Statement of Basis

Permit to Construct P-2011.0029
Project No. 60726

Utility Trailer Sales of Idaho, Inc.
Utility Trailer Sales of Boise, Co.
Boise, Idaho

Facility ID No. 001-000263

Final

July 29, 2011
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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.

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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

Utility Trailer Sales of Boise, Co. is a truck and trailer 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 October, 2008 thus there is no permitting history.

Application Scope

This is the initial PTC for an existing facility that was constructed in October, 2008.

Application Chronology

January 3, 2011	DEQ received an application and an application fee.
January 17 – February 1, 2011	DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.
February 1, 2011	DEQ determined that the application was incomplete.
June 1, 2011	DEQ received supplemental information from the applicant.
June 22, 2011	DEQ determined that the application was complete.
July 7, 2011	DEQ made available the draft permit and statement of basis for peer and regional office review.
July 12, 2011	DEQ made available the draft permit and statement of basis for applicant review.
July 22, 2011	DEQ received the permit processing fee.
July 29, 2011	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

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
Truck and Trailer Coating Operation	**Paint spray booth(s) and/or preparation station:** Manufacturer(s): Global Finishing Solutions or equivalent Model(s): Autobus or equivalent Note: The number of booths installed at the facility is not limited by this permit. **Paint booth heater(s):** Manufacturer(s): Rupp or equivalent Model(s): CFAM-227HT or equivalent Total Heat input capacity(s): 3.629 MMBtu/hr Fuel: natural gas only	**Paint spray booth(s) and/or preparation station filter system:** Booth Type(s): Down draft Particulate filtration method: Dry Filters Manufacturer(s): Viledon or equivalent Model(s): 200 series or equivalent PM/PM_{10} Control Efficiency: 98% or greater **Coating spray gun(s):** Manufacturer(s): SataJet or equivalent Model(s): 100, 3000B, 3000K, or equivalent Type: HVLP or equivalent Transfer Efficiency: 65% or greater	Paint booth exhaust stack and/or preparation station exhaust stack

Emissions Inventories

Potential to Emit

IDAPA 58.01.01 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 truck and trailer coating operation. Criteria pollutant and HAPs PTE were based on the worst-case VOC, PM_{10}, and HAPs content for coatings as taken from the Applicant modified DEQ Automotive Coating EI spreadsheet (see Appendix B).

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 truck and trailer 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 truck and trailers for the application of coating) and paint drying time (the time the truck and trailer 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_{10}	$PM_{2.5}$	SO_2	NO_X	CO	VOC
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Point Sources						
Paint spray booth(s) and/or preparation station(s)	16.50	15.50	0.0	0.0	0.0	47.14
Paint booth heater	0.029	0.029	0.002	0.355	0.151	0.021
Total, Point Sources	**16.53**	**15.53**	**0.00**	**0.36**	**0.15**	**47.16**

The following table presents the uncontrolled Potential to Emit for HAP pollutants as submitted by the Applicant and verified 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 truck and trailer 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). Then, the worst-case maximum HAPs Potential to Emit was determined for this truck and trailer coating operation.

Table 3 UNCONTROLLED POTENTIAL TO EMIT FOR HAPs

HAP Pollutants	PTE (T/yr)
Ethyl benzene	0.32
Methyl Isobutyl Ketone (MIBK)	1.88
Naphthalene	0.02
Toluene	1.61
Styrene	0.0
Xylene (o-, m-, p-isomers)	1.95
Total	**5.78**

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_{10}		$PM_{2.5}$		SO_2		NO_X		CO		VOC	
	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]	lb/hr[a]	lb/hr[a]	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]
Point Sources												
Paint spray booth(s) and/or preparation station(s)	0.08	0.33	0.07	0.31	0.0	0.0	0.0	0.0	0.0	0.0	10.76	47.14
Paint booth heater(s)	0.0276	0.029	0.0276	0.029	0.0022	0.002	0.341	0.355	0.145	0.151	0.020	0.021
Post-Project Totals	**0.11**	**0.36**	**0.10**	**0.34**	**0.00**	**0.00**	**0.34**	**0.36**	**0.15**	**0.15**	**10.78**	**47.16**

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.

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 5 CHANGES IN POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

	PM_{10}		$PM_{2.5}$		SO_2		NO_X		CO		VOC	
	lb/hr	lb/hr	T/yr	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	0.11	0.36	0.10	0.34	0.00	0.00	0.34	0.36	0.15	0.15	10.78	47.16
Changes in Potential to Emit	**0.11**	**0.36**	**0.10**	**0.34**	**0.00**	**0.00**	**0.34**	**0.36**	**0.15**	**0.15**	**10.78**	**47.16**

Non-Carcinogenic TAP Emissions

Because of the daily coating material use limits proposed by the Applicant in applying for this permit, no ELs specified in IDAPA 58.01.01.585 or 586 are expected to be exceeded by the facility (see Appendix B).

Post Project HAP Emissions

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

Table 6 UNCONTROLLED POTENTIAL TO EMIT FOR HAPs

HAP Pollutants	PTE (T/yr)
Ethyl benzene	0.32
Methyl Isobutyl Ketone (MIBK)	1.88
Naphthalene	0.02
Toluene	1.61
Styrene	0.0
Xylene (o-, m-, p-isomers)	1.95
Total	**5.78**

Ambient Air Quality Impact Analyses

Because of the daily coating material use limits proposed by the Applicant in applying for this permit, it needs to be determined if the criteria pollutant PTE for this truck and trailer coating operation exceeds the DEQ modeling guideline thresholds. The following table compares the post-project facility-wide hourly emissions to the DEQ modeling guideline thresholds (per the State of Idaho Air Quality Modeling Guideline, 12/31/2002, updated in 2011).

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

Pollutant	PTE (T/yr) or (lb/hr) as listed	DEQ Modeling Guideline Thresholds (T/yr) or (lb/hr) as listed	Exceeds Modeling Guideline Threshold?
PM_{10}	0.11 lb/hr	0.22 lb/hr up to 2.6 lb/hr	No
$PM_{2.5}$	0.10 lb/hr	0.054 lb/hr up to 0.63 lb/hr 0.35 T/yr up to 4.1 T/yr	Exceeds lower threshold but not the upper threshold
SO_2	0.00 lb/hr	0.22 lb/hr up to 2.6 lb/hr	No
NO_X	0.34 lb/hr	0.20 lb/hr up to 2.4 lb/hr	Exceeds lower threshold but not the upper threshold
CO	0.15 lb/hr	15 lb/hr up to 175 lb/hr	No
Lead	0.00	14 lb/month	No

As presented in this table, the lower modeling thresholds for both $PM_{2.5}$ and NO_X were both exceeded. However, in both cases the upper thresholds were not surpassed. Per the modeling guidance provided by DEQ staff modeling is not required for either $PM_{2.5}$ or NO_X emissions. Therefore, the installation of the new truck and trailer 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 truck and trailer coating operation does not require TAPs modeling.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Ada County, which is designated as attainment or unclassifiable for $PM_{2.5}$, PM_{10}, SO_2, NO_2, CO, and Ozone. 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 8 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}	16.53	0.36	100	No
$PM_{2.5}$	15.53	0.34	100	No
SO_2	0.00	0.00	100	No
NO_X	0.36	0.36	100	No
CO	0.15	0.15	100	No
VOC	47.16	47.16	100	No

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

Table 9 UNCONTROLED PTE AND PTE FOR HAPs POLLUTANTS COMPARED TO THE MAJOR SOURCE THRESHOLDS

HAP 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?
Ethyl benzene	0.32	0.32	10	No
Methyl Isobutyl Ketone (MIBK)	1.88	1.88	10	No
Naphthalene	0.02	0.02	10	No
Toluene	1.61	1.61	10	No
Styrene	0.0	0.0	10	No
Xylene (o-, m-, p-isomers)	1.95	1.95	10	No
Total	**5.78**	**5.78**	25	No

As demonstrated in Table 8 the facility has an uncontrolled potential to emit for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, and VOC emissions are less than the Major Source thresholds of 100 T/yr for each pollutant. In addition, as demonstrated in Table 9 the facility has an uncontrolled potential for each HAP is 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 not designated as a Synthetic Minor facility.

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 truck and trailer 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 58.01.01.006.107 in order to determine if the project may qualify for a Category I exemption.

Table 10 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_{10}	0.36	1.5	No
$PM_{2.5}$	034	4.0	No
SO_2	0.00	4.0	No
NO_X	0.36	4.0	No
CO	0.15	10.0	No
VOC	47.16	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 58.01.01.006.104. Therefore, the existing truck and trailer 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 truck and trailer 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 20.

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 58.01.01.006.120 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 (tpy) or more of any hazardous air pollutant, other than radionuclides, or
- The facility emits or has the potential to emit twenty-five (25) tpy or more of any combination of any hazardous air pollutants, other than radionuclides.

or, for non-attainment areas (Note: The State of Idaho currently has no serious non-attainment areas therefore the Major Source threshold is defined as follows):

- The facility emits or has the potential to emit one hundred (100) tons per year 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":

Therefore, it needs to be determined if this facility is a HAP Major Source. The following table compares this facility's post-project facility-wide annual PTE for all HAPs emitted by the source to the HAPS Major Source thresholds in order to determine if this facility is a HAPs Major Source.

Table 11 PTE FOR HAPs POLLUTANTS COMPARED TO THE HAPs MAJOR SOURCE THRESHOLDS

HAP Pollutants	PTE (T/yr)	Major Source Threshold (T/yr)	Exceeds the Major Source Threshold?
Ethyl benzene	0.32	10	No
Methyl Isobutyl Ketone (MIBK)	1.88	10	No
Naphthalene	0.02	10	No
Toluene	1.61	10	No
Styrene	0.0	10	No
Xylene (o-, m-, p-isomers)	1.95	10	No
Total	**5.78**	25	No

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 requirements.

