Statement of Basis

Permit to Construct No. P-2016.0032
Project ID 61730

Interstate Group, LLC
Nampa, Idaho

Facility ID 027-00153

Final

September 26, 2016
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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

AAC	acceptable ambient concentrations
AACC	acceptable ambient concentrations for carcinogens
acfm	actual cubic feet per minute
ASTM	American Society for Testing and Materials
Btu	British thermal units
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalent emissions
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gases
gr	grains (1 lb = 7,000 grains)
HAP	hazardous air pollutants
hr/yr	hours per consecutive 12 calendar month period
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometers
lb/hr	pounds per hour
lb/qtr	pound per quarter
m	meters
MACT	Maximum Achievable Control Technology
MMBtu	million British thermal units
MMscf	million standard cubic feet
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
PAH	polyaromatic hydrocarbons
PC	permit condition
PM	particulate matter
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
POM	polycyclic organic matter
ppm	parts per million
ppmw	parts per million by weight
PSD	Prevention of Significant Deterioration
psig	pounds per square inch gauge
PTC	permit to construct
PTC/T2	permit to construct and Tier II operating permit
PTE	potential to emit
PW	process weight rate
Rules	*Rules for the Control of Air Pollution in Idaho*
scf	standard cubic feet
SCL	significant contribution limits

SIP	State Implementation Plan
SM	synthetic minor
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/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
T2	Tier II operating permit
TAP	toxic air pollutants
ULSD	ultra-low sulfur diesel
U.S.C.	United States Code
VOC	volatile organic compounds
yd^3	cubic yards
$\mu g/m^3$	micrograms per cubic meter

FACILITY INFORMATION

Description

The Interstate Group facility in Nampa manufactures over-the-road trailers of various sizes. Constructing the trailer frames involves welding the frame channel rails and completing the skeletal structure of the trailer using bent and straight tubes. Following completion of the frames, the trailer box structure is attached to pre-manufactured axles and wheels. The trailer is then prepared for paint and wired for lighting. After painting, the wiring is completed. Plywood is then installed for interior and floor surfaces and then the frame is undercoated. The outside of the trailer is covered with the prefinished sheet metal and the final trim and accessories are installed. The finished product is a complete trailer ready for sale to the trailer dealers.

Permitting History

This is the initial PTC for an existing facility that has transferred most of its existing equipment to a new location. Although this is an initial PTC for the facility at the new location, the facility's most current PTC at the previous location is P-2013.0043 issued on August 28, 2013.

Application Scope

This permit is the initial PTC for this facility. The applicant has proposed to authorize pre-permit construction and to install and operate an over-the-road trailer manufacturing facility.

Application Chronology

June 17, 2016	DEQ received an application and an application fee.
July 14 – July 29, 2016	DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.
June 29, 2016	DEQ approved pre-permit construction.
July 20, 2016	DEQ determined that the application was complete.
September 7, 2016	DEQ made available the draft permit and statement of basis for peer and regional office review.
September 12, 2016	DEQ made available the draft permit and statement of basis for applicant review.
September 19, 2016	DEQ received the permit processing fee.
September 27, 2016	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION

Sources	Control Equipment
Makeup Air Unit Manufacturer: Titan Model: TA-122 NG VRH Max. Capacity: 1.925 MMBth/hr Fuel: Natural Gas	None
Unit Heaters 1-10 Manufacturer: SunStar Heating Products Model: SIR-35 Max. Capacity: 0.035 MMBtu/hr each Fuel: Natural Gas	None
Wood Cutting Max Production Rate: 60,000 ft/mth	Two Dust Canisters Manufacturer: Jet PM_{10} control efficiency: 86%
Welding	None
Painting Operations Paint Booth Manufacturer: GFS Model: CDG, 1412NDT-50-SS-S HVLP Spray Gun Transfer Efficiency: 65% Rated Capacity: 4.7 gal/hr	Fiberglass Exhaust Filters Manufacturer: Chemco PM_{10} control efficiency: 98.65%
Undercoating Booth Manufacturer: Custom – Partial Enclosure Airless Spray Gun Transfer Efficiency: 40%	Fiberglass Exhaust Filters Manufacturer: Chemco PM_{10} control efficiency: 96%

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 makeup air unit, ten unit heaters, wood cutting, welding, and painting and undercoating operations at the facility (see Appendix A) associated with this proposed project. Emissions estimates of criteria pollutant, greenhouse gases (GHG), hazardous air pollutants (HAP), and toxic air pollutants (TAP) were based on emission factors from AP-42, San Diego Welding Operations Guidance, operation of 8,760 hours per year, and process information specific to the facility for this proposed project.

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 regulated air pollutants or HAP above the applicable Major Source threshold without permit limits.

The following table presents the uncontrolled Potential to Emit for regulated air 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 over-the-road trailer manufacturing operation uncontrolled Potential to Emit is based upon a worst-case for operation of the facility of 8,760 hr/yr.

Table 2 UNCONTROLLED POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	$PM_{10}/PM_{2.5}$	SO_2	NO_X	CO	VOC	CO_2e
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Point Sources						
Makeup Air Unit	0.06	0.005	0.83	0.69	0.05	986.51
Unit Heaters 1-10	0.01	0.001	0.14	0.06	0.01	179.37
Wood Cutting	5.58	0.0	0.0	0.0	0.0	0.0
Welding	0.34	0.0	0.0	0.0	0.0	0.0
Paint Booth	56.06	0.0	0.0	0.0	94.70	0.0
Undercoating Booth	35.02	0.0	0.0	0.0	22.23	0.0
Total, Point Sources	**97.07**	**0.006**	**0.97**	**0.75**	**116.99**	**1165.88**

