td>No</td>
</tr>
<tr>
<td>SO2</td>
<td>0.01</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>NOX</td>
<td>0.99</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>0.10 lb/hr</td>
<td>14 lb/hr</td>
<td>No</td>
</tr>
<tr>
<td>Lead</td>
<td>0.00</td>
<td>0.6 or 100 lb/month</td>
<td>No</td>
</tr>
</tbody>
</table>

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

As presented previously in the DEQ Automotive Coatings EI Spreadsheet (see Appendix A) 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)

Coachman Auto Body is located in Kootenai County, which is designated as attainment or unclassifiable for PM2.5, PM10, SO2, NOX, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

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, it will be determined if the installation of this automotive coating operation is exempt from obtaining a PTC per 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.
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 58.01.01.006.104 in order to determine if the project may qualify for a Category I exemption.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PTE (T/yr)</th>
<th>10% of the Significance Threshold (T/yr)</th>
<th>Exceeds 10% of the Significance Threshold?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM_{10}</td>
<td>0.17</td>
<td>1.5</td>
<td>No</td>
</tr>
<tr>
<td>SO_{2}</td>
<td>0.01</td>
<td>4.0</td>
<td>No</td>
</tr>
<tr>
<td>NO_{x}</td>
<td>0.99</td>
<td>4.0</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>0.42</td>
<td>10.0</td>
<td>No</td>
</tr>
<tr>
<td>VOC</td>
<td>12.32</td>
<td>4.0</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The potential VOC emission rate of the proposed project is 12.32 T-VOC/yr, which is above 10% of the significant emission rate listed in IDAPA 58.01.01.006.104. Therefore, the installation of a new/permitting of an existing 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 13.

**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 58.01.01.006.118 defines a Tier I source as “Any source located at a major facility as defined in Section 008.” IDAPA 58.01.01.008.10 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$_{10}$) nonattainment area and the facility has the potential to emit seventy (70) T/yr or more of PM$_{10}$, 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) tpy 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 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 8,760 hours per year as a worst-case assumption.

The following table compares the post-project facility-wide annual worst-case uncontrolled emission rate for all HAPs emitted by the source to the HAPS Major Source thresholds in order to determine if the facility is a HAPS Major Source.

<table>
<thead>
<tr>
<th>HAPS Pollutants</th>
<th>PTE (T/yr)</th>
<th>Major Source Threshold (T/yr)</th>
<th>Exceeds the Major Source Threshold?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl benzene</td>
<td>0.61</td>
<td>10</td>
<td>No</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone (MIBK)</td>
<td>1.25</td>
<td>10</td>
<td>No</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>2.32</td>
<td>10</td>
<td>No</td>
</tr>
<tr>
<td>Toluene</td>
<td>1.90</td>
<td>10</td>
<td>No</td>
</tr>
<tr>
<td>Styrene</td>
<td>2.49</td>
<td>10</td>
<td>No</td>
</tr>
<tr>
<td>Xylene (o-, m-, p-isomers)</td>
<td>2.20</td>
<td>10</td>
<td>No</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10.77</strong></td>
<td><strong>25</strong></td>
<td><strong>No</strong></td>
</tr>
</tbody>
</table>

As presented in the preceding table 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 the Coachman Auto Body facility is located in Kootenai County (AQCR 62), which is designated as unclassifiable for PM$_{2.5}$, PM$_{10}$, SO$_2$, NO$_x$, CO, and Ozone for federal and state criteria air pollutants. Therefore, the following table compares the post-project facility-wide annual PTE for all criteria pollutants emitted by the source to the applicable criteria pollutant Major Source thresholds in order to determine if the facility is a criteria pollutant Major Source.

### Table 8 PTE for Criteria Pollutants Compared to the Criteria Pollutant Major Source Thresholds

<table>
<thead>
<tr>
<th>Criteria Pollutants</th>
<th>PTE (T/yr)</th>
<th>Major Source Threshold (T/yr)</th>
<th>Exceeds the Major Source Threshold?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>0.17</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>SO$_2$</td>
<td>0.01</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>0.99</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>0.42</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>VOC</td>
<td>12.32</td>
<td>100</td>
<td>No</td>
</tr>
</tbody>
</table>

As presented in the preceding table 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 an existing source because it commenced construction prior to 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 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 occurred prior to January 9, 2008, the compliance date is January 10, 2011.

§ 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 in paragraphs (e)(1) through (e)(5) of this section.

In accordance with §63.11173(f), each owner or operator of an affected automotive coating operation must ensure and certify that all new and existing personnel, including contract personnel, who spray apply surface coatings, as defined in §63.11180, are trained in the proper application of surface coatings as required by paragraph (e)(1) of this section. The training program must include, at a minimum, the items listed in paragraphs (f)(1) through (f)(3) of this section.