Therefore, it needs to be determined if this facility is a criteria pollutant Major Source. As discussed previously the facility name facility is located in Ada County (AQCR 64), which is designated as unclassifiable/attainment 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 12 PTE FOR CRITERIA POLLUTANTS COMPARED TO THE CRITERIA POLLUTANT MAJOR SOURCE THRESHOLDS

Criteria Pollutants	PTE (T/yr)	Major Source Threshold (T/yr)	Exceeds the Major Source Threshold?
PM_{10}	0.36	100	No
$PM_{2.5}$	0.34	100	No
SO_2	0.00	100	No
NO_X	0.36	100	No
CO	0.15	100	No
VOC	47.16	100	No

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 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), PSD requirements are not applicable to this permitting action. The facility is/is not a designated facility as defined in 40 CFR 52.21(b)(1)(i)(a), and does not have facility-wide emissions of any criteria pollutant that exceed 250 T/yr.

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 truck and trailer 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 truck and trailer 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 truck and trailer 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 truck and trailer 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 a truck and trailer 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 truck and trailer 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 25.

§ 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 24.

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 new operation, the Initial Notification must be submitted no later than 180 days after initial startup.

In accordance with §63.11175(b), because the facility is a new 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 26.

§ 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 26.

Because the facility has not proposed to conduct paint stripping operations, the MeCl minimization plan requirements are not applicable (see permit 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 permit condition 27.

§ 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 25.

§ 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 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 truck and trailer 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 truck and trailer 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 Applicant modified DEQ Automotive Coating EI spreadsheet (see Appendix B). 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 truck and trailer 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 Applicant modified DEQ Automotive Coating EI spreadsheet (see Appendix B).

Permit condition 11 establishes a daily use limit for PPG coating materials used in the truck and trailer 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 TAPs emissions limits specified in the Applicant modified DEQ Automotive Coating EI spreadsheet (see Appendix B).

Permit condition 12 establishes a daily use limit for PPG catalyst coating materials used in the truck and trailer 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 TAPs emissions limits specified in the Applicant modified DEQ Automotive Coating EI spreadsheet (see Appendix B).

Permit condition 13 establishes a daily use limit for Sherwin-Williams coating materials used in the truck and trailer 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 TAPs emissions limits specified in the Applicant modified DEQ Automotive Coating EI spreadsheet (see Appendix B).

Permit condition 14 establishes a daily use limit for Sherwin-Williams activator coating materials used in the truck and trailer 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 TAPs emissions limits specified in the Applicant modified DEQ Automotive Coating EI spreadsheet (see Appendix B).

Permit condition 15 establishes a daily use limit for Sherwin-Williams Genesis coating materials used in the truck and trailer 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 TAPs emissions limits specified in the Applicant modified DEQ Automotive Coating EI spreadsheet (see Appendix B).

Permit condition 16 establishes a daily use limit for Sherwin-Williams Advanced Industrial Coatings (AIC) coating materials used in the truck and trailer 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 TAPs emissions limits specified in the Applicant modified DEQ Automotive Coating EI spreadsheet (see Appendix B).

Permit condition 17 establishes a daily use limit for Amteco Black Zero Rust coating materials used in the truck and trailer 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 TAPs emissions limits specified in the Applicant modified DEQ Automotive Coating EI spreadsheet (see Appendix B).

Permit condition 18 establishes a daily use limit for bed liner and rubber undercoating materials used in the bed liner and rubber undercoating processes as proposed by the Applicant. This limit was established because it was the easiest way for the Applicant to demonstrate compliance with the TAPs emissions limits specified in the Applicant modified DEQ Automotive Coating EI spreadsheet (see Appendix B).

Permit condition 19 establishes that the permittee conduct all truck and trailer 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 20 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 truck and trailer coating process. This was required because truck and trailer coating operations are expected to have odors that might be offensive to their immediate neighbors.

Permit condition 21 establishes that the permittee shall maintain material purchase records and Material Safety Data Sheets (MSDS) for the truck and trailer coating process. This condition was placed in the permit to ensure compliance with the Coating Materials Use Limit Permit Condition.

Permit condition 22 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 truck and trailer coating process. This condition was placed in the permit to ensure compliance with all of the Coating Materials Use Limit and Manufacturer Specific Coating Materials Use Limit permit conditions.

Permit condition 23 establishes that the permittee shall maintain records as required by the General Provision recordkeeping requirements.

Permit condition 24 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 25 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 26 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 27 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 28 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 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:

PM_{10} Emissions:

A daily coatings material use limit needs to be established for truck and trailer coating operations that demonstrates compliance with State Law. Specifically, compliance with IDAPA 58.01.01.585 and .586 for toxic air pollutants (TAPs) needs to be determined. Therefore, the Applicant used the DEQ Automotive Coating EI spreadsheet to create a new spreadsheet for the specific coatings used at their facility (see Appendix B). This spreadsheet contains paints from the manufacturers of paints used at the facility and contains multiple paint systems for each brand. The TAPs data entered in the spreadsheet by the Applicant was taken from the MSDSs for the paints listed. The spreadsheet was then used to demonstrate that with 15.0 gallons per day of coating use (as proposed by the Applicant), the ELs listed in IDAPA 58.01.01.585 and .586 would not be exceeded for any of the coatings listed in the spreadsheet. The 15.0 gallons per day of coating was then used to determine worst-case PM_{10}, $PM_{2.5}$, and VOC emissions from Automotive Coating operations (see calculations as follows):

Table A.1 POST PROJECT HOURLY AND ANNUAL PM_{10} POTENTIAL TO EMIT FOR THE AUTOMOTIVE COATING OPERATION

Coating Material	Daily Coating Use[1] (gal/day)	Annual Coating Use[2] (gal/yr)	Density[3] (lb/gal)	Paint Spray Gun TE[4] (%)	Booth Particulate Filters CE[5] (%)	Hourly PM_{10} Emissions (lb-PM_{10}/hr)	Annual PM_{10} Emissions (T-PM_{10}/yr)
Pre-treatment wash primer, primer, topcoat, clear, reducer, and hardener combined	15.0	5,475	17.22	65	98	0.08	0.33

[1] – Daily coating use was determined by the Applicant using the modified DEQ Automotive Coatings EI spreadsheet (see Appendix B).
[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 EI spreadsheet provided by the Applicant (DEQ assumption for worst-case emissions).
[4] – The permit requires a minimum paint gun transfer efficiency of 65%. Therefore, PM_{10} emissions are based up this minimum transfer efficiency.
[5] – The permit requires a minimum PM_{10} control efficiency of 98%. Therefore, PM_{10} emissions are based up this minimum control efficiency.

$PM_{2.5}$ Emissions:

In order to determine $PM_{2.5}$ emissions dacily and annual PM_{10} emissions were multiplied by a speciation factor. The factor was taken from the California Emissions Inventory and Reporting System (CEIDARS) Particulate Matter Speciation Profiles (dated 7/28/2009). Specifically the "Paint Application – Oil Based" factor of 92.5% of PM_{10} is $PM_{2.5}$ speciation factor.

Table A.2 POST PROJECT HOURLY AND ANNUAL $PM_{2.5}$ POTENTIAL TO EMIT FOR THE AUTOMOTIVE COATING OPERATION

Coating Material	Hourly PM_{10} Emissions (lb-PM_{10}/hr)	Annual PM_{10} Emissions (T-PM_{10}/yr)	Hourly $PM_{2.5}$ Emissions (lb-$PM_{2.5}$/hr)	Annual $PM_{2.5}$ Emissions (T-$PM_{2.5}$/yr)
Pre-treatment wash primer, primer, topcoat, clear, reducer, and hardener combined	0.08	0.33	0.07	0.31

[1] – Daily coating use was determined by the Applicant using the modified DEQ Automotive Coatings EI spreadsheet (see Appendix B).

VOC Emissions:

Table A.3 POST PROJECT HOURLY AND ANNUAL VOC POTENTIAL TO EMIT FOR THE AUTOMOTIVE COATING OPERATION

Coating Material	Daily Coating Use[1] (gal/day)	Annual Coating Use[2] (gal/yr)	VOC Content[3] (lb-VOC/gal)	Hourly VOC Emissions (lb-VOC/hr)	Annual VOC Emissions[3] (T-VOC/yr)
Pre-treatment wash primer, primer, topcoat, clear, reducer, and hardener combined	15.0	5,475	17.22	10.76	47.14

[1] – Daily coating use was determined by the Applicant using the modified DEQ Automotive Coatings EI spreadsheet (see Appendix B).
[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 emissions are based upon normal operation of the facility of 2,080 hrs/yr (8 hrs/day x 260 days/yr, normal business hours) with all coating operation occurring during this time. Since there is inherent 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) this was considered to be the worst-case maximum for which emissions could occur.

Therefore, uncontrolled annual PM emissions are calculated using the annual PTE as calculated and backing out the 98% control efficiency of the filter system.

Uncontrolled annual PM_{10} emissions from the coating operation are calculated as:

Uncontrolled Annual PM_{10} emissions = PM_{10} PTE (T-PM_{10}/yr) ÷ (1 – Filter CE)

Uncontrolled Annual PM_{10} emissions = 0.33 T-PM_{10}/yr ÷ (1 – 0.98) = 16.50 T-PM_{10}/yr

Uncontrolled annual $PM_{2.5}$ emissions from the coating operation are calculated as:

Uncontrolled Annual $PM_{2.5}$ emissions = $PM_{2.5}$ PTE (T-$PM_{2.5}$/yr) ÷ (1 – Filter CE)

Uncontrolled Annual PM_{10} emissions = 0.31 T-$PM_{2.5}$/yr ÷ (1 – 0.98) = 15.50 T-$PM_{2.5}$/yr

Therefore, uncontrolled annual VOC emissions are calculated using the annual PTE as calculated.

Uncontrolled annual VOC emissions are equal to annual PTE as calculated.

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

Uncontrolled Annual VOC emissions = 47.14 T-VOC/yr

Paint Booth Heater Criteria Pollutant Emissions Calculations:

To determine worst-case emissions from the paint booth(s) heater(s) the maximum heat input rating of the burner was determined by the Applicant to be 3.629 MMBtu/hr with operation of 2,080 hrs/yr.