Pre-Project Potential to Emit

This is a new facility. Therefore, 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 and GHG 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 3 POST PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	$PM_{10}/PM_{2.5}$		SO_2		NO_X		CO		VOC		CO_2e	
	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]	lb/hr[a]	T/yr[b]
Makeup Air Unit	0.014	0.06	0.001	0.005	0.19	0.83	0.16	0.69	0.01	0.05	225.2	986.5
Unit Heaters 1-10	0.003	0.01	0.0002	0.0009	0.03	0.14	0.01	0.06	0.002	0.008	40.95	179.37
Wood Cutting	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding	0.03	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paint Booth	0.08	0.18	0.00	0.00	0.00	0.00	0.00	0.00	9.89	22.78	0.00	0.00
Undercoating Booth	0.15	0.33	0.00	0.00	0.00	0.00	0.00	0.00	2.30	5.29	0.00	0.00
Post Project Totals	**0.36**	**0.85**	**0.001**	**0.006**	**0.22**	**0.97**	**0.17**	**0.75**	**12.20**	**28.13**	**266.15**	**1165.9**

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 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 4 CHANGES IN POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	$PM_{10}/PM_{2.5}$		SO_2		NO_X		CO		VOC		CO_2e	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Pre-Project Potential to Emit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Post Project Potential to Emit	0.36	0.85	0.001	0.006	0.22	0.97	0.17	0.75	12.20	28.13	266.15	1165.9
Changes in Potential to Emit	**0.36**	**0.85**	**0.001**	**0.006**	**0.22**	**0.97**	**0.17**	**0.75**	**12.20**	**28.13**	**266.15**	**1165.9**

Non-Carcinogenic TAP Emissions

A summary of the estimated PTE for emissions increase of non-carcinogenic toxic air pollutants (TAP) is provided in the following table.

Pre- and post-project, as well as the change in, non-carcinogenic TAP emissions are presented in the following table:

Table 5 PRE- AND POST PROJECT POTENTIAL TO EMIT FOR NON-CARCINOGENIC TOXIC AIR POLLUTANTS

Non-Carcinogenic Toxic Air Pollutants	Pre-Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Post Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Change in 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Non-Carcinogenic Screening Emission Level (lb/hr)	Exceeds Screening Level? (Y/N)
Barium	0.00E-03	9.81E-06	9.81E-06	0.033	No
Chromium	0.00E-03	3.12E-06	3.12E-06	0.033	No
Copper	0.00E-03	3.21E-06	3.21E-06	0.067	No
Manganese	0.00E-03	8.48E-07	8.48E-07	0.333	No
Molybdenum	0.00E-03	2.45E-06	2.45E-06	0.667	No
Naphthalene	0.00E-03	1.57E-06	1.57E-06	3.33	No
Selenium	0.00E-03	2.49E-04	2.49E-04	0.013	No
Toluene	0.00E-03	7.58E-06	7.58E-06	25	No
Vanadium	0.00E-03	5.13E-06	5.13E-06	0.003	No
Zinc	0.00E-03	6.47E-05	6.47E-05	0.667	No

None of the PTEs for non-carcinogenic TAP were exceeded as a result of this project. Therefore, modeling is not required for any non-carcinogenic TAP because none of the 24-hour average carcinogenic screening ELs identified in IDAPA 58.01.01.585 were exceeded.

Carcinogenic TAP Emissions

A summary of the estimated PTE for emissions increase of carcinogenic toxic air pollutants (TAP) is provided in the following table.

Table 6 PRE- AND POST PROJECT POTENTIAL TO EMIT FOR CARCINOGENIC TOXIC AIR POLLUTANTS

Carcinogenic Toxic Air Pollutants	Pre-Project Annual Average Emissions Rates for Units at the Facility (lb/hr)	Post Project Annual Average Emissions Rates for Units at the Facility (lb/hr)	Change in Annual Average Emissions Rates for Units at the Facility (lb/hr)	Carcinogenic Screening Emission Level (lb/hr)	Exceeds Screening Level? (Y/N)
Arsenic	0.00E-03	4.5E-07	4.5E-07	1.5E-06	No
Benzene	0.00E-03	4.7E-06	4.7E-06	8.0E-04	No
Benzo(a)pyrene	0.00E-03	2.7E-09	2.7E-09	2.0E-06	No
Beryllium	0.00E-03	2.7E-08	2.7E-08	2.8E-05	No
Cadmium	0.00E-03	2.5E-06	2.5E-06	3.7E-06	No
Formaldehyde	0.00E-03	1.7E-04	1.7E-04	5.1E-04	No
3-Methylchloranthene	0.00E-03	4.0E-09	4.0E-09	2.5E-06	No
Nickel	0.00E-03	4.7E-06	4.7E-06	2.7E-05	No
Polyaromatic Hydrocarbons	0.00E-03	1.4E-07	1.4E-07	9.1E-05	No
POM	0.00E-03	2.5E-08	2.5E-08	2.0E-06	No

a) Polycyclic Organic Matter (POM) is considered as one TAP comprised of: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, chrysene, indeno(1,2,3-cd)pyrene, benzo(a)pyrene. The total is compared to benzo(a)pyrene.

None of the PTEs for carcinogenic TAP were exceeded as a result of this project. Therefore, modeling is not required for any carcinogenic TAP because none of the annual average carcinogenic screening ELs identified in IDAPA 58.01.01.586 were exceeded.

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 A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 7 HAZARDOUS AIR POLLUTANTS EMISSIONS POTENTIAL TO EMIT SUMMARY

Hazardous Air Pollutants	PTE (T/yr)
2-Methylnaphthalene	2.7E-07
3-Methylchloranthrene	2.0E-08
Acenaphthene	2.0E-08
Acenaphthylene	2.0E-08
Anthracene	2.7E-08
Arsenic	2.0E-06
Barium	5.0E-05
Benzene	1.2E-05
Benzo(a)anthracene	1.4E-08
Benzo(a)pyrene	2.0E-08
Benzo(b)fluoranthene	1.4E-08
Benzo(g,h,i)perylene	2.0E-08
Benzo(k)fluoranthene	2.0E-08
Beryllium	1.2E-07
Cadmium	1.1E-05
Chromium	2.3E-05
Chrysene	2.0E-08
Cobalt	8.2E-07
Dibenzo(a,h)anthracene	1.4E-08
Dichlorobenzene	1.2E-05
Ethylbenzene	1.8
Fluoranthene	3.4E-08
Fluorene	3.2E-08
Formaldehyde	7.3E-04
Hexane	1.8E-02
Indeno(1,2,3-cd)pyrene	2.0E-08

