Statement of Basis
Automotive Coating Operations General Permit

Final

Rhino Linings of Pocatello
Pocatello, Idaho
Facility ID No. 005-00092
Permit to Construct P-2014.0006
Project No. 61339

June 13, 2014
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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.

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
MMBtu	million British thermal units
MSDS	Material Safety Data Sheet
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
PC	permit condition
PM_{10}	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
SO_2	sulfur dioxide
SO_X	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

Rhino Linings of Pocatello is an auto coating (pickup bed lining and miscellanea parts) facility with paint spray booth(s). Traditional painting will not occur, "Rhino" lining is the only process permitted. The paint booth(s) is a pressurized side draft booth(s) with fiber filtration media for control of particulate emissions. The process includes application of coatings via a paint gun.

Permitting History

This is the initial PTC for a new facility thus there is no permitting history.

Application Scope

This is the initial PTC for an existing facility.

Application Chronology

March 14, 2014	DEQ received an application.
March 17, 2014	DEQ an application fee and the processing fee.
March 25 - April 9, 2014	DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.
April 4, 2014	DEQ made available the draft permit and statement of basis for peer review.
April 9, 2014	DEQ determined that the application was complete.

TECHNICAL ANALYSIS

The facility utilizes fiber filtration media for control of particulate matter emissions from the automotive coating operation. The applicant specified that traditional auto painting will not occur. The applicant specified that only pickup bed lining coating material is used. The application also specified that the current spray gun is a high pressure gun. The analysis conducted for this permitting action is a worst case analysis assuming spray guns are not HVLP guns. It should be noted that if the facility does not receive an exemption from EPA for 40 CFR 63, Subpart HHHHHH the permittee will be required to use HVLP guns as that subpart requires. However, it appears that the facility will qualify for the EPA exemption because none of the target HAPs are listed in contents of the bed lining materials included in the standard permit analysis (TRIM record #2011AAG916).

The analysis used to issue this permit relies on the general permit analysis (TRIM record #2011AAG916) for volatile air pollutant emissions (including volatile HAP and TAP) for spray applying pickup bed liner material. It also relies on the chemical composition of bed liner components listed in that document to determine the worst case potential for particulate matter emissions (criteria and toxic air pollutant particulate) as detailed in the following sections.

The facility does not use combustion sources to provide heat for product curing.

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	Spray booth(s): The number of booths installed at the facility is not limited by this permit.	Spray booth(s) Booth Type(s): Side draft Particulate filtration method: Dry Filters Manufacturer(s): Not Specified PM/PM_{10} Efficiency: 98% or greater as documented by the manufacturer Coating spray gun(s): Manufacturer: Graco or equivalent Type: HVLP or equivalent unless an exemption from the EPA has been granted for 40 CFR 63, Subpart HHHHHH Transfer Efficiency: 65% or greater unless an exemption from the EPA has been granted for 40 CFR 63, Subpart HHHHHH	Paint booth exhaust stack

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.

The analysis used to issue this permit relies on the general permit analysis for emissions that occur from applying bed liners (TRIM record #2011AAG916) with regard to volatile air pollutant emissions. It also relies on the chemical composition of bed liner materials listed in that document to determine the worst case potential for particulate matter emissions (criteria and toxic air pollutant particulate). Particulate matter emissions estimates in this analysis differ from the existing general permit analysis only with respect to the transfer efficiency used to calculate particulate matter emissions. The existing general permit analysis uses a transfer efficiency of 65% corresponding to the use of HVLP guns. As previous discussed, the application for this permit designates that the use of high pressure paint guns are used; the transfer efficiency of the high pressure gun was not specified in the application. As demonstrated by the following calculations any transfer efficiency is sufficient to demonstrate compliance with all standards provided the resulting emissions are controlled by a filter with 98% control efficiency.

Worst case particulate emissions from coating material data used in the General Permit (TRIM record #2011AAG916):

Density	10.24 lb/gal
Solids	73.8%
Use	4 gal./day
Transfer	0% (assumed worst case)
Filter	98%

Silica dioxide 1.5%

Emissions Calculations (including a 1.2 safety factor):

PM emissions = (4 gal/day)(day/24hr)(10.24 lb/gal)(0.738)(1-0.98)(1.2) = 0.030 lb/hr

Silica Dioxide = (4 gal/day)(day/24hr)(10.24 lb/gal)(1-0.98)(1.2)(0.015) = 6.14 E- 4 lb/hr

Note that the PM emissions are less than the modeling threshold for $PM_{2.5}$ (0.054 lb/hr), and silica dioxide emissions are less than the screening emissions level for that TAP (6.7 E -3 lb/hr).