In accordance with §63.11173(g), as required by paragraph (e)(1) of this section, all new and existing personnel at an affected motor vehicle and mobile equipment or miscellaneous surface coating source, including contract personnel, who spray apply surface coatings, as defined in §63.11180, must be trained by the dates specified in paragraphs (g)(1) and (2) of this section. Employees who transfer within a company to a position as a painter are subject to the same requirements as a new hire.

Compliance with these requirements is assured by PTC condition 12.

§ 63.11174 What parts of the General Provisions apply to me?

In accordance with §63.11174(a), Table 1 of this subpart shows which parts of the General Provisions in subpart A apply. Compliance with these requirements is assured by PTC condition 12.

In accordance with §63.11174(b), an owner or operator of an area source subject to this subpart is exempt from the obligation to obtain a permit under 40 CFR part 70 or 71 provided that a permit under 40 CFR 70.3(a) or 71.3(a) is not required for a reason other than becoming area source subject to this subpart. This permit application and permitting action involve a Permit to Construct, and will not utilize the requirements and procedures in IDAPA 58.01.01.300-399 for the issuance of Tier I operating permits.

§ 63.11175 What notifications must I submit?

In accordance with §63.11175(a), because the facility is a surface coating operation subject to this subpart, the initial notification required by §63.9(b) must be submitted. For this existing operation, the Initial Notification must be submitted no later than on or before March 11, 2011.

In accordance with §63.11175(b), because the facility is an existing source, the permittee is not required to submit a separate notification of compliance status in addition to the initial notification specified in paragraph (a) of this subpart provided the permittee was able to certify compliance on the date of the initial notification, as part of the initial notification, and the permittee's compliance status has not since changed. The permittee must submit a Notification of Compliance Status on or before March 11, 2011. The permittee is required to submit the information specified in paragraphs (b)(1) through (4) of this section with the Notification of Compliance Status.

Compliance with these requirements is assured by PTC condition 19.
§ 63.11176  What reports must I submit?

In accordance with §63.11176(a), because the permittee is an owner or operator of a paint stripping, motor vehicle or mobile equipment, or miscellaneous surface coating affected source, the permittee is required to submit a report in each calendar year in which information previously submitted in either the initial notification required by §63.11175(a), Notification of Compliance, or a previous annual notification of changes report submitted under this paragraph, has changed. Deviations from the relevant requirements in §63.11173(a) through (d) or §63.11173(e) through (g) on the date of the report will be deemed to be a change. The annual notification of changes report must be submitted prior to March 1 of each calendar year when reportable changes have occurred and must include the information specified in paragraphs (a)(1) through (2) of this section.

Compliance with these requirements is assured by PTC condition 20.

Because the facility has not proposed to conduct paint stripping operations, the MeCl minimization plan requirements are not applicable (see PTC condition 9).

§ 63.11177  What records must I keep?

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 PTC condition 16.

§ 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 PTC condition 16.

§ 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. At the time of this permitting action, the EPA has not delegated authority to the State of Idaho. However, IDAPA 58.01.01.107.03.1 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 or only those permit conditions that have been added, revised, modified or deleted as a result of this permitting action.

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_{10} 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 or LPG 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 Appendix A). 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$_{10}$ and VOC emissions limit specified in permit condition 5 and the TAPs emissions limits specified in the DEQ Automotive Coating EI Spreadsheet (see Appendix A).

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

Permit Condition 12 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 13 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 14 establishes that the permittee shall maintain material purchase records and Material Safety Data Sheets (MSDS) 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 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 16 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 17 establishes that the federal requirements of 40 CFR Part 63 are incorporated by reference into the requirements of this permit per current DEQ guidance.

Permit Condition 18 establishes that the permittee shall maintain records as required by the General Provision recordkeeping requirements.

Permit Condition 19 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 20 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.
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 were no comments on the application and there was not a request for a public comment period on DEQ’s proposed action. Refer to the chronology for public comment opportunity dates.
APPENDIX A – EMISSIONS INVENTORIES

Coating Operation Emissions Calculations:

Table A.1 POST PROJECT HOURLY AND ANNUAL PM10 POTENTIAL TO EMIT FOR THE AUTOMOTIVE COATING OPERATION

<table>
<thead>
<tr>
<th>Coating Material</th>
<th>Daily Coating Use(^1) (gal/day)</th>
<th>Annual Coating Use(^2) (gal/yr)</th>
<th>Density(^3) (lb/gal)</th>
<th>Paint Spray Gun TE (%)</th>
<th>Booth Particulate Filters CE (%)</th>
<th>Hourly PM(<em>{10}) Emissions (lb-PM(</em>{10})/hr)</th>
<th>Annual PM(<em>{10}) Emissions (T-PM(</em>{10})/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-treatment wash primer, primer, topcoat, clear, reducer, and hardener combined</td>
<td>4.0</td>
<td>1,467</td>
<td>16.71</td>
<td>65</td>
<td>98</td>
<td>0.02</td>
<td>0.09</td>
</tr>
</tbody>
</table>

\(^1\) Daily coating use was determined using the DEQ Automotive Coatings EI spreadsheet.