Lead Compounds	4.9E-06
Manganese	5.2E-04
Mercury Compounds	2.5E-06
Methyl Isobutyl Ketone	3.1E-01
Naphthalene	6.0E-06
Nickel	2.2E-05
Phenanthrene	1.9E-07
Pyrene	5.6E-08
Polycyclic Organic Matter	1.1E-07
Selenium	2.3E-07
Toluene	1.4
Xylene	9.2
Totals	**12.8**

Ambient Air Quality Impact Analyses

The estimated emission rates of PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, and TAP from this project were below applicable screening emission levels (EL) and published DEQ modeling thresholds established in IDAPA 58.01.01.585-586 and in the State of Idaho Air Quality Modeling Guideline[1]. Although VOC emissions exceeded the screening emission level, VOC emissions are not typically modeled. Refer to the Emissions Inventories section for additional information concerning the emission inventories.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Canyon 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

The AIRS/AFS facility classification codes are as follows:

For THAPs (Total Hazardous Air Pollutants) Only:

A = Use when any one HAP has actual or potential emissions $\geq$ 10 T/yr or if the aggregate of all HAPS (Total HAPs) has actual or potential emissions $\geq$ 25 T/yr.

SM80 = Use if a synthetic minor (potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable limitations) and the permit sets limits $\geq$ 8 T/yr of a single HAP or $\geq$ 20 T/yr of THAP.

SM = Use if a synthetic minor (potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable limitations) and the potential HAP emissions are limited to < 8 T/yr of a single HAP and/or < 20 T/yr of THAP.

B = Use when the potential to emit without permit restrictions is below the 10 and 25 T/yr major source threshold

UNK = Class is unknown

For All Other Pollutants:

A = Actual or potential emissions of a pollutant are $\geq$ 100 T/yr.

SM80 = Use if a synthetic minor for the applicable pollutant (potential emissions fall below 100 T/yr if and only if the source complies with federally enforceable limitations) and potential emissions of the

[1] Criteria pollutant thresholds in Table 2, State of Idaho Guideline for Performing Air Quality Impact Analyses, Doc ID AQ-011, September 2013.

pollutant are ≥ 80 T/yr.

SM = Use if a synthetic minor for the applicable pollutant (potential emissions fall below 100 T/yr if and only if the source complies with federally enforceable limitations) and potential emissions of the pollutant are < 80 T/yr.

B = Actual and potential emissions are < 100 T/yr without permit restrictions.

UNK = Class is unknown.

Table 8 REGULATED AIR POLLUTANT FACILITY CLASSIFICATION

Pollutant	Uncontrolled PTE (T/yr)	Permitted PTE (T/yr)	Major Source Thresholds (T/yr)	AIRS/AFS Classification
PM	97.07	0.85	**100**	B
$PM_{10}/PM_{2.5}$	97.07	0.85	**100**	B
SO_2	0.006	0.006	**100**	B
NO_X	0.97	0.97	**100**	B
CO	0.75	0.75	**100**	B
VOC	116.99	28.13	**100**	SM
HAP (single)	> 10	9.2	**10**	SM-80
HAP (Total)	> 25	12.8	**25**	SM

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 .....Permit to Construct Required

The permittee has requested that a PTC be issued to the facility for the proposed new emissions source. Therefore, a permit to construct is required to be issued in accordance with IDAPA 58.01.01.220. This permitting action was processed in accordance with the procedures of IDAPA 58.01.01.200-228.

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 sources of PM_{10} emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Condition 2.5.

Standards for New Sources (IDAPA 58.01.01.676)

IDAPA 58.01.01.676 .....Standards for New Sources

The fuel burning equipment located at this facility, with a maximum rated input of less than ten (10) million BTU per hour, are subject to a particulate matter limitation of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume when combusting gaseous fuels. Fuel-Burning Equipment is defined as any furnace, boiler, apparatus, stack and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer. This requirement is assured by Permit Condition 2.8.

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

IDAPA 58.01.01.301 .....Requirement to Obtain Tier I Operating Permit

Post project facility-wide emissions from this facility do not have a potential to emit greater than 100 tons per year for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, and VOC, or 10 tons per year for any one HAP or 25 tons per year for all HAP combined as demonstrated previously in the Emissions Inventories Section of this analysis. Therefore, the facility is not a Tier I source in accordance with IDAPA 58.01.01.006 and the requirements of IDAPA 58.01.01.301 do not apply.

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 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 40 CFR Part 60.

NESHAP Applicability (40 CFR 61)

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

MACT Applicability (40 CFR 63)

The facility has proposed to operate as a minor source of hazardous air pollutant (HAP) emissions, and is subject to the requirements of 40 CFR 63, Subpart HHHHHH–National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources. DEQ is delegated this Subpart. Refer to the Title V Classification section for additional information.

40 CFR 63, Subpart HHHHHH .....National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

§ 60.11169 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 mobile equipment 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 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 mobile 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 is not proposed as a business activity.

In accordance with §63.11171(c), this mobile coating operation is an existing source because it commenced construction prior to September 17, 2007, by installing new surface coating equipment, and the new surface coating equipment will be used at a source that was actively engaged in miscellaneous surface coating prior to September 17, 2007.

§ 63.11172 When do I have to comply with this subpart?

In accordance with §63.11172(a)(2), because the initial startup of the facility occurred prior to January 9, 2008, the compliance date is January 10, 2011.

§ 63.11173 What are my general requirements for complying with this subpart?

Because the facility has not proposed paint-stripping activities, the requirements of §63.11173(a) through (f) are not applicable. Because the facility is a mobile equipment 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 mobile equipment 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 mobile equipment 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.

§ 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.

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

§ 63.11175 What notifications must I submit?

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

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

§ 63.11176 What reports must I submit?

In accordance with §63.11176(a), because the permittee is an owner or operator of a mobile equipment 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.

Because the facility has not proposed to conduct paint stripping operations, the MeCl minimization plan requirements are not applicable.

§ 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.

§ 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.

§ 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.

Permit Scope; Permit Section 1

Permit Condition 1.1 establishes the permit to construct scope and the regulated sources and control devices used at the facility.

Facility-Wide Permit Conditions; Permit Section 2

Unless specified, permit conditions in this section apply to all emissions units at the facility.