Table A.4 PAINT BOOTH HEATER POST PROJECT HOURLY AND ANNUAL POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS WHEN COMBUSTING NATURAL GAS

Emissions Unit	Rated Heat Input (MMBtu/hr)	Annual Hours of Operation (hrs/yr)	Criteria Pollutant	Emissions Factors (lb/MMBtu)[1,2]	Hourly Emissions (lb/hr)	Annual Emissions (T/yr)
Paint Booth Heater	3.629	2,080	$PM_{10}/PM_{2.5}$	0.0076	0.0276	0.029
			SO_2	0.0006	0.0022	0.002
			NO_X	0.094	0.341	0.355
			CO	0.040	0.145	0.151
			VOC	0.0055	0.020	0.021
			Pb	0.0000005	0.0000018	0.0000019

1 – 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 with a heat content of natural gas/LP of 1,000 Btu/scf.

2 – For natural gas combustion sources all PM_{10} is assumed to be $PM_{2.5}$.

As discussed previously uncontrolled emissions were based upon normal operation of the facility of 2,080 hrs/yr. Therefore, uncontrolled annual criteria pollutant emissions are calculated using the annual criteria pollutant PTE as calculated.

Coating Operation HAPs Emissions Calculations:

Uncontrolled Potential to Emit for HAPs was determined as follows. Using the Applicant supplied modified DEQ Automotive Coatings EI spreadsheet (see Appendix X) the pounds per hour HAPs emissions rates for each coating proposed by the Applicant was determined. Note: For most coating operations the only HAPs proposed to be emitted are ethyl benzene, methyl isobutyl ketone, naphthalene, toluene, styrene, and xylene. Then, the highest pound per hour HAPs emission rate was determined. The highest pound per hour HAPs emission rate was then multiplied by 2,080 hours (assumed normal business hours for annual operation) to determine annual emissions in pounds. This pounds per year HAPs emission rate was then converted to tons.

As discussed previously uncontrolled emissions were based upon normal operation of the facility of 2,080 hrs/yr. Therefore, uncontrolled annual HAPs emissions are calculated using the annual HAPs as calculated.

Table A.5 UNCONTROLLED AND CONTROLLED POTENTIAL TO EMIT FOR HAPs

Coatings (as listed by the Applicant)	Ethyl benzene (lb/hr)	Methyl Isobutyl Ketone (MIBK) (lb/hr)	Naphthalene (lb/hr)	Toluene (lb/hr)	Styrene (lb/hr)	Xylene (o-, m-, p-isomers) (lb/hr)
PPG Paint	None	0.28	0.007	0.49	None	1.87
PPG Catalyst	None	None	None	None	None	0.010
Sherwin Stables	0.043	1.81	None	1.39	None	0.24
Sherwin Staples 2	0.17	0.16	0.016	1.55	None	0.86
Genesis	0.015	None	None	None	None	None
Genesis 2	None	None	None	None	None	None
Genesis 3	0.015	None	None	None	None	None
AIC	0.31	0.84	None	0.38	None	1.76
Activators	0.08	0.11	None	0.24	None	0.44
Worst-Case Emissions (lb/hr)	0.31	1.81	0.016	1.55	0	1.87
Assuming 2,080 hrs/yr of applying coatings (lb/yr)	645	3,765	33	3,224	0	3,890
Assuming 2,080 hrs/yr of applying coatings (T/yr)	0.32	1.88	0.02	1.61	0.00	1.95

APPENDIX B – APPLICANT MODIFIED DEQ AUTOMOTIVE COATING EI SPREADSHEET

Paint Type: PPG Paint

Weight Percentage Content Data

Coating Material (see Notes)	Density (lb/gal)	Wt. % Solids	1,2,4 TMB	acetone	aluminum (particulate)	aromatic hydrocarbon 64742-95-6 64742-94-5	2-butoxyethanol	2-butoxyethyl acetate	butyl acetate
HBE RTS	10.73	60.12%		0.00%			2.06%		
MC161 RTS	8.05	48.26%	4.78%	0.00%	0.00%	9.70%		1.72%	1.48%
MBC RTS	8.08	23.22%	2.80%			5.54%			14.98%
ESSS RTS	10.26	64.10%	0.42%	6.15%		0.96%			1.23%
ALK-110 RTS	9.88	56.56%	0.48%			1.06%	0.06%		
ALK-200 RTS	9.79	55.17%	0.00%			0.00%	3.69%		
ALK300E RTS	10.21	71.03%	0.10%			1.22%	0.00%		0.26%
ESU460 RTS	10.50	56.75%	1.89%	0.00%		3.73%	3.27%		1.89%
ALK-FP901	7.99	40.06%	1.23%			1.24%	1.78%		
AUE-300 RTS	8.65	63.81%	1.41%		0.33%	2.36%			1.60%
DBC RTS	7.61	17.46%	0.03%		0.25%	0.14%		0.34%	21.26%
DC3000 RTS	7.72	39.35%	2.40%	16.39%		4.77%			0.17%
DC4000 RTS	7.99	47.13%		4.04%					1.19%
DP50LF RTS	10.29	56.37%	3.09%			6.14%	5.57%		
NLP-908	9.76	54.19%	0.18%						
AUE-300/3501RTS	8.83	68.86%	0.64%		0.36%	0.57%			
MC270RTS	7.82	41.51%	2.10%	13.93%		4.16%			2.90%

lb/gal Calculations

Coating Material	lb/gal	solids	1,2,4 TMB	acetone	aluminum	aromatic hydrocarbon	2-butoxyethanol	2-butoxyethyl acetate	butyl acetate
HBE RTS		6.45	0.00	0.00	0.00	0.00	0.22	0.00	0.00
MC161 RTS		3.88	0.38	0.00	0.00	0.78	0.00	0.14	0.12
MBC RTS		1.88	0.23	0.00	0.00	0.45	0.00	0.00	1.21
ESSS RTS		6.58	0.04	0.63	0.00	0.10	0.00	0.00	0.13
ALK-110 RTS		5.59	0.05	0.00	0.00	0.10	0.01	0.00	0.00
ALK-200 RTS		5.40	0.00	0.00	0.00	0.00	0.36	0.00	0.00
ALK300E RTS		7.25	0.01	0.00	0.00	0.12	0.00	0.00	0.03
ESU460 RTS		5.96	0.20	0.00	0.00	0.39	0.34	0.00	0.20
ALK-FP901		3.20	0.10	0.00	0.00	0.10	0.14	0.00	0.00
AUE-300 RTS		5.52	0.12	0.00	0.03	0.20	0.00	0.00	0.14
DBC RTS		1.33	0.00	0.00	0.02	0.01	0.00	0.03	1.62
DC3000 RTS		3.04	0.19	1.27	0.00	0.37	0.00	0.00	0.01
DC4000 RTS		3.77	0.00	0.32	0.00	0.00	0.00	0.00	0.10
DP50LF RTS		5.80	0.32	0.00	0.00	0.63	0.57	0.00	0.00
NLP-908		5.29	0.02	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AUE-300/3501RTS		6.08	0.06	0.00	0.03	0.05	0.00	0.00	0.00
MC270RTS		3.25	0.16	1.09	0.00	0.33	0.00	0.00	0.23
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Density (lb/gal)	**10.73**	**7.25**	**0.38**	**1.27**	**0.03**	**0.78**	**0.57**	**0.14**	**1.62**
Weighted Avg wt %		**0.79**	**0.04**	**0.14**	**0.00**	**0.09**	**0.06**	**0.02**	**0.18**
Minimum Density (lb/gal)	**7.61**								

Daily Use Rates

1.15 gal/hr
12 hr/day
13.8 gal/day
24 hr/day (averaging period)

Factor of Safety (Allowance to cover the fact that not all paints will be analyzed)

1.00

Paint Gun Transfer Efficiency (control for particulates)

65.00%

Particulate Filter Control Efficiency (control for particulates)

98.00%

Isocyanate reaction factor (control for isocyanate particulates)

85.00%

Calculated Emissions Rate (lb/hr)	**100.0798**	**0.948806**	**0.727552**	**0.000127947**	**0.44898875**	**0.329562975**	**0.0796145**	**0.93028445**
IDAPA TAP EL (lb/hr)		8.2	11.9	0.0667		0.8	0.833	4.73
Meets the EL?		**Yes**	**Yes**	**Yes**		**Yes**	**Yes**	**Yes**

Annual Use Rate

5037 gal/yr

HAP Emissions

9.9797 T/yr

butyl alcohol	carbon black (particulate)	ethyl 3-ethoxy propionate	ethyl benzene	heptane	isobutyl alcohol	isopropyl alcohol	methyl amyl ketone	MEK	methyl cyclohexane	methyl isobutyl ketone	1-methoxy-2-propyl acetate 108-65-6
			4.02%					2.74%		1.67%	0.08%
0.00%	0.00%	0.53%	3.55%				8.50%	0.00%	0.00%	0.00%	0.00%
0.00%			1.50%	0.69%			4.48%	13.80%	0.69%	1.13%	
		1.26%	0.00%				7.78%			0.00%	7.71%
			4.69%				0.00%			0.00%	6.86%
			4.00%				0.00%	7.07%		0.00%	6.93%
			0.21%				18.02%			0.00%	6.46%
0.00%	0.10%		0.37%			0.80%	10.40%	2.79%		2.95%	
			5.85%								
			0.01%				16.66%				8.47%
			0.78%	1.43%	0.06%			15.90%	1.43%	1.17%	13.51%
			4.24%				2.46%				
			4.55%				5.15%			6.09%	5.35%
			0.39%			4.69%	9.10%			2.61%	
			6.95%								
			0.01%				14.98%				9.25%
			4.34%				1.34%				

butyl alcohol	carbon black	ethyl 3-ethoxy propionate	ethyl benzene	heptane	isobutyl alcohol	isopropyl alcohol	methyl amyl ketone	MEK	methylcyclohexane	methyl isobutyl ketone	1-methoxy-2-proanol acetate
0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.29	0.00	0.18	0.01
0.00	0.00	0.04	0.29	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.12	0.06	0.00	0.00	0.36	1.12	0.06	0.09	0.00
0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.79
0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.68
0.00	0.00	0.00	0.02	0.00	0.00	0.00	1.84	0.00	0.00	0.00	0.66
0.00	0.01	0.00	0.04	0.00	0.00	0.08	1.09	0.29	0.00	0.31	0.00
0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.00	0.73
0.00	0.00	0.00	0.06	0.11	0.00	0.00	0.00	1.21	0.11	0.09	1.03
0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.41	0.00	0.00	0.49	0.43
0.00	0.00	0.00	0.04	0.00	0.00	0.48	0.94	0.00	0.00	0.27	0.00
0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00	0.82
0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.01**	**0.13**	**0.68**	**0.11**	**0.00**	**0.48**	**1.84**	**1.21**	**0.11**	**0.49**	**1.03**
0.00	**0.00**	**0.01**	**0.07**	**0.01**	**0.00**	**0.05**	**0.20**	**0.13**	**0.01**	**0.05**	**0.11**