The volatile organic compound and volatile HAP and TAP emission estimates in the general permit analysis for bed liner applications remain unchanged for this permit (TRIM record #2011AAG916). The emission estimates are included in Appendix A.

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 (TRIM record #2011AAG916). For VOC emissions it is assumed that on an annual average basis the source has the capacity to use a total of 8 gallons of coatings per day, for particulate matter operations are assumed to occur 8,760 hours per year. These assumptions are sufficient enough to accomplish the requirement 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.

Table 2 UNCONTROLLED POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

Emissions Unit	PM_{10} T/yr	SO_2 T/yr	NO_X T/yr	CO T/yr	VOC T/yr	Lead lb/quarter
Point Sources						
Paint spray booth(s)	**6.8**	**0.0**	**0.0**	**0.0**	**20**	**0.0**

When it is presumed that the maximum bed liner coating material usage is 2,920 gallons per year (or 8 gallons per day) the uncontrolled Potential to Emit for HAP pollutants is less than 10 tons per year for any individual HAP and less than 25 tons per year for all HAPs combined.

Table 3 UNCONTROLLED POTENTIAL TO EMIT FOR HAP

HAP	Emission Rate (lb/hr)[a]	Emission Rate (T/yr)
Hexamethylene Diisocyanate	**1.0E-3**	**4.4E-3**
Methylene Diisocyanate	**2.83E-3**	**0.012**
Xylene	**3.1E-2**	**0.136**

a) Emission estimates from General Permit analysis (TRIM record #2011AAG916)

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.

Table 3 POST PROJECT POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

Emissions Unit	PM_{10}		SO_2		NO_X		CO		VOC		Lead	
	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]	lb/hr	T/yr
Point Sources												
Paint spray booth(s) and/or preparation station(s)	**0.03**	**0.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.6**	**20**	**0**	**0**

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.

Potential to Emit for HAP pollutants is less than 10 tons per year for any individual HAP and less than 25 tons per year for all HAPs combined.

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 5 CHANGES IN POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

	PM_{10}		SO_2		NO_X		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
Point Sources												
Pre-Project Potential to Emit	**0.0**	**0.0**	**0.0.**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Post Project Potential to Emit	**0.03**	**0.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.6**	**20**	**0**	**0**
Changes in Potential to Emit	**0.03**	**0.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.6**	**20**	**0**	**0**

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.

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 6 PTE FOR CRITERIA POLLUTANTS COMPARED TO THE DEQ MODELING GUIDELINE THRESHOLDS

Pollutant	PTE (lb/hr)	DEQ Modeling Guideline Thresholds (lb/hr)	Exceeds Modeling Guideline Threshold?
PM_{10}	0.03 lb/hr	0.22 lb/hr	No
$PM_{2.5}$	0.03 lb/hr	0.054 lb/hr	No
SO_2	0.0	0.21 lb/hr	No
NO_x	0.0	0.20 lb/hr	No
CO	0.0	15 lb/hr	No
Lead	0.00	14 lb/month	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 (TRIM record #2011AAG916), and the Potential to Emit section of this Statement of Basis 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)

Rhino Linings of Pocatello is located in Bannock County, which is designated as attainment or unclassifiable for $PM_{2.5}$, SO_2, NO_2, CO, and Ozone, and non-attainment for PM_{10}. Refer to 40 CFR 81.313 for additional information.

Facility Classification AIRS/AFS

"Synthetic Minor" for AIRS/AFS classification for criteria pollutants is defined as the uncontrolled Potential to Emit for criteria pollutants are above the applicable major source thresholds and the Potential to Emit for criteria pollutants fall below the applicable major source thresholds. Therefore, the following table compares the uncontrolled Potential to Emit and the Potential to Emit for criteria pollutants to the Major Source thresholds to determine if the facility will be "Synthetic Minor."

Table 7 UNCONTROLLED PTE AND PTE FOR CRITERIA POLLUTANTS COMPARED TO THE MAJOR SOURCE THRESHOLDS

Pollutant	Uncontrolled PTE (T/yr)	PTE (T/yr)	Major Source Thresholds (T/yr)	Uncontrolled PTE Exceeds the Major Source Threshold and PTE Exceeds the Major Source Threshold?
PM_{10}	6.8	0.13	100	No
SO_2	0.0	0.0	100	No
NO_x	0.0	0.0	100	No
CO	0.0	0.0	100	No
VOC	20	20	100	No

The facility has an uncontrolled potential to emit for PM_{10}, SO_2, NO_X, CO, VOC and HAP 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 designated as a Synthetic Minor facility.

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.

If this proposed operation does not qualify the exemption criteria in accordance with Section 223, it cannot qualify for a permit exemption. Uncontrolled emissions of silica exceed the screening emissions level and the source does not qualify for an exemption based on the criteria that uncontrolled emissions are less than the screening emissions level (calculations are shown below).