Permit Conditions 2.1 - 2.2, Fugitive Dust

All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651. Compliance with the fugitive requirements is assured by following the operating, monitoring and recordkeeping requirements listed in Permit Conditions 2.1 - 2.2 (fugitive dust monitoring).

Permit Conditions 2.3 - 2.4, Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution per IDAPA 58.01.01.775-776. Compliance with this requirement is demonstrated by maintaining records of all odor complaints received and the corrective action taken in response to the complaint.

Permit Conditions 2.5 - 2.6, Visible Emissions

The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. Compliance with this requirement is demonstrated by conducting a periodic (i.e., weekly) facility-wide inspection of potential sources of visible emissions to determine if visible emissions are present, and maintaining records of the inspections and any corrective actions taken.

Permit Condition 2.7, Fuel-burning equipment emission limit

This is a standard permit condition as specified in IDAPA 58.01.01.676-677.

Permit Condition 2.8, Fuel Type Restriction

This permit condition requires that all fuel burning equipment at the facility be fired on natural gas exclusively as submitted by the Applicant.

Permit Condition 2.9, Reports and Certifications

This permit condition establishes generally applicable requirements for submittal of reports, certifications, and notifications to DEQ and/or EPA as specified.

Permit Condition 2.10, Obligation to Comply

Permit Condition 2.10 states that receiving a PTC shall not relieve any owner or operator of the responsibility to comply with all applicable local, state, and federal rules and regulations.

The permittee is allowed to use equivalent new materials as defined in the permit. If a new material contains new TAP or HAP, it is not an equivalent new material as defined in the permit. The permittee is required to document compliance with the Rules when using new materials containing new TAP or HAP. That could mean permits, or exemption documents.

Permit Condition 2.11, Incorporation of Federal Requirements by Reference

This is a standard permit condition to make it clear that the federal regulations take precedence over text presented in a DEQ-issued permit condition. Often times federal regulations are paraphrased in order to fit them into a permit, and there is a chance that the meaning of the regulation might be altered. In the event that this occurs, the text, as printed in the federal regulations, must be followed.

Paints and Coating; Permit Section 3

Permit Conditions 3.1 and 3.2

These permit conditions describe the process and emission controls of painting and coating operations.

Permit Condition 3.3, Emission Limits

This condition establishes emission limits for both PM_{10} and VOCs from the painting operations.

Permit Conditions 3.4 and 3.5

These permit condition provide an emission calculation for both VOCs and PM_{10} on a monthly basis so as to demonstrate compliance with the emission limits.

Permit Condition 3.6, Material Usage Limit

This permit condition establishes a monthly usage limit for all painting, coating, adhesive, solvent, or cleaning material because they are used in the facility's emission inventory to demonstrate compliance with the standards. HAPs are inherently limited by the material usage limit and a separate HAPs limit is not needed to ensure the facility is minor for HAPs.

Permit Condition 3.7, Spray Gun and Filter System

This permit condition establishes the minimum control efficiency of the filter system and the minimum transfer efficiency of the HVLP spray gun.

Permit Condition 3.8, Material Purchase Records and Safety Data Sheets

The analyses in the application and for this permitting action have been based on the specific materials and their quantities used or to be used in the facility. Permit Condition 3.8 is a recordkeeping requirement to ensure compliance with the material usage limits.

Permit Condition 3.9, Coating Material Usage Recordkeeping

This permit condition is a recordkeeping requirement to ensure compliance with the material usage limits.

Permit Condition 3.10, Recordkeeping

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

Permit Condition 3.11, General Operating Requirements

This permit condition 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 3.12, Monitoring and Recordkeeping Requirements

This permit condition 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 3.13, Initial Notification and Reporting Requirements

This permit condition 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 3.14, Annual Notification and Reporting Requirements

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

PUBLIC REVIEW

Public Comment Opportunity

An opportunity for public comment period on the application was provided in accordance with IDAPA 58.01.01.209.01.c or IDAPA 58.01.01.404.01.c. During this time, there were no comments on the application and there was not a request for a public comment period on DEQ's proposed action. Refer to the chronology for public comment opportunity dates.

APPENDIX A – EMISSIONS INVENTORIES

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Table 2-1: MAU1 Combustion Emissions

Modification Sources	No. of units	Input Duty MMBtu/hr	MMBtu/hr	Emissions apportioned among paint room stacks
Booth Air Heater	1	1.925	1.925 MMBtu/hr	

MakeUp Air Heater Duty =

1.925 MMBtu/hr ÷ 1,020 MMBtu/MMscf = **1.89E-03 MMscf/hr**

Fuel Use:
0.045 MMscf/day
16.532 MMscf/year

Operating Assumptions:
24 hr/day
8,760 hr/yr [3]

Criteria Air Pollutants	Emission Factor[1]	Emissions	
	lb/MMscf	lb/hr	T/yr
NO_2	100	0.19	0.83
CO	84	0.16	0.69
PM_{10}	7.6	0.014	0.06
$PM_{2.5}$	7.6	0.014	0.06
SO_2	0.6	1.1E-03	5.0E-03
VOC	5.5	1.0E-02	4.5E-02
Lead	0.0005	9.4E-07	4.1E-06
		6.8E-04	lb/month
Total Criteria Emissions (ton/yr) =			**1.63**