0.00262545	**4.22625E-05**	**0.0743337**	**0.390034**	**0.0625732**	**0.00262545**	**0.2774956**	**1.057909**	**0.6957443**	**0.062573225**	**0.27979**	**0.591163825**	
4.73	0.023		2.9	10.9	1	6.53	1.57	3.93	1.57	1.37	2.4	
Yes	**Yes**		**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	

mineral spirits 64742-48-9	n-butyl alcohol	naphthalene 91-20-3	propyl alcohol	silica (particulate)	stoddard solvent	styrene	toluene	VM&P naphtha 8032-32-4 64742-89-8 64742-88-7	xylene
	1.35%					0.00%	0.00%	0.00%	22.08%
	0.00%				0.00%	0.24%	0.00%	0.00%	20.52%
	4.55%						10.45%	7.77%	8.00%
						0.00%			0.08%
0.12%					0.30%		0.00%	6.44%	22.96%
0.12%					0.11%		0.00%		22.61%
0.10%	0.31%	0.12%			0.82%		0.00%		0.95%
0.24%	1.28%						4.73%		2.26%
					9.77%		0.23%		38.66%
0.61%					0.14%				0.05%
	0.06%						9.02%	8.05%	4.41%
						0.17%	2.64%	2.61%	24.20%
						0.16%			25.78%
			4.69%				4.12%		6.13%
				1%	2.91%		0.28%		33.37%
0.67%					0.15%				0.06%
						0.16%	2.16%	2.14%	24.74%

mineral spirits	n-butyl alcohol	naphthalene	propyl alcohol	silica	stoddard solvent	styrene	toluene	VM&P naphtha	xylene	HAP
0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.37	2.80
0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	1.65	1.94
0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.84	0.63	0.65	1.61
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.64	2.27	2.73
0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	2.21	2.61
0.01	0.03	0.01	0.00	0.00	0.08	0.00	0.00	0.00	0.10	0.13
0.03	0.13	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.24	0.77
0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.02	0.00	3.09	3.57
0.05	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.61	0.34	1.08
0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.20	0.20	1.87	2.40
0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	2.06	2.42
0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.42	0.00	0.63	1.09
0.00	0.00	0.00	0.00	0.10	0.28	0.00	0.03	0.00	3.26	3.96
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.06	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.17	0.17	1.93	2.44
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.06	**0.37**	**0.01**	**0.48**	**0.10**	**0.78**	**0.02**	**0.84**	**0.64**	**3.26**	**3.96**
0.01	**0.04**	**0.00**	**0.05**	**0.01**	**0.09**	**0.00**	**0.09**	**0.07**	**0.36**	**0.43**

0.034017575	**0.211393**	**0.0070449**	**0.2774956**	**0.00039284**	**0.003142**	**7.78E-05**	**0.485507**	**0.3658564**	**1.872724**
	1	0.333	3.33	0.0667	3.5	0.667	2.5	9.13	2.9
	Yes	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Paint Type: PPG Catalyst

Weight Percentage Content Data

Coating Material	Density (lb/gal)	Wt. % Solids	1,2,4 TMB	aromatic hydrocarbon 64742-95-6	2-butoxyethyl acetate	butyl acetate	ethyl 3-ethoxy propionate	hexamethylene diisocyanate monomer	isophorone diisocyanate monomer
ESH200 (catalyst)	9.52	89.04%	0.00%	0.00%		0.00%	10.90%	0.13%	0.00%
MH168 (catalyst)	8.26	46.48%	13.99%	28.37%	5.02%	4.34%		0.00%	0.14%
ALKK201 (catalyst	9.32	83.40%	1.48%	2.94%		4.62%		0.13%	

lb/gal Calculations

Coating Material	lb/gal	solids	1,2,4 TMB	aromatic hydrocarbon	2-butoxyethyl acetate	butyl acetate	ethyl 3-ethoxy propionate	hexamethylene diisocyanate	isophorone diisocyanate
ESH200 (catalyst)		8.48	0.00	0.00	0.00	0.00	1.04	0.01	0.00
MH168 (catalyst)		3.84	1.16	2.34	0.41	0.36	0.00	0.00	0.01
ALKK201 (catalyst)		7.77	0.14	0.27	0.00	0.43	0.00	0.01	0.00
Maximum Density (lb/gal)	**9.32**	**7.77**	**1.16**	**2.34**	**0.41**	**0.43**	**0.00**	**0.01**	**0.01**
Weighted Avg wt %		**0.88**	**0.13**	**0.27**	**0.05**	**0.05**	**0.00**	**0.00**	**0.00**
Minimum Density (lb/gal)	**8.26**								

Daily Use Rates

0.22 gal/hr
12 hr/day
2.64 gal/day
24 hr/day (averaging period)

Factor of Safety (Allowance to cover the fact that not all paints will be analyzed)

1.00

Paint Gun Transfer Efficiency (control for particulates)

65.00%

Particulate Filter Control Efficiency (control for particulates)

98.00%

Isocyanate reaction factor (control for isocyanate particulates)

85.00%

Calculated Emissions Rate (lb/hr)	**20.5204**	**0.127113**	**0.25776982**	**0.04561172**	**0.0473642**	**0**	**0.000199914**	**0.000190806**
10 % of the IDAPA TAP EL (lb/hr)		8.2		0.833	4.73		0.0002	0.0006
Meets 10% of the the EL?		**Yes**	**Yes**	**Yes**		**Yes**	**Yes**	

Annual Use Rate

963.6 gal/yr

HAP Emissions

0.0458 T/yr

1-methoxy-2-proanyl acetate	xylene	
		Also 0.57% Cumene
	1.15%	(98-82-8)
7.29%	0.14%	

1-methoxy-2-proanol acetate	xylene	HAP
0.00	0.00	0.00
0.00	0.09	0.09
0.68	0.01	0.01
0.68	**0.09**	**0.09**
0.08	**0.01**	**0.01**

0.07473708	**0.010449**	
2.4	2.9	
Yes	**Yes**	

Paint Type: Sherwin-Williams Staples

Weight Percentage Content Data

Coating Material	Density (lb/gal)	Wt. % Solids	1,2,4 TMB	acetone	aromatic hydrocarbon	n-butyl acetate	carbon black (particulate)	ethyl 3-ethoxy propionate	ethyl benzene	kaolin (particulate)
R7K158	6.21	0.00%								
AS8	7.06	0.40%				46.00%				
US-2	6.92	0.00%				20.00%		10.00%		
US-3	7.08	0.00%				35.00%		15.00%		
US-4	7.31	0.00%				25.00%		28.00%		
US-5	7.28	0.00%				13.00%		14.00%		
GR1070	7.39	0.00%				87.00%				
GR1088	7.50	0.00%		70.00%						
AIR10	6.59	0.00%		100.00%						
AIR20	7.50	0.00%		70.00%						
BS10	7.18	4.10%	2.00%		1.00%	15.00%		9.00%	0.70%	
S66	7.89	37.10%				51.00%				
P30A	13.60	76.00%				4.00%	0.30%			8.00%
E2W932	12.02	71.60%		10.00%		7.00%				
E2A933	12.00	71.50%		10.00%		7.00%	0.10%			
E2B931	11.80	71.10%		10.00%		7.00%	0.80%			
DS693	9.42	42.90%		16.00%		20.00%	0.30%			
E2G973	7.34	21.70%					0.10%		0.40%	
S41	8.44	50.70%				33.00%		15.00%	0.10%	
CC950	8.39	49.60%		5.00%		24.00%		1.00%		

lb/gal Calculations

Coating Material	lb/gal	solids	1,2,4 TMB	acetone	aromatic hydrocarbon	butyl acetate	carbon black	ethyl 3-ethoxy propionate	ethyl benzene	kaolin (particulate)
R7K158		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AS8		0.03	0.00	0.00	0.00	3.25	0.00	0.00	0.00	0.00
US-2		0.00	0.00	0.00	0.00	1.38	0.00	0.69	0.00	0.00
US-3		0.00	0.00	0.00	0.00	2.48	0.00	1.06	0.00	0.00
US-4		0.00	0.00	0.00	0.00	1.83	0.00	2.05	0.00	0.00
US-5		0.00	0.00	0.00	0.00	0.95	0.00	1.02	0.00	0.00
GR1070		0.00	0.00	0.00	0.00	6.43	0.00	0.00	0.00	0.00
GR1088		0.00	0.00	5.25	0.00	0.00	0.00	0.00	0.00	0.00
AIR10		0.00	0.00	6.59	0.00	0.00	0.00	0.00	0.00	0.00
AIR20		0.00	0.00	5.25	0.00	0.00	0.00	0.00	0.00	0.00
BS10		0.29	0.14	0.00	0.07	1.08	0.00	0.65	0.05	0.00
S66		2.93	0.00	0.00	0.00	4.02	0.00	0.00	0.00	0.00
P30A		10.34	0.00	0.00	0.00	0.54	0.04	0.00	0.00	1.09
E2W932		8.61	0.00	1.20	0.00	0.84	0.00	0.00	0.00	0.00
E2A933		8.58	0.00	1.20	0.00	0.84	0.01	0.00	0.00	0.00
E2B931		8.39	0.00	1.18	0.00	0.83	0.09	0.00	0.00	0.00
DS693		4.04	0.00	1.51	0.00	1.88	0.03	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E2G973		1.59	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.00
S41		4.28	0.00	0.00	0.00	2.79	0.00	1.27	0.01	0.00
CC950		4.16	0.00	0.42	0.00	2.01	0.00	0.08	0.00	0.00
Maximum Density (lb/gal)	**13.60**	**10.34**	**0.14**	**6.59**	**0.07**	**6.43**	**0.09**	**2.05**	**0.05**	**1.09**
Weighted Avg wt %		**1.04**	**0.01**	**0.67**	**0.01**	**0.65**	**0.01**	**0.21**	**0.01**	**0.11**
Minimum Density (lb/gal)	**6.21**									