Uncontrolled silica emissions calculations:

Worst case silica emissions from coating material data (TRIM record #2011AAG916):

Density	10.24 lb/gal
Use	4 gal./day
Transfer	40% (assumed worst case)
Filter	0% (uncontrolled emissions)
Silica dioxide	1.5%

Emissions

Uncontrolled Silica Dioxide = (4 gal/day)(day/24 hr)(10.24 lb/gal)(0.015)(1-0.4) = 0.015lb/hr

Uncontrolled silica dioxide emissions are greater than the screening emissions level of 6.7E-3 lb/hr. Therefore the source has not demonstrated that it qualifies for a permit to construct 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.

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.

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

IDAPA 58.01.01.301 Requirement to Obtain Tier I Operating Permit

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**

Unless an exemption from the EPA has been granted to this facility in accordance with 40 CFR 63.11170 (a)(2), in accordance with 40 CFR 63.11172(a)(2), on and after January 10, 2011 the permittee shall comply with the applicable emission limitations and requirements of the National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH. It appears that the facility will qualify for the EPA exemption because none of the target HAPs are listed in contents of the bed lining materials included in the standard permit analysis (TRIM record #2011AAG916). Target HAP are compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd). Regardless, the facility will have to petition EPA to qualify for the exemption.

For the purpose of thoroughness this Subpart is detailed in the following paragraphs as if the facility does not obtain the EPA exemption.

§ 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[1].

§ 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 permit condition 17.

§ 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 permit condition 17.

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1 Rhino Linings of Pocatello web page state they began operation in Since 2002 (http://rhinoliningspocatello.com/p-9037-about-us.html)

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 permit 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 permit condition 19.

Because the facility has not proposed to conduct paint stripping operations, the MeCl minimization plan requirements are not applicable (see permit condition 8).

§ 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 permit condition 18.

§ 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 18.

§ 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.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.

This permit follows the existing General Permit to Construct for Automotive Coating Operations with the following exceptions:

- The applicant has specified that high pressure paint guns will be used and the general permit has been modified to allow the use of high pressure paint guns if the source petitions and receives an exemption form EPA for the requirements of 40 CFR 63, Subpart HHHHHH.
- Traditional automotive painting operations are not allowed. The only coatings allowed to be used are pickup bed liner materials.

Permit conditions 1 & 2 provide 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 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 9 prohibits traditional painting of automobile. The facility is only permitted to apply pickup bed lining material.

Permit condition 10 & 11 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 PM10 and VOC emissions limit specified in permit condition 5 and the TAPs emissions limits specified in the DEQ Automotive Coating EI Spreadsheet (TRIM record #2011AAG916 & the PTE Section of this Statement of Basis).

Permit condition 12 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 permittee shall maintain and operate the paint booth 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 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 that the permittee shall maintain records as required by the General Provision recordkeeping requirements.

Permit conditions 17 through 20 establishes parameters that will allow the facility to comply with the requirements of 40 CFR 63, Subpart HHHHHH if an exemption from those requirements is not granted by EPA.

Permit condition 21 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 were no comments on the application and there was 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 will be made available to the public in accordance with IDAPA 58.01.01.209.01.c. The comment period ran from May 7, 2014 through June 6, 2014. No comments were provided on DEQ's proposed action.

APPENDIX A

Emission Estimates

Coating: Bed Liner Components

Content Weight %						
Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Hexamethylene Diisocyanate (HDI)(HAP)	Methylene Diisocyanate (MDI)(HAP)
BASF XS-310						38.00%
Vortex						60.00%
Rhino 2170 A						60.00%
Monstaliner					0.10%	
Morton 999823					0.35%	
Speedliner 1000						9.66%
Speedliner Primer 450 & 460						11.09%
Langeman 700 A						15.00%
Pro-Tex Black					0.32%	

Content lb/gal						
Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Hexamethylene Diisocyanate (HDI)(HAP)	Methylene Diisocyanate (MDI)(HAP)
BASF XS-310	9.80	0.00	3.82	3.82	0.00	3.82
Vortex	8.12	0.00	4.87	4.87	0.00	4.87
Rhino 2170 A	10.33	0.00	6.20	6.20	0.00	6.20
Monstaliner	9.77	0.00	0.01	0.01	0.01	0.00
Morton 999823	9.58	0.00	0.03	0.03	0.03	0.00
Speedliner 1000	8.33	0.00	0.80	0.80	0.00	0.80
Speedliner Primer	8.33	0.00	0.92	0.92	0.00	0.92
Langeman 700 A	9.10	0.00	1.37	1.37	0.00	1.37
Pro-Tex Black	9.50	0.00	0.03	0.03	0.03	0.00
Maximum (lb/gal)	10.33	0.00	6.20	6.20	0.03	6.20
Emission Rate (lb/hr)		0.0E+00	1.2E+00	1.2E+00	1.0E-03	
IDAPA TAP EL (lb/hr)					2.0E-03	see "Iso" MDI sheet
Below EL?					Yes	