Hazardous & Toxic Air Pollutants (HAP & TAP)	Emission Factor[1]	Emissions		Modeling Threshold / TAP Screening Emission Level	Modeling Required?
	lb/MMscf	lb/hr[2]	T/yr		
PAH HAPs					
2-Methylnaphthalene	2.40E-05	**4.53E-08**	2.0E-07	9.1E-05 lb/hr	No
3-Methylchloranthrene	1.80E-06	**3.40E-09**	1.5E-08	2.5E-06 lb/hr	No
Acenaphthene	1.80E-06	**3.40E-09**	1.5E-08	9.1E-05 lb/hr	No
Acenaphthylene	1.80E-06	**3.40E-09**	1.5E-08	9.1E-05 lb/hr	No
Anthracene	2.40E-06	**4.53E-09**	2.0E-08	9.1E-05 lb/hr	No
Benzo(a)anthracene	1.80E-06	**3.40E-09**	1.5E-08		See POM
Benzo(a)pyrene	1.20E-06	**2.26E-09**	9.9E-09	2.0E-06 lb/hr	See POM
Benzo(b)fluoranthene	1.80E-06	**3.40E-09**	1.5E-08		See POM
Benzo(g,h,i)perylene	1.20E-06	**2.26E-09**	9.9E-09	9.1E-05 lb/hr	No
Benzo(k)fluoranthene	1.80E-06	**3.40E-09**	1.5E-08		See POM
Chrysene	1.80E-06	**3.40E-09**	1.5E-08		See POM
Dibenzo(a,h)anthracene	1.20E-06	**2.26E-09**	9.9E-09		See POM
Fluoranthene	3.00E-06	**5.66E-09**	2.5E-08	9.1E-05 lb/hr	No
Fluorene	2.80E-06	**5.28E-09**	2.3E-08	9.1E-05 lb/hr	No
Indeno(1,2,3-cd)pyrene	1.80E-06	**3.40E-09**	1.5E-08		See POM
Naphthalene	6.10E-04	1.15E-06	5.0E-06	3.33 lb/hr	No
Phenanthrene	1.70E-05	**3.21E-08**	1.4E-07	9.1E-05 lb/hr	No
Pyrene	5.00E-06	**9.44E-09**	4.1E-08	9.1E-05 lb/hr	No
Polycyclic Org. Matter (POM, 7-PAH Group)		**2.15E-08**	**9.4E-08**	2.0E-06 lb/hr	No
Non-PAH HAPs					
Benzene	2.10E-03	**3.96E-06**	1.7E-05	8.0E-04 lb/hr	No
Dichlorobenzene	1.20E-03	2.26E-06	9.9E-06	20 lb/hr	No
Formaldehyde	7.50E-02	**1.42E-04**	6.2E-04	5.1E-04 lb/hr	No
Hexane	1.80E+00	3.40E-03	1.5E-02	12 lb/hr	No
Toluene	3.40E-03	6.42E-06	2.8E-05	25 lb/hr	No
Non-HAP Organic Compounds					
Pentane	2.60E+00	4.91E-03	2.1E-02	118 lb/hr	No
Metals (HAPs)					
Arsenic	2.00E-04	**3.77E-07**	1.7E-06	1.5E-06 lb/hr	No
Barium	4.40E-03	8.30E-06	3.6E-05	0.033 lb/hr	No
Beryllium	1.20E-05	**2.26E-08**	9.9E-08	2.8E-05 lb/hr	No
Cadmium	1.10E-03	**2.08E-06**	9.1E-06	3.7E-06 lb/hr	No
Chromium	1.40E-03	2.64E-06	1.2E-05	0.033 lb/hr	No
Cobalt	8.40E-05	1.59E-07	6.9E-07	0.0033 lb/hr	No
Manganese	3.80E-04	7.17E-07	3.1E-06	0.067 lb/hr	No
Mercury	2.60E-04	4.91E-07	2.1E-06	0.003 lb/hr	No
Nickel	2.10E-03	**3.96E-06**	1.7E-05	2.7E-05 lb/hr	No
Selenium	2.40E-05	4.53E-08	2.0E-07	0.013 lb/hr	No
Non-HAP Metals					
Copper	8.50E-04	1.60E-06	7.0E-06	0.013 lb/hr	No
Molybdenum	1.10E-03	2.08E-06	9.1E-06	0.333 lb/hr	No
Vanadium	2.30E-03	4.34E-06	1.9E-05	0.003 lb/hr	No
Zinc	2.90E-02	5.47E-05	2.4E-04	0.667 lb/hr	No
Total HAP Emissions (ton/yr) =			0.02		

Notes:
1. Emission factors taken from AP-42, Section 1.4 *Natural Gas Combustion* (7/98)
2. HAPs lb/hr emissions that are not TAPs are annual averages.
3. TAPs lb/hr emissions are 24-hour averages unless shown in bold. Bold emissions are annual averages for carcinogens.
4. Booth Make-up Air heater is used only during cold weather, so actual on-line rating is significantly less.
5. Polycyclic Organic Matter (POM) is considered as one TAP comprised of: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, chrysene, indeno(1,2,3-cd)pyrene, benzo(a)pyrene. The total is compared to benzo(a)pyrene.

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Nampa, ID

Table 2-2: Indirect Heater Natural Gas Combustion Emissions

Heater Combustion Source	No. of units	Input Duty Btu/hr	MMBtu/hr	Emission Points
SunStar Natural Gas Heater Infrared Vacuum Compact U-Tube	10	35000	0.35 MMBtu/hr	

Office & Warehouse Indirect Air Heater Duty =

0.35 MMBtu/hr ÷ 1,020 MMBtu/MMscf = **3.43E-04 MMscf/hr**

Fuel Use:
0.008 MMscf/day
3.006 MMscf/year

Operating Assumptions:
24 hr/day
8,760 hr/yr [3]

Criteria Air Pollutants	Emission Factor[1]	Emissions	
	lb/MMscf	lb/hr	T/yr
NO_2	94	0.0323	0.14
CO	40	0.01	0.06
PM_{10}	7.6	0.0026	0.01
$PM_{2.5}$	7.6	0.003	0.01
SO_2	0.6	2.1E-04	9.0E-04
VOC	5.5	1.9E-03	8.3E-03
Lead	0.0005	1.7E-07	7.5E-07
		1.2E-04	lb/month
Total Criteria Emissions (ton/yr) =			**0.22**