Daily Use Rates

1.7 gal/hr
12 hr/day
20.4 gal/day
24 hr/day (averaging period)

Factor of Safety (Allowance to cover the fact that not all paints will be analyzed)

1.00

Paint Gun Transfer Efficiency (control for particulates)

65.00%

Particulate Filter Control Efficiency (control for particulates)

98.00%

Calculated Emissions Rate (lb/hr)	**210.8544**	**5.72356**	**5.6015**	**0.06103**	**5.464905**	**0.00056168**	**1.73978**	**0.042721**	**0.0064736**
IDAPA TAP EL (lb/hr)		8.2	119		47.3	0.23		29	0.133
Meets the EL?		**Yes**	**Yes**		**Yes**	**Yes**		**Yes**	**Yes**

Annual Use Rate

7446 gal/yr

HAP Emissions

6.0759 T/yr

Notes:

If no percentage of TAP was listed in the MSDS, then 1.0% was assumed.
For materials labeled as particulate, the transfer effciency of the paint gun and the control effciency of the particulate filters are used to deter

methyl amyl ketone	MEK	Methyl Isobutyl Ketone (MIBK) (HAP)	mineral spirits	toluene	VM&P naphtha	xylene
			5.00%		95.00%	
		15.00%		3.00%		
5.00%	40.00%	1.00%				
10.00%	20.00%	1.00%				
20.00%						
34.00%						
1.00%	40.00%			10.00%		4.00%
11.00%						
		3.00%		12.00%		
		6.00%		2.00%		
		29.00%		5.00%		2.00%

methyl amyl ketone	MEK	Methyl Isobutyl Ketone (MIBK) (HAP)	mineral spirits	toluene	VM&P naphtha	xylene	HAP
0.00	0.00	0.00	0.31	0.00	5.90	0.00	0.00
0.00	0.00	1.06	0.00	0.21	0.00	0.00	0.21
0.35	2.77	0.07	0.00	0.00	0.00	0.00	0.00
0.71	1.42	0.07	0.00	0.00	0.00	0.00	0.00
1.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.07	2.87	0.00	0.00	0.72	0.00	0.29	1.06
0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.41	0.00	1.63	0.00	0.00	1.63
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.57	0.00	0.19	0.00	0.00	0.19
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	2.13	0.00	0.37	0.00	0.15	0.54
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.48	**2.87**	**2.13**	**0.31**	**1.63**	**5.90**	**0.29**	**1.63**
0.25	**0.29**	**0.21**	**0.03**	**0.16**	**0.60**	**0.03**	**0.16**

2.10392	**2.4412**	**1.80931**	**0.263925**	**1.3872**	**5.014575**	**0.24412**	
15.7	39.3	13.7		25	91.3	29	
Yes	**Yes**	**Yes**		**Yes**	**Yes**	**Yes**	

mine emissions.

Paint Type: Sherwin-Williams Staples

Weight Percentage Content Data

Coating Material	Density (lb/gal)	Wt. % Solids	1,2,4 TMB	acetone	aromatic hydrocarbon	n-butyl acetate	carbon black (particulate)	ethyl 3-ethoxy propionate	ethyl benzene	isopropyl alcohol
CC931	8.06	50.10%		13.00%		25.00%				
HPC15	7.75	39.30%		23.00%		21.00%				
BCS95	7.17	2.50%				36.00%			2.00%	
DC5020	7.96	47.00%		8.00%		18.00%		6.00%		
1100755	7.93	56.00%		22.00%		19.00%				
SC159	7.07	0.00%								30.00%
GR2070	10.42	0.00%								
CC947	8.65	52.00%				26.00%		7.00%		
FC730	8.22	36.70%	6.00%	18.00%	4.00%	2.00%				
AIP200	10.80	61.80%		3.00%	1.00%					
AIP201	10.41	59.70%		4.00%	1.00%		1.00%			
AIP202	10.48	59.60%		5.00%	1.00%		0.30%			
SR15	7.21	24.10%								
CBS2835P	7.92	37.00%		42.00%			5.00%		0.30%	
AIA200	7.43	9.10%				22.00%				
GA1097	8.13	1.10%								
DP840	11.09	62.50%				5.00%	0.10%		1.00%	
FP410	10.81	60.20%				4.00%		1.00%	1.00%	
R7K156	6.44	0.00%								
ultra 7000	7.80	22.00%				38.00%	0.10%		3.00%	

lb/gal Calculations

Coating Material	lb/gal	solids	1,2,4 TMB	acetone	aromatic hydrocarbon	butyl acetate	carbon black	ethyl 3-ethoxy propionate	ethyl benzene	isopropyl alcohol
CC931		4.04	0.00	1.05	0.00	2.02	0.00	0.00	0.00	0.00
HPC15		3.05	0.00	1.78	0.00	1.63	0.00	0.00	0.00	0.00
BCS95		0.18	0.00	0.00	0.00	2.58	0.00	0.00	0.14	0.00
DC5020		3.74	0.00	0.64	0.00	1.43	0.00	0.48	0.00	0.00
1100755		4.44	0.00	1.74	0.00	1.51	0.00	0.00	0.00	0.00
SC159		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12
GR2070		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC947		4.50	0.00	0.00	0.00	2.25	0.00	0.61	0.00	0.00
FC730		3.02	0.49	1.48	0.33	0.16	0.00	0.00	0.00	0.00
AIP200		6.67	0.00	0.32	0.11	0.00	0.00	0.00	0.00	0.00
AIP201		6.21	0.00	0.42	0.10	0.00	0.10	0.00	0.00	0.00
AIP202		6.25	0.00	0.52	0.10	0.00	0.03	0.00	0.00	0.00
SR15		1.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CBS2835P		2.93	0.00	3.33	0.00	0.00	0.40	0.00	0.02	0.00
AIA200		0.68	0.00	0.00	0.00	1.63	0.00	0.00	0.00	0.00
GA1097		0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DP840		6.93	0.00	0.00	0.00	0.55	0.01	0.00	0.11	0.00
FP410		6.51	0.00	0.00	0.00	0.43	0.00	0.11	0.11	0.00
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R7K156		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ultra 7000		1.72	0.00	0.00	0.00	2.96	0.01	0.00	0.23	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Density (lb/gal)	**11.09**	**6.93**	**0.49**	**3.33**	**0.33**	**2.96**	**0.40**	**0.61**	**0.23**	**2.12**
Weighted Avg wt %		**0.79**	**0.06**	**0.38**	**0.04**	**0.34**	**0.05**	**0.07**	**0.03**	**0.24**
Minimum Density (lb/gal)	**6.44**									

Daily Use Rates

1.47 gal/hr
12 hr/day
17.64 gal/day
24 hr/day (averaging period)

Factor of Safety (Allowance to cover the fact that not all paints will be analyzed)

1.00

Paint Gun Transfer Efficiency (control for particulates)

65.00%

Particulate Filter Control Efficiency (control for particulates)

98.00%

Calculated Emissions Rate (lb/hr)	**122.2673**	**2.807406**	**2.444904**	**0.241668**	**2.17854**	**0.00203742**	**0.4450425**	**0.17199**	**1.558935**
IDAPA TAP EL (lb/hr)		8.2	119		47.3	0.23		29	65.3
Meets the EL?		**Yes**	**Yes**		**Yes**	**Yes**		**Yes**	**Yes**

Annual Use Rate

6438.6 gal/yr

HAP Emissions

9.9966 T/yr

Notes:

If no percentage of TAP was listed in the MSDS, then 1.0% was assumed.
For materials labeled as particulate, the transfer effciency of the paint gun and the control effciency of the particulate filters are used to determi

kaolin (particulate)	methyl amyl ketone	MEK	Methyl Isobutyl Ketone (MIBK) (HAP)	mineral spirits	naphthalene	propionic acid	silica (particulate)	toluene	VM&P naphtha	xylene
	5.00%									
	26.00%									10.00%
	15.00%	5.00%								
						1.00%				
	2.00%	3.00%					13.00%			
	2.00%	9.00%								
	20.00%				0.20%					
	24.00%				0.20%					
	23.00%				0.20%					
	1.00%			1.00%					13.00%	2.00%
				13.00%						
15.00%			2.00%					19.00%		8.00%
15.00%		2.00%	2.00%	1.00%				18.00%		8.00%
				54.00%				11.00%	32.00%	
	9.00%							5.00%		15.00%

kaolin (particulate)	methyl amyl ketone	MEK	Methyl Isobutyl Ketone (MIBK) (HAP)	mineral spirits	naphthalene	propionic acid	silica	toluene	VM&P naphtha	xylene	HAP
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.86
0.00	1.19	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.17	0.26	0.00	0.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00
0.00	0.16	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	2.16	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
0.00	2.50	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
0.00	2.41	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.00	0.00	1.03	0.16	0.18
0.00	0.00	0.00	0.00	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.66	0.00	0.00	0.22	0.00	0.00	0.00	0.00	2.11	0.00	0.89	3.11
1.62	0.00	0.22	0.22	0.11	0.00	0.00	0.00	1.95	0.00	0.86	2.92
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	3.48	0.00	0.00	0.00	0.71	2.06	0.00	0.71
0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	1.17	1.79
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.66	**2.50**	**0.74**	**0.22**	**3.48**	**0.02**	**0.08**	**1.12**	**2.11**	**2.06**	**1.17**	**3.11**
0.19	**0.29**	**0.08**	**0.03**	**0.40**	**0.00**	**0.01**	**0.13**	**0.24**	**0.24**	**0.13**	**0.35**

0.008558708	**1.836324**	**0.543753**	**0.163023**	**2.556036**	**0.015876**	**0.0582855**	**0.005785553**	**1.548719**	**1.514688**	**0.85995**
0.133	15.7	39.3	13.7		3.33	2	0.667	25	91.3	29
Yes	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

ine emissions.