Daily Use Rates (gal/day)	Averaging Period (hr/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4.00	24	65.00%	98.00%

Isocyanate Reaction Factor (ratio)	Annual Usage Rate (gal/yr)	Safety Factor (ratio)
85.00%	1,460.0	1.20

Coating: Bed Liner Components

Content Weight %

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	Butyl Acetate	Carbon Black (particulate)	Diethyl toluene diamine (DETA)	Dipropylene Glycol Methyl Ether	Methyl Amyl Ketone	Polyether Polyols	Silica Silicon Dioxide (particulate)	Xylene (HAP)
BASF XS-350 Resin								25.00%			70.00%		
Rhino 2170 B								5.00%	60.00%				
Rhino Duraspray B													
Langeman Reflex Colorant								20.00%			80.00%		
Langeman 700 B								20.00%			80.00%		
Langeman Reflex 700RA											100.00%		
Pro-Tex Black		73.60%			10.00%	7.00%	1.50%			5.00%		1.50%	1.50%
Content lb/gal													

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	Butyl Acetate	Carbon Black (particulate)	Diethyl toluene diamine (DETA)	Dipropylene Glycol Methyl Ether	Methyl Amyl Ketone	Polyether Polyols	Silica Silicon Dioxide (particulate)	Xylene (HAP)
BASF XS-350 Re	8.39	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.00	0.00	5.87	0.00	0.00
Rhino 2170 B	8.83	0.00	0.00	0.00	0.00	0.00	0.00	0.44	5.30	0.00	0.00	0.00	0.00
Rhino Duraspray I	8.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Langeman Reflex	8.58	0.00	0.00	0.00	0.00	0.00	0.00	1.72	0.00	0.00	6.86	0.00	0.00
Langeman 700 B	8.58	0.00	0.00	0.00	0.00	0.00	0.00	1.72	0.00	0.00	6.86	0.00	0.00
Langeman Reflex	8.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.41	0.00	0.00
Pro-Tex Black	10.24	7.56	0.15	0.15	1.02	0.72	0.15	0.00	0.00	0.51	0.00	0.15	0.15
Maximum (lb/gal)	10.24	7.56	0.15	0.15	1.02	0.72	0.15	2.10	5.30	0.51	8.41	0.15	0.15
Emission Rate (lb/hr)		1.1E-02	3.1E-02	3.1E-02	2.0E-01	1.4E-01	2.2E-04	4.2E-01	1.1E+00	1.0E-01	1.7E+00	2.2E-04	3.1E-02
IDAPA TAP EL (lb/hr)					1.19E+02	4.73E+01	2.3E-01			1.57E+01		6.70E-03	2.90E+01
Below EL?					Yes	Yes	Yes			Yes		Yes	Yes

Daily Use Rates (gal/day)	Averaging Period (hr/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4.00	24	65.00%	98.00%

Isocyanate Reaction Factor (ratio)	Annual Usage Rate (gal/yr)	Safety Factor (ratio)
85.00%	1,460.0	1.20

Coating: Bed Liner "Iso" Component (MDI-Based)

$L_{sp} = (V_{air}/359) * (273.15/T_{sp}) * 60 * (C_{MDI}/1000000) * MW * K_{MDI} * t_{sp}$

where:

L_{sp} = the annual emissions for spray coating operations	24.77	lb/yr[1]
V_{air} = the exhaust airflow rate	10,000	ft³/min
359 = the molar volume of an ideal gas	359	ft³/lbmol @ 0°C and 1-atm
T_{sp} = the spray temperature	308.15	K
$C_{MDI} = (VP_{MDI}/760) \times 10^6$ = the MDI concentration in the exhaust air	0.0458	ppmv
VP_{MDI} = MDI vapor pressure at exhaust temperature	3.48E-05	mmHg[2]
MW = the molecular weight of MDI (250.26)	250.26	lb/lbmol
k_{MDI} = the adjustment factor to the vapor pressure that is a function of MDI concentration i	1.00	
t_{sp} = hr/day x 365 day/yr = is the total time in hours/year that spray coating is occurring	1460	hr/yr
t_{hr} = is the total time in hours/day that spray coating is occurring	4.00	hr/day
T = the spray temperature	95	°F

Emission Rate (lb/hr, 24-hr average)	**2.83E-03**	
IDAPA TAP EL (lb/hr)	3.00E-03	
Below EL?	Yes	