Hazardous & Toxic Air Pollutants (HAP & TAP)	Emission Factor[1]	Emissions		Modeling Threshold / TAP Screening Emission Level	Modeling Required?
	lb/MMscf	lb/hr[2]	T/yr		
PAH HAPs					
2-Methylnaphthalene	2.40E-05	**8.24E-09**	3.6E-08	9.1E-05 lb/hr	No
3-Methylchloranthrene	1.80E-06	**6.18E-10**	2.7E-09	2.5E-06 lb/hr	No
Acenaphthene	1.80E-06	**6.18E-10**	2.7E-09	9.1E-05 lb/hr	No
Acenaphthylene	1.80E-06	**6.18E-10**	2.7E-09	9.1E-05 lb/hr	No
Anthracene	2.40E-06	**8.24E-10**	3.6E-09	9.1E-05 lb/hr	No
Benzo(a)anthracene	1.80E-06	**6.18E-10**	2.7E-09		See POM
Benzo(a)pyrene	1.20E-06	**4.12E-10**	1.8E-09	2.0E-06 lb/hr	See POM
Benzo(b)fluoranthene	1.80E-06	**6.18E-10**	2.7E-09		See POM
Benzo(g,h,i)perylene	1.20E-06	**4.12E-10**	1.8E-09	9.1E-05 lb/hr	No
Benzo(k)fluoranthene	1.80E-06	**6.18E-10**	2.7E-09		See POM
Chrysene	1.80E-06	**6.18E-10**	2.7E-09		See POM
Dibenzo(a,h)anthracene	1.20E-06	**4.12E-10**	1.8E-09		See POM
Fluoranthene	3.00E-06	**1.03E-09**	4.5E-09	9.1E-05 lb/hr	No
Fluorene	2.80E-06	**9.61E-10**	4.2E-09	9.1E-05 lb/hr	No
Indeno(1,2,3-cd)pyrene	1.80E-06	**6.18E-10**	2.7E-09		See POM
Naphthalene	6.10E-04	2.09E-07	9.2E-07	3.33 lb/hr	No
Phenanthrene	1.70E-05	**5.83E-09**	2.6E-08	9.1E-05 lb/hr	No
Pyrene	5.00E-06	**1.72E-09**	7.5E-09	9.1E-05 lb/hr	No
Polycyclic Org. Matter (POM, 7-PAH Group		**3.91E-09**	**1.7E-08**	2.0E-06 lb/hr	No
Non-PAH HAPs					
Benzene	2.10E-03	**7.21E-07**	3.2E-06	8.0E-04 lb/hr	No
Dichlorobenzene	1.20E-03	4.12E-07	1.8E-06	20 lb/hr	No
Formaldehyde	7.50E-02	**2.57E-05**	1.1E-04	5.1E-04 lb/hr	No
Hexane	1.80E+00	6.18E-04	2.7E-03	12 lb/hr	No
Toluene	3.40E-03	1.17E-06	5.1E-06	25 lb/hr	No
Non-HAP Organic Compounds					
Pentane	2.60E+00	8.92E-04	3.9E-03	118 lb/hr	No
Metals (HAPs)					
Arsenic	2.00E-04	**6.86E-08**	3.0E-07	1.5E-06 lb/hr	No
Barium	4.40E-03	1.51E-06	6.6E-06	0.033 lb/hr	No
Beryllium	1.20E-05	**4.12E-09**	1.8E-08	2.8E-05 lb/hr	No
Cadmium	1.10E-03	**3.77E-07**	1.7E-06	3.7E-06 lb/hr	No
Chromium	1.40E-03	4.80E-07	2.1E-06	0.033 lb/hr	No
Cobalt	8.40E-05	2.88E-08	1.3E-07	0.0033 lb/hr	No
Manganese	3.80E-04	1.30E-07	5.7E-07	0.067 lb/hr	No
Mercury	2.60E-04	8.92E-08	3.9E-07	0.003 lb/hr	No
Nickel	2.10E-03	**7.21E-07**	3.2E-06	2.7E-05 lb/hr	No
Selenium	2.40E-05	8.24E-09	3.6E-08	0.013 lb/hr	No
Non-HAP Metals					
Copper	8.50E-04	2.92E-07	1.3E-06	0.013 lb/hr	No
Molybdenum	1.10E-03	3.77E-07	1.7E-06	0.333 lb/hr	No
Vanadium	2.30E-03	7.89E-07	3.5E-06	0.003 lb/hr	No
Zinc	2.90E-02	9.95E-06	4.4E-05	0.667 lb/hr	No
Total HAP Emissions (ton/yr) =			0.003		

Notes:
1. Emission factors taken from AP-42, Section 1.4 *Natural Gas Combustion* (7/98)
2. HAPs lb/hr emissions that are not TAPs are annual averages.
3. TAPs lb/hr emissions are 24-hour averages unless shown in bold. Bold emissions are annual averages for carcinogens.
4. Booth Make-up Air heater is used only during cold weather, so actual on-line rating is significantly less.
5. Polycyclic Organic Matter (POM) is considered as one TAP comprised of: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, chrysene, indeno(1,2,3-cd)pyrene, benzo(a)pyrene. The total is compared to benzo(a)pyrene.

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Nampa, ID

Table 2-3: Wood Cutting Emissions

Estimated Max. Monthly Wood Cutting (feet/month)	Volume Wood Shavings (gals./ft. cut)[1]	Voume Wood Shavings ($ft.^3$ shavings./ft. cut)	Density of Sawdust ($lbs./ft.^3$)[2,3]	Fine Particulate Fraction[4]	$PM_{10/2.5}$ (lbs./month)	Control Efficiency Canister Dust Filter (%)	$PM_{10/2.5}$ Emitted (lbs./month)	$PM_{10/2.5}$ Emitted (lbs./hr)	$PM_{10/2.5}$ Emitted (tons./yr)
60,000	0.1	0.0134	14.8	1.86%	221	86%	31	0.08	0.19

Sawdust PM Calculations

lbs. PM10/2.5 generated/month = wood ft. cut/month * gals. wood shaving & sawdust/ft. cut * volume wood shaving & sawdust * density sawdust * % fine particulate
= 80,000 ft. cut/month * 60 gals./ft. cut * 0.134 ft^3/gal. * 14.8 lbs./ft.3 * 1.86% fine particulate = 295 lbs. PM10/2.5 generated/month

lbs. $PM_{10/2.5}$ emitted/hr = (1-Control efficiency) * wood dust $PM_{10/2.5}$ lbs. generated/month * 1 month/4 weeks * 1 week/4 days * 1 day/ 24 hrs
= (1-86%) * 221 lbs. $PM_{10/2.5}$/month * 1 month/4 weeks * 1 week/4 days * 1 day/ 24 hrs = 0.08 lbs. $PM_{10/2.5}$ emitted/hr
tons $PM_{10/2.5}$ emitted year = lbs. $PM_{10/month}$ * (1-Control Efficiency) * 12 months/year * 1 ton/2000 lbs. = 495.6 lbs. $PM_{10/2.5}$ emitted year
tons $PM_{10/2.5}$ emitted year = 221 lbs. $PM_{10/2.5}$ emitted/yr * 1 ton/2000 lbs. = .19 tons $PM_{10/2.5}$ emitted year