Paint Type: GENESIS

Weight Percentage Content Data

Coating Material	Density (lb/gal)	Wt. % Solids	acetone	antimony and compounds (particulate)	butyl acetate	carbon black (particulate)	chromium III (particulate)	ethyl benzene	methyl amyl ketone
GT1002	13.28	77.00%							
GT1006	8.24	60.10%			2.00%				19.00%
GT1009	7.81	52.00%	29.00%						18.00%
GT1010	8.87	48.20%	28.00%		12.00%			0.20%	11.00%
GT1011	16.10	83.20%			8.00%				
GT1012	9.53	63.50%			17.00%				
GT1013	8.40	60.60%			6.00%	5.00%			4.00%
GT1014	9.05	64.30%			16.00%				
GT1015	8.39	59.70%			19.00%				
GT1016	8.51	60.80%			19.00%				
GT1017	8.58	61.60%			15.00%				
GT1018	8.56	62.90%			13.00%				
GT1019	8.54	63.30%			6.00%				
GT1020	8.48	58.80%			19.00%				
GT1021	8.59	55.00%			6.00%				
GT1022	8.77	61.40%			9.00%				
GT1025	11.81	71.10%			14.00%		0.01%		
GT1026	17.22	83.30%		7.18%	11.00%			0.10%	
GT1028	12.95	75.30%			12.00%				
GT1029	9.27	65.50%			19.00%				
GT1030	9.45	66.10%			19.00%				
GT1032	8.40	57.40%			23.00%				

lb/gal Calculations

Coating Material	lb/gal	solids	acetone	antimony and compounds	butyl acetate	carbon black	chromium III	ethyl benzene	methyl amyl ketone
GT1002		10.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GT1006		4.95	0.00	0.00	0.16	0.00	0.00	0.00	1.57
GT1009		4.06	2.26	0.00	0.00	0.00	0.00	0.00	1.41
GT1010		4.28	2.48	0.00	1.06	0.00	0.00	0.02	0.98
GT1011		13.40	0.00	0.00	1.29	0.00	0.00	0.00	0.00
GT1012		6.05	0.00	0.00	1.62	0.00	0.00	0.00	0.00
GT1013		5.09	0.00	0.00	0.50	0.42	0.00	0.00	0.34
GT1014		5.82	0.00	0.00	1.45	0.00	0.00	0.00	0.00
GT1015		5.01	0.00	0.00	1.59	0.00	0.00	0.00	0.00
GT1016		5.17	0.00	0.00	1.62	0.00	0.00	0.00	0.00
GT1017		5.29	0.00	0.00	1.29	0.00	0.00	0.00	0.00
GT1018		5.38	0.00	0.00	1.11	0.00	0.00	0.00	0.00
GT1019		5.41	0.00	0.00	0.51	0.00	0.00	0.00	0.00
GT1020		4.99	0.00	0.00	1.61	0.00	0.00	0.00	0.00
GT1021		4.72	0.00	0.00	0.52	0.00	0.00	0.00	0.00
GT1022		5.38	0.00	0.00	0.79	0.00	0.00	0.00	0.00
GT1025		8.40	0.00	0.00	1.65	0.00	0.00	0.00	0.00
GT1026		14.34	0.00	1.24	1.89	0.00	0.00	0.02	0.00
GT1028		9.75	0.00	0.00	1.55	0.00	0.00	0.00	0.00
GT1029		6.07	0.00	0.00	1.76	0.00	0.00	0.00	0.00
GT1030		6.25	0.00	0.00	1.80	0.00	0.00	0.00	0.00
GT1032		4.82	0.00	0.00	1.93	0.00	0.00	0.00	0.00
Maximum Density (lb/gal)	**17.22**	**14.34**	**2.48**	**1.24**	**1.93**	**0.42**	**0.00**	**0.02**	**1.57**
Weighted Avg wt %		**1.15**	**0.20**	**0.10**	**0.15**	**0.03**	**0.00**	**0.00**	**0.13**
Minimum Density (lb/gal)	**7.81**								

Daily Use Rates

1.7 gal/hr
12 hr/day
20.4 gal/day
24 hr/day (averaging period)

Factor of Safety (Allowance to cover the fact that not all paints will be analyzed)

1.00

Paint Gun Transfer Efficiency (control for particulates)

65.00%

Particulate Filter Control Efficiency (control for particulates)

98.00%

Calculated Emissions Rate (lb/hr)	**292.6229**	**2.11106**	**0.007356556**	**1.6422**	**0.002499**	**7.02695E-06**	**0.015079**	**1.33076**
IDAPA TAP EL (lb/hr)		119	0.033	47.3	0.23	0.033	29	15.7
Meets the EL?		**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Annual Use Rate

7446 gal/yr

HAP Emissions

0.0660 T/yr

Notes:

If no percentage of TAP was listed in the MSDS, then 1.0% was assumed.
For materials labeled as particulate, the transfer effciency of the paint gun and the control effciency of the particulate filters are used to determ

silica (particulate)
20.00%

silica	HAP
0.00	0.00
0.00	0.00
0.00	0.00
1.77	0.02
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.02
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
1.77	**0.02**
0.14	**0.00**

0.0105553

0.667

Yes

ıine emissions.

Paint Type: GENESIS

Weight Percentage Content Data

Coating Material	Density (lb/gal)	Wt. % Solids	butyl acetate	carbon black (particulate)	methyl amyl ketone	mineral spirits	VM&P naphtha
GT1033	8.76	62.70%	17.00%				
GT1034	9.22	64.10%	17.00%				
GT1039	9.10	62.50%	13.00%				
GT1043	9.31	62.20%	25.00%				
GT1044	9.03	64.00%	15.00%				
GT1045	10.00	69.70%	12.00%				
GT1046	8.51	60.00%	18.00%				
GT1047	8.46	59.40%	24.00%				
GT1048	8.47	61.00%	9.00%				
GT1049	8.89	63.50%	22.00%				
GT1050	8.66	61.00%	15.00%				
GT1051	8.55	61.30%	10.00%				
GT1052	8.47	59.10%	19.00%				
GT1053	8.48	60.20%	20.00%				
GT1054	8.46	59.70%	20.00%				
GT1055	8.54	60.40%	17.00%			1.00%	
GT1056	8.62	60.70%	15.00%		3.00%	4.00%	
GT1057	8.72	62.40%	15.00%			1.00%	
GT1058	8.55	62.70%	15.00%			1.00%	
GT1059	8.82	62.70%	13.00%			2.00%	2.00%
GT1060	8.53	61.20%	15.00%			2.00%	
GT1061	8.21	60.30%	7.00%	2.00%			
GT1062	8.26	60%	13.00%				

lb/gal Calculations

Coating Material	lb/gal	solids	butyl acetate	carbon black	methyl amyl ketone	mineral spirits	VM&P naphtha	HAP
GT1033		5.49	1.49	0.00	0.00	0.00	0.00	0.00
GT1034		5.91	1.57	0.00	0.00	0.00	0.00	0.00
GT1039		5.69	1.18	0.00	0.00	0.00	0.00	0.00
GT1043		5.79	2.33	0.00	0.00	0.00	0.00	0.00
GT1044		5.78	1.35	0.00	0.00	0.00	0.00	0.00
GT1045		6.97	1.20	0.00	0.00	0.00	0.00	0.00
GT1046		5.11	1.53	0.00	0.00	0.00	0.00	0.00
GT1047		5.03	2.03	0.00	0.00	0.00	0.00	0.00
GT1048		5.17	0.76	0.00	0.00	0.00	0.00	0.00
GT1049		5.65	1.96	0.00	0.00	0.00	0.00	0.00
GT1050		5.28	1.30	0.00	0.00	0.00	0.00	0.00
GT1051		5.24	0.86	0.00	0.00	0.00	0.00	0.00
GT1052		5.01	1.61	0.00	0.00	0.00	0.00	0.00
GT1053		5.10	1.70	0.00	0.00	0.00	0.00	0.00
GT1054		5.05	1.69	0.00	0.00	0.00	0.00	0.00
GT1055		5.16	1.45	0.00	0.00	0.09	0.00	0.00
GT1056		5.23	1.29	0.00	0.26	0.34	0.00	0.00
GT1057		5.44	1.31	0.00	0.00	0.09	0.00	0.00
GT1058		5.36	1.28	0.00	0.00	0.09	0.00	0.00
GT1059		5.53	1.15	0.00	0.00	0.18	0.18	0.00
GT1060		5.22	1.28	0.00	0.00	0.17	0.00	0.00
GT1061		4.95	0.57	0.16	0.00	0.00	0.00	0.00
Maximum Density (lb/gal)	**10.00**	**6.97**	**2.33**	**0.16**	**0.26**	**0.34**	**0.18**	**0.00**
Weighted Avg wt %		**0.77**	**0.26**	**0.02**	**0.03**	**0.04**	**0.02**	**0.00**
Minimum Density (lb/gal)	**8.21**							

Daily Use Rates

1.7 gal/hr
12 hr/day
20.4 gal/day
24 hr/day (averaging period)

Factor of Safety (Allowance to cover the fact that not all paints will be analyzed)

1.00

Paint Gun Transfer Efficiency (control for particulates)

65.00%

Particulate Filter Control Efficiency (control for particulates)

98.00%

Calculated Emissions Rate (lb/hr)	**142.188**	**1.978375**	**0.00097699**	**0.21981**	**0.29308**	**0.14994**
IDAPA TAP EL (lb/hr)		47.3	0.23	15.7		91.3
Meets the EL?	**Yes**	**Yes**	**Yes**		**Yes**	

Annual Use Rate

7446 gal/yr

HAP Emissions

0.0000 T/yr

Notes:

If no percentage of TAP was listed in the MSDS, then 1.0% was assumed.
For materials labeled as particulate, the transfer effciency of the paint gun and the control effciency of the particulate filters are used to determine emissions.