\(^2\) Annual coating use is assumed to be daily coating use multiplied by 365 days per year.

\(^3\) The density of the paint was assumed to be the highest available using the DEQ Automotive Coatings EI spreadsheet (DEQ assumption for worst-case emissions).

Table A.2 POST PROJECT HOURLY AND ANNUAL VOC POTENTIAL TO EMIT FOR THE AUTOMOTIVE COATING OPERATION

<table>
<thead>
<tr>
<th>Coating Material</th>
<th>Daily Coating Use(^1) (gal/day)</th>
<th>Annual Coating Use(^2) (gal/yr)</th>
<th>VOC Content(^3) (lb-VOC/gal)</th>
<th>Hourly VOC Emissions (lb-VOC/hr)</th>
<th>Annual VOC Emissions(^4) (T-VOC/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-treatment wash primer, primer, topcoat, clear, reducer, and hardener combined</td>
<td>4.0</td>
<td>1,467</td>
<td>16.71</td>
<td>2.79</td>
<td>12.26</td>
</tr>
</tbody>
</table>

\(^1\) Daily coating use was determined using the DEQ Automotive Coatings EI spreadsheet.

\(^2\) Annual coating use is assumed to be daily coating use multiplied by 365 days per year.

\(^3\) The VOC content of the paint is assumed to be 100% VOC (DEQ assumption for worst-case emissions).

Uncontrolled annual emissions can be calculated by scaling up the coating operation from the 2,080 hrs/yr (8 hrs/day x 260 days/yr, normal business hours) to 8,760 hrs/yr (24 hrs/day x 365 days/yr).

Thus:

Scaling factor = 8,760 hrs/yr ÷ 2,080 hrs/yr = 4.2

Therefore, uncontrolled annual emissions from the coating operation are calculated as:

Uncontrolled Annual PM\(_{10}\) emissions = Scaling factor x PM\(_{10}\) PTE (T-PM\(_{10}\)/yr) ÷ (1 – Filter CE)

Uncontrolled Annual PM\(_{10}\) emissions = 4.2 x 0.09 T-PM\(_{10}\)/yr ÷ (1 – 0.98) = 18.90 T-PM\(_{10}\)/yr

Uncontrolled Annual VOC emissions = Scaling factor x VOC PTE (T-VOC/yr)

Uncontrolled Annual VOC emissions = 4.2 x 12.26 T-VOC/yr = 51.49 T-VOC/yr
Paint Booth Heater Emissions Calculations:

To determine worst-case emissions from the paint booth(s) heater(s) the maximum heat input rating of the burner was assumed to 2.4 MMBtu/hr with operation of 8,760 hrs/yr.

Table A.3 PAINT BOOTH HEATER POST PROJECT HOURLY AND ANNUAL POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS WHEN COMBUSTING NATURAL GAS

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>Rated Heat Input (MMBtu/hr)$^1$</th>
<th>Annual Hours of Operation (hrs/yr)</th>
<th>Criteria Pollutant</th>
<th>Emissions Factors (lb/MMBtu)$^2$</th>
<th>Hourly Emissions (lb/hr)</th>
<th>Annual Emissions (T/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paint Booth Heater</td>
<td>2.40</td>
<td>8,760</td>
<td>PM$_{10}$</td>
<td>0.0076</td>
<td>0.0182</td>
<td>0.080</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SO$_2$</td>
<td>0.0006</td>
<td>0.0014</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NO$_X$</td>
<td>0.094</td>
<td>0.226</td>
<td>0.988</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CO</td>
<td>0.040</td>
<td>0.096</td>
<td>0.420</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VOC</td>
<td>0.0055</td>
<td>0.013</td>
<td>0.058</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pb</td>
<td>0.00000035</td>
<td>0.0000012</td>
<td>0.0000053</td>
</tr>
</tbody>
</table>

1. For worst-case emissions a maximum heat input of 2.40 MMBtu/hr was assumed.
2. Based on AP-42 Table 1.4-2 (7/98) for PM$_{10}$, SO$_2$, VOC, and Pb and AP-42 Table 1.4-1 (7/98) for NO$_X$ and CO.

Uncontrolled emissions are equal to controlled emissions since they were calculated full-time operation of 8,760 hrs/yr.