References

1. Volume of wood dust shavings generated provided by Richard Asbell, Interstate Group, Email June 2, 2016.
2. Vítěz T., Trávníček P., *Particle size distribution of sawdust and wood shavings mixtures*, Res. Agr. Eng., 56: 154-158, www.agriculturejournals.cz/publicFiles/31258.pd, 2010.
3. Density of sawdust greater than shavings + sawdust. Therefore, using density of sawdust is conservative.
4. Robert Harris and Douglas Phillips, *Density of Select Hardwood Fuels*, Georgia Forest Researc Paper, No. 61, http://www.gfc.state.ga.us/resources/publications/research-papers/gfrp61.pdf, February 1986.

Table 2-4: Welding Emissions

Interstate Max. Projected Welding Material Purchases	TAP/HAP Metal	Al	AlO	Ba	Be	Cr	Cr+6	Cu	Co	Fe	Iron Oxide	Mg	MgO	Mn	Molyb	Ni	Niobium	Silica	Silicon	Titanium	Zirconium	Zn	P	V
Welding Process/Electrode	CAS No.	7440-47-3	7429-90-5 1344-28-1	7440-39-3	7440-41-7	7440-47-3	18540-29-9	7440-50-8	7440-48-4	7439-89-6	1309-37-1 1317-61-9	7439-96-5	1309-48-4	7439-96-5	7439-98-7	7440-21-3	7440-03-1	1317-95-9 Not Tap	7440-21-3	7440-32-6 Not TAP	7440-67-7	7440-66-6	7723-14-0	1314-62-1 as V_2O_5
Carbon Fillers	Annual Use(lbs.)	Al	AlO	Ba	Be	Cr	Cr+6	Cu	Co	Fe	Iron Oxide	Mg	MgO	Mn	Molyb	Ni	Niobium	Silica	Silicon	Titanium	Zirconium	Zn	P	V
[1]GMAW Pinnacle ER70S-6	29,250					0.0%		0.15%						1.54%	0.0048%	0.01%	0.3%	3.0%	0.9%	0.5%	1.0%		0.0140%	0.0032%
Metal	PM10 total	Al	AlO	Ba	Be	Cr	Cr+6	Cu	Co	Fe	Iron Oxide	Mg	MgO	Mn	Molyb	Ni	Niobium	Silica	Silicon	Titanium	Zirconium	Zn	Zn	V
TAP		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X?	X		X	X	X	X
HAP					X	X	X		X					X		X								
Table 12.19-1 and SDAPCD w/NASSCO fume correction		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	A	X	X
Table 12.19-2 and SDAPCD w/NASSCO fume correction						X			X					X		X								
SDAPCD w/ GMAW/SMAW NASSCO fume correction		X	X	X	X		X	X		X	X	X	X		X		X	X	X	X	X	X	X	X
IDEQ EL Dust (lbs./hr.)	—	6.7E-01	6.7E-01	3.3E-02	2.80E-05	3.3E-02	5.6E-07	6.7E-02	3.30E-03	—	—	—		3.3E-01	6.7E-01	2.70E-05	0.0067	—	6.7E-01	—	3.3E-01	6.7E-01	7.0E-03	3.0E-03
Fume lbs/yr @EF[2]	1.6E+02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4.6E-02	0.0E+00	2.4E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2.5E+00	7.7E-03	1.6E-02	4.8E-01	4.8E+00	1.4E+00	8.0E-01	1.6E+00	0.0E+00	2.2E-02	5.1E-03
lbs./hr. (Assume use in 4 days/week, 52 weeks/yr=208 days/yr; 24-hour average/day PM/585 TAPs; annual average 586 TAPs;	0.032	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9.1E-06	0.0E+00	4.8E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4.9E-04	1.5E-06	1.8E-06	9.6E-05	9.6E-04	2.9E-04	1.6E-04	3.2E-04	0.0E+00	4.5E-06	1.0E-06
IDEQ EL Fume (lbs./hr.)		—			—	—	—	1.3E-02	3.3E-03	—	3.3E-01	6.7E-01	6.7E-01	6.7E-02	—	—	—	—	—	—		3.330E-01	—	3.0E-03

Calculation Method With AP-42 Emission Factors, AP-42 Table 12.19-1, Table 12.19-2						
		lbs/1000 lbs electrode		0.00% fume generation		
TAP	Cr	Cr+6	Cobalt	Mn	Ni	Pb

Calculation Method Without AP-42 Emission Factors

Eh = max hourly emissions of each TAP Ea= annual emissions of each TAP
Ea= Ua X EF (fume rate rod lbs fume/lbs rod) X Nasso fume Correction Factor X Concentration metal
Eh=Uh X EF (fume rate rod lbs fume/lbs rod) X Nasso fume Correction Factor X Concentration metal
[2]SDAPCD G99 Gas Metal Arc Welding (GMAW), Unspecified Electrode, General District-ARB-NASSCO GMAW Emission Estimation Procedure

	lbs fume/lbs rod
default fume rates GMAW, MIG, TIG	1%
default fume rates SMAW, FCAW	2%
default fume rates unspecified	5%
default fume Correction Factor GMAW, MIG, TIG	0.5464
default fume Correction Factor SMAW, FCAW	0.2865
default fume Correction Factor unspecified	1.0
default Cr+6 conversion rates GMAW, MIG, TIG	0.05
default Cr+6 conversion rates SMAW, FCAW	0.63
default Cr+6 conversion rates unspecified	0.1
default emission factor (lbs./lbs rod)	
PM10 (PM2.5)	0.01
Cr+3	0.01*0.5464*.95*Cl
Cr+6	0.01*0.5464*.05*Cl
Cobalt	0.01*0.5464*Cl
Manganese	0.01*0.5464*Cl
Nickel	0.01*0.5464*Cl
Lead	0.01*0.5464*Cl
Metals w/o EF	0.01*0.5464*Cl