Paint Type: GENESIS

Weight Percentage Content Data

Coating Material	Density (lb/gal)	Wt. % Solids	1,2,4 TMB	acetone	aromatic hydrocarbon	butyl acetate	ethyl benzene	methyl amyl ketone	silica (particulate)
GT1062	8.26	60.20%				13.00%			
GT1063	8.26	60.40%				13.00%			
GT1064	8.27	60.80%				13.00%			
GT1065	8.40	60.50%				14.00%			
GT1066	8.57	61.00%				14.00%			
GT1068	8.57	62.10%	1.00%			14.00%			
GT1069	8.85	47.90%		28.00%		12.00%	0.20%	11.00%	20.00%
GT1355	7.54	35.00%		21.00%		14.00%		14.00%	
GT2008	10.50	11.20%		3.00%		3.00%			
GT2047	8.69	61.60%				18.00%			
GT2048	8.38	59.70%				12.00%			
GT6000	8.54	71.10%	4.00%	7.00%	2.00%		0.20%	11.00%	

lb/gal Calculations

Coating Material	lb/gal	solids	1,2,4 TMB	acetone	aromatic hydrocarbon	butyl acetate	ethyl benzene	methyl amyl ketone	silica	HAP
GT1062		4.97	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.00
GT1063		4.99	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.00
GT1064		5.03	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.00
GT1065		5.08	0.00	0.00	0.00	1.18	0.00	0.00	0.00	0.00
GT1066		5.23	0.00	0.00	0.00	1.20	0.00	0.00	0.00	0.00
GT1068		5.32	0.09	0.00	0.00	1.20	0.00	0.00	0.00	0.00
GT1069		4.24	0.00	2.48	0.00	1.06	0.02	0.97	1.77	0.02
GT1355		2.64	0.00	1.58	0.00	1.06	0.00	1.06	0.00	0.00
GT2008		1.18	0.00	0.32	0.00	0.32	0.00	0.00	0.00	0.00
GT2047		5.35	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.00
GT2048		5.00	0.00	0.00	0.00	1.01	0.00	0.00	0.00	0.00
GT6000		6.07	0.34	0.60	0.17	0.00	0.02	0.94	0.00	0.02
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Density (lb/gal)	**10.50**	**6.07**	**0.34**	**2.48**	**0.17**	**1.56**	**0.02**	**1.06**	**1.77**	**0.02**
Weighted Avg wt %		**0.67**	**0.04**	**0.27**	**0.02**	**0.17**	**0.00**	**0.12**	**0.20**	**0.00**
Minimum Density (lb/gal)	**7.54**									

Daily Use Rates

1.7 gal/hr
12 hr/day
20.4 gal/day
24 hr/day (averaging period)

Factor of Safety (Allowance to cover the fact that not all paints will be analyzed)

1.00

Paint Gun Transfer Efficiency (control for particulates)

65.00%

Particulate Filter Control Efficiency (control for particulates)

98.00%

Calculated Emissions Rate (lb/hr)	**123.8676**	**2.39666**	**2.1063**	**0.14518**	**1.32957**	**0.015045**	**0.89726**	**0.0105315**
IDAPA TAP EL (lb/hr)		8.2	119		47.3	29	15.7	0.667
Meets the EL?		**Yes**	**Yes**		**Yes**	**Yes**	**Yes**	**Yes**

Annual Use Rate

7446 gal/yr

HAP Emissions

0.0659 T/yr

Notes:

If no percentage of TAP was listed in the MSDS, then 1.0% was assumed.

For materials labeled as particulate, the transfer effciency of the paint gun and the control effciency of the particulate filters are used to determine emissions.

Paint Type: AIC

Weight Percentage Content Data

Coating Material	Density (lb/gal)	Wt. % Solids	1,2,4 TMB	acetone	aromatic hydrocarbon	barium (soluble compounds) (particulate)	butyl acetate	carbon black (particulate)	ethyl acetate	ethyl benzene
FPC235W	9.86	66.40%		8.00%			10.00%			2.00%
AIC400	7.96	44.70%	1.00%				3.00%	2.00%		6.00%
AIC401	8.45	52.30%	1.00%				3.00%			5.00%
AIC403	8.08	46.70%	1.00%				3.00%			6.00%
AIC404	8.20	44.70%					3.00%		5.00%	4.00%
AIC405	8.43	47.80%					3.00%			5.00%
AIC406	8.09	48.00%	1.00%				3.00%			6.00%
AIC407	7.95	42.70%					3.00%			6.00%
AIC408	11.67	70.20%					2.00%			4.00%
AIC409	8.09	46.20%					17.00%			5.00%
AIC410	8.30	46.30%		6.00%			18.00%			3.00%
AIC411	9.26	53.90%					3.00%			5.00%
AIC412	8.08	34.00%		4.00%			9.00%			5.00%
AIP100	11.89	72.00%					15.00%			0.10%
AIP200	10.80	61.80%		3.00%	1.00%	7.00%				

lb/gal Calculations

Coating Material	lb/gal	solids	1,2,4 TMB	acetone	aromatic hydrocarbon	barium (soluble compounds)	butyl acetate	carbon black	ethyl acetate	ethyl benzene
FPC235W		6.55	0.00	0.79	0.00	0.00	0.99	0.00	0.00	0.20
AIC400		3.56	0.08	0.00	0.00	0.00	0.24	0.16	0.00	0.48
AIC401		4.42	0.08	0.00	0.00	0.00	0.25	0.00	0.00	0.42
AIC403		3.77	0.08	0.00	0.00	0.00	0.24	0.00	0.00	0.48
AIC404		3.67	0.00	0.00	0.00	0.00	0.25	0.00	0.41	0.33
AIC405		4.03	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.42
AIC406		3.88	0.08	0.00	0.00	0.00	0.24	0.00	0.00	0.49
AIC407		3.39	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.48
AIC408		8.19	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.47
AIC409		3.74	0.00	0.00	0.00	0.00	1.38	0.00	0.00	0.40
AIC410		3.84	0.00	0.50	0.00	0.00	1.49	0.00	0.00	0.25
AIC411		4.99	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.46
AIC412		2.75	0.00	0.32	0.00	0.00	0.73	0.00	0.00	0.40
AIP100		8.56	0.00	0.00	0.00	0.00	1.78	0.00	0.00	0.01
AIP200		6.67	0.00	0.32	0.11	0.76	0.00	0.00	0.00	0.00
	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Density (lb/gal)	**11.89**	**8.56**	**0.08**	**0.79**	**0.11**	**0.76**	**1.78**	**0.16**	**0.41**	**0.49**
Weighted Avg wt %		**0.86**	**0.01**	**0.08**	**0.01**	**0.08**	**0.18**	**0.02**	**0.04**	**0.05**
Minimum Density (lb/gal)	**7.95**									

Daily Use Rates

1.28 gal/hr
12 hr/day
15.36 gal/day
24 hr/day (averaging period)

Factor of Safety (Allowance to cover the fact that not all paints will be analyzed)

1.00

Paint Gun Transfer Efficiency (control for particulates)

65.00%

Particulate Filter Control Efficiency (control for particulates)

98.00%

Calculated Emissions Rate (lb/hr)	**131.4939**	**0.558912**	**0.504832**	**0.06912**	**0.00338688**	**1.14144**	**0.000713216**	**0.2624**	**0.310656**
IDAPA TAP EL (lb/hr)		8.2	119		0.033	47.3	0.23	93.3	29
Meets the EL?		**Yes**	**Yes**		**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Annual Use Rate

5606.4 gal/yr

HAP Emissions

9.9250 T/yr

Notes:

If no percentage of TAP was listed in the MSDS, then 1.0% was assumed.

For materials labeled as particulate, the transfer effciency of the paint gun and the control effciency of the particulate filters are used to determine emissions.

methyl amyl ketone	MEK	Methyl Isobutyl Ketone (MIBK) (HAP)	naphthalene	silica (particulate)	toluene	xylene
						12.00%
					2.00%	34.00%
					3.00%	29.00%
					2.00%	33.00%
	3.00%				5.00%	24.00%
					7.00%	30.00%
						34.00%
					6.00%	31.00%
						21.00%
						27.00%
	3.00%					17.00%
					3.00%	28.00%
						27.00%
		11.00%		1.00%		
20.00%			0.20%			

methyl amyl ketone	MEK	Methyl Isobutyl Ketone (MIBK) (HAP)	naphthalene	silica	toluene	xylene	HAP
0.00	0.00	0.00	0.00	0.00	0.00	1.18	1.38
0.00	0.00	0.00	0.00	0.00	0.16	2.71	3.34
0.00	0.00	0.00	0.00	0.00	0.25	2.45	3.13
0.00	0.00	0.00	0.00	0.00	0.16	2.67	3.31
0.00	0.25	0.00	0.00	0.00	0.41	1.97	2.71
0.00	0.00	0.00	0.00	0.00	0.59	2.53	3.54
0.00	0.00	0.00	0.00	0.00	0.00	2.75	3.24
0.00	0.00	0.00	0.00	0.00	0.48	2.46	3.42
0.00	0.00	0.00	0.00	0.00	0.00	2.45	2.92
0.00	0.00	0.00	0.00	0.00	0.00	2.18	2.59
0.00	0.25	0.00	0.00	0.00	0.00	1.41	1.66
0.00	0.00	0.00	0.00	0.00	0.28	2.59	3.33
0.00	0.00	0.00	0.00	0.00	0.00	2.18	2.59
0.00	0.00	1.31	0.00	0.12	0.00	0.00	0.01
2.16	0.00	0.00	0.02	0.00	0.00	0.00	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.16	**0.25**	**1.31**	**0.02**	**0.12**	**0.59**	**2.75**	**3.54**
0.22	**0.03**	**0.13**	**0.00**	**0.01**	**0.06**	**0.28**	**0.36**

1.3824	**0.15936**	**0.837056**	**0.013824**	**0.000532672**	**0.377664**	**1.760384**
15.7	39.3	13.7	3.33	0.667	25	29
Yes	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Paint Type: SHERWIN ACTIVATORS

Weight Percentage Content Data

Coating Material	Density (lb/gal)	Wt. % Solids	1,2,4 TMB	aromatic hydrocarbon	n-butyl acetate	ethyl 3-ethoxy propionate	ethyl benzene	hexamethylene diisocyanate	isophorone diisocyanate
H38	8.69	63.40%			37.00%			0.10%	
GH1091	9.08	74.90%			8.00%	7.00%		0.10%	
GH1093	8.85	66.80%			17.00%	6.00%		0.10%	
V6V943	7.81	43.90%			15.00%				
AIH35	8.79	66.90%			33.00%			0.10%	
RHF75	7.40	8.10%			46.00%		2.00%		
FH411	7.96	35.00%	1.00%		19.00%	7.00%	0.90%		
UH80	9.03	80.00%			20.00%			0.20%	
GH2092	9.38	85.00%	2.00%	1.00%	2.00%			0.10%	0.10%
FH731	9.22	39.40%				7.00%			
FH732	9.37	38.80%							
FH733	9.71	37.40%				1.00%			
AIH50	8.38	53.60%			46.00%			0.10%	
RHF85	7.38	8.00%			62.00%		2.00%		
RHF95	7.28	8.10%			34.00%		2.00%		
DH656	8.79	66.90%			33.00%			0.10%	
DH658	7.96	41.20%	1.00%		19.00%	7.00%	0.90%		
DH659	7.91	41.50%							
UPO7229	7.25	5.00%					10.00%		
R7K242	6.74	2.90%							
UH904	9.03	74.00%			14.00%		0.10%		0.20%

lb/gal Calculations

Coating Material	lb/gal	solids	1,2,4 TMB	aromatic hydrocarbon	butyl acetate	ethyl 3-ethoxy propionate	ethyl benzene	hexamethylene diisocyanate	isophorone diisocyanate
H38		5.51	0.00	0.00	3.22	0.00	0.00	0.01	0.00
GH1091		6.80	0.00	0.00	0.73	0.64	0.00	0.01	0.00
GH1093		5.91	0.00	0.00	1.50	0.53	0.00	0.01	0.00
V6V943		3.43	0.00	0.00	1.17	0.00	0.00	0.00	0.00
AIH35		5.88	0.00	0.00	2.90	0.00	0.00	0.01	0.00
RHF75		0.60	0.00	0.00	3.40	0.00	0.15	0.00	0.00
FH411		2.79	0.08	0.00	1.51	0.56	0.07	0.00	0.00
UH80		7.22	0.00	0.00	1.81	0.00	0.00	0.02	0.00
GH2092		7.97	0.19	0.09	0.19	0.00	0.00	0.01	0.01
FH731		3.63	0.00	0.00	0.00	0.65	0.00	0.00	0.00
FH732		3.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FH733		3.63	0.00	0.00	0.00	0.10	0.00	0.00	0.00
AIH50		4.49	0.00	0.00	3.85	0.00	0.00	0.01	0.00
RHF85		0.59	0.00	0.00	4.58	0.00	0.15	0.00	0.00
RHF95		0.59	0.00	0.00	2.48	0.00	0.15	0.00	0.00
DH656		5.88	0.00	0.00	2.90	0.00	0.00	0.01	0.00
DH658		3.28	0.08	0.00	1.51	0.56	0.07	0.00	0.00
DH659		3.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UPO7229		0.36	0.00	0.00	0.00	0.00	0.73	0.00	0.00
R7K242		0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UH904		6.68	0.00	0.00	1.26	0.00	0.01	0.00	0.02
0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Density (lb/gal)	**9.71**	**7.97**	**0.19**	**0.09**	**4.58**	**0.65**	**0.73**	**0.02**	**0.02**
Weighted Avg wt %		**0.97**	**0.02**	**0.01**	**0.56**	**0.08**	**0.09**	**0.00**	**0.00**
Minimum Density (lb/gal)	**6.74**								

Daily Use Rates

0.22 gal/hr
12 hr/day
2.64 gal/day
24 hr/day (averaging period)

Factor of Safety (Allowance to cover the fact that not all paints will be analyzed)

1.00

Paint Gun Transfer Efficiency (control for particulates)

65.00%

Particulate Filter Control Efficiency (control for particulates)

98.00%

Calculated Emissions Rate (lb/hr)	**21.04872**	**0.020636**	**0.010318**	**0.503316**	**0.070994**	**0.07975**	**0.0019866**	**0.0019866**
IDAPA TAP EL (lb/hr)		8.2		47.3		29	0.002	0.006
Meets the EL?		**Yes**		**Yes**		**Yes**	**Yes**	**Yes**

Annual Use Rate

963.6 gal/yr

HAP Emissions

3.3184 T/yr

Notes:

If no percentage of TAP was listed in the MSDS, then 1.0% was assumed.

For materials labeled as particulate, the transfer effciency of the paint gun and the control effciency of the particulate filters are used to determine emissions.

methyl amyl ketone	MEK	Methyl Isobutyl Ketone (MIBK) (HAP)	phosphoric acid	toluene	xylene
4.00%					
3.00%					
		13.00%			
6.00%					9.00%
5.00%	10.00%				5.00%
17.00%					
9.00%					
10.00%					9.00%
25.00%					2.00%
5.00%	10.00%				5.00%
3.00%					
				30.00%	55.00%
	44.00%		3.00%		

methyl amyl ketone	MEK	Methyl Isobutyl Ketone (MIBK) (HAP)	phosphoric acid	toluene	xylene	HAP
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.36	0.00	0.00	0.00	0.00	0.00	0.00
0.27	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	1.02	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.44	0.00	0.00	0.00	0.00	0.67	0.81
0.40	0.80	0.00	0.00	0.00	0.40	0.47
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.57	0.00	0.00	0.00	0.00	0.00	0.00
0.84	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.74	0.00	0.00	0.00	0.00	0.66	0.81
1.82	0.00	0.00	0.00	0.00	0.15	0.29
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.40	0.80	0.00	0.00	0.00	0.40	0.47
0.24	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	2.18	3.99	6.89
0.00	2.97	0.00	0.20	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.82	**2.97**	**1.02**	**0.20**	**2.18**	**3.99**	**6.89**
0.22	**0.36**	**0.12**	**0.02**	**0.26**	**0.48**	**0.84**

	0.2002	**0.326216**	**0.111683**	**0.022242**	**0.23925**	**0.438625**
	15.7	39.3	13.7	0.067	25	29
Yes	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	

Paint Type: Black Zero Rust

Weight Percentage Content Data

Coating Material	Density (lb/gal)	Wt. % Solids	butyl acetate	Methyl Propyl Ketone	VM&P naphtha	xylene (HAP)
28-62	10.82	100.00%	5.00%	5.00%	16.00%	3.60%

lb/gal Calculations

Coating Material	Density (lb/gal)	Solids Wt. (lb)	butyl acetate	Methyl Propyl Ketone	VM&P naphtha	xylene (HAP)	HAP Solids (lb/gal)
28-62		10.82	0.54	0.54	1.73	0.39	0.39
0		0.00	0.00	0.00	0.00	0.00	0.00
0		0.00	0.00	0.00	0.00	0.00	0.00
Maximum Density (lb/gal)	**10.82**	**10.82**	**0.54**	**0.54**	**1.73**	**0.39**	**0.39**
Weighted Avg wt %		**1.00**	**0.05**	**0.05**	**0.16**	**0.04**	**0.04**
Minimum Density (lb/gal)	**10.82**						

Daily Use Rates

1.00 gal/hr
5.00 hr/day
5.00 gal/day
24.00 hr/day (averaging period)

Factor of Safety (Allowance to cover the fact that not all paints will be analyzed)

1.00

Paint Gun Transfer Efficiency (control for particulates)

65.00%

Particulate Filter Control Efficiency (control for particulates)

98.00%

Calculated Emissions Rate (lb/hr)	**2.254**	**0.113**	**0.113**	**0.361**	**0.081**
IDAPA TAP EL (lb/hr)		47.3	46.7	91.3	29
Meets the EL?		Yes	Yes	Yes	Yes

Annual Use Rate

1,825.0 gal/yr

HAP Emissions

0.36 T/yr

Notes:

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						39.00%
Vortex						60.00%
Rhino 2170 A						60.00%
Monstaliner					0.10%	
Morton 999623					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 999623	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

APPENDIX C – FACILITY DRAFT COMMENTS

The following comments were received from the facility on July 20, 2011:

Facility Comment: I have reviewed the draft you sent and all looks good except I do not see where you included the rubber under coating unless you made it a part of item 18.

DEQ Response: Permit condition 18 was modified to include the use of rubber undercoating since bed liner and rubber undercoating are the same material.

APPENDIX D – PROCESSING FEE

PTC Fee Calculation

Instructions:
Fill in the following information and answer the following questions with a Y or N. Enter the emissions increases and decreases for each pollutant in the table.

Company: Utility Trailer Sales of Idaho, Inc.
Address: 7350 S. Eisenman
City: Boise
State: ID
Zip Code: 83715
Facility Contact: Joe Parker
Title: Operations Manager
AIRS No.: 001-00263

N Does this facility qualify for a general permit (i.e. concrete batch plant, hot-mix asphalt plant)? Y/N

Y Did this permit require engineering analysis? Y/N

N Is this a PSD permit Y/N (IDAPA 58.01.01.205.04)

Emissions Inventory			
Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO_X	0.4	0	0.4
SO_2	0.0	0	0.0
CO	0.2	0	0.2
PM10	0.4	0	0.4
VOC	47.2	0	47.2
TAPS/HAPS	0.0	0	0.0
Total:	0.0	0	**48.0**
Fee Due	**$ 5,000.00**		

Comments: There was a 5.78 T/yr increase in HAPs. However, this was accounted for in the annual increase in VOC emissions.