Calculation Map For Welding Wire Products

Welding Wire	Row	AP-42 Table 12.1	AP-42 Table 12.2 Cr, Cr+6, Mn, Co, Pb	Process Type	Correction
GTAW Mig/Tig ALC 4043		NA	NA	1% default	0.5464
GTAW Mig/Tig ALC 5356		NA	NA	1% default	0.5464
GMAW Mig/Tig ESAB 5356		NA	NA	1% default	0.5464
GMAW Mig/Tig Hobart Maxal 5356		NA	NA	1% default	0.5464
GMAW Pinnacle ER70S-6	16	NA	NA	1% default	0.5464
GMAW Hobart E70 Quantum Arc D2		X	X	NA	NA
GMAW Premier Arc 6		X	X	NA	NA
SAW Lincoln Weld L-70 and L-705		NA	NA	5% default	1
SAW Lincoln Weld 781 Flux		X	X	NA	NA
GMAW Harris HPG 308LS		X	X	NA	NA
GMAW Harris HPG 308L		X	X	NA	NA
Avesta 309L				1% default	0.5464
Lincoln Electric Mig 308LSi		X	X	NA	NA

Example Calculation Copper (585 TAP) in ER70S-6
Max. estimated Copper Emission lbs./yr. = lbs/yr. E70S-3 * % copper * fume emission factor * Fume correction factor
= 29250 lbs/yr. * 0.15% copper * 1 % fume emission factor *0.5464 fume correction factor = 0.24 lbs/yr
Max. estimated Copper Emission lbs./hr. = 0.24 lbs/yr / (208 days * 24 hrs) = 4.8 E-5 lbs./hr.

Example Calculation Nickel (586 TAP) in ER70S-6
Max. estimated nickel lbs./yr. = lbs/yr. ER70S-6 * % nickel * fume emission factor * Fume correction factor
= 29250 lbs/yr. * 0.01% nickel * 1% fume emission factor * 0.5464 Fume correction factor = 0.016 lbs./yr.
Max. estimated Nickel Emission lbs./hr. = 1.6E-2 lbs/yr / (8760 hrs) = 1.82E-6 lbs./hr.

Table 3-2: Paint Analysis

MAX Monthly Use 2015	Included in PTC Application monthly use	Manufacturer	Coating Material	Calcium Carbonate (Limestone)	Xylene	Carbon Black	Aluminum	VM&P Naptha	Stoddard Solvent	Quartz	Cristobalite	Silica NOT TAP	2-(2H-Benzotriazol-2-yl)-p-cresol NOT TAP	Cobalt 2-Ethyl-hexanoate NOT TAP	Titanium Dioxide NOT TAP	Talc NOT TAP	hydrotreated middle petroleum distillates NOT TAP
			CAS No.	1317-65-3	1330-20-7	1333-86-4	7429-90-5	8032-32-4	8052-41-3	14808-60-7	14464-46-1	112945-52-5	2440-22-4	136-52-7	13463-67-7	14807-96-6	64742-46-7
																	Weight Percentage Content
17.7	100	Henkel	Quad Sealant Advanced Grey/Black	60.00%	5.0%					1%		5%					
6.3	50	Henkel	Quad Sealant Clear		30.0%				30.00%				1%				
6	50	Henkel	Quad Sealant White	30%	5.0%							5%			10.00%		
3.4	50	Walmart	Black Spray			0.60%											
0.4	50	Rust-Oleum	Silver Spray		2.50%		2.5%										
0	50	Sherwin Williams	Touch-Up Paint		45.00%										15.00%		
0	40	Columbia	Interior Wall Paint/Floor Paint								0.8%				11.00%		
19.96	100	LaVanture Products	Adhesive White/Black	55%											10.00%		
26.2	100	Henkel	Almond - LOS PSS 10.00Z ACWS ALM 12CC	60%						1%					5.00%		
4.89	50	Hi-Tech Industries	Silicone (Project 1)														26%
0	50	Sherwin Williams	Xylene		100%												
4	50	Sherwin Williams	Mineral Spirits														
120	250	Asphalt Co.	9900 Paint		4.00%												
2.75	50	Asphalt Co.	9970 Primer		4.00%												
10.2	50	Hi-Lite Solutions	AeroGreen Paint Prep														
0.25	10	Sherwin Williams	Acetone														
	250	Sherwin Williams	Black Paint (Kem 400)		35%	3%								0.20%			
	10	Columbia	Gray Primer		1%					0.1%					8.00%	10.00%	
total gals./day	85.0		If volatile, enter "1" ==>		1			1	1				1	1			1

Manufacturer	Coating Material	Calcium Carbonate (Limestone)	Xylene	Carbon Black	Aluminum	VM&P Naptha	Stoddard Solvent	Quartz	Cristobalite	Silica NOT TAP	2-(2H-Benzotriazol-2-yl)-p-cresol NOT TAP	Cobalt 2-Ethyl-hexanoate NOT TAP	Titanium Dioxide NOT TAP	Talc NOT TAP	hydrotreated middle petroleum distillates NOT TAP
		lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.
Henkel	Quad Sealant Advanced Grey/Black	1.694	0.141					0.028		0.141					
Henkel	Quad Sealant Clear		0.302				0.302				0.010				
Henkel	Quad Sealant White	0.424	0.071							0.071			0.141		
Walmart	Black Spray			0.005											
Rust-Oleum	Silver Spray		0.020		0.020										
Sherwin Williams	Touch-Up Paint		0.533										0.178		
Columbia	Interior Wall Paint/Floor Paint								0.008				0.113		
LaVanture Products	Adhesive White/Black	1.760											0.320		
Henkel	Almond - LOS PSS 10.00Z ACWS ALM 12CC	2.202						0.037					0.184		
Hi-Tech Industries	Silicone (Project 1)														0.271
Sherwin Williams	Xylene		0.935												
Sherwin Williams	Mineral Spirits														
Asphalt Co.	9900 Paint		0.223												
Asphalt Co.	9970 Primer		0.045												
Hi-Lite Solutions	AeroGreen Paint Prep														
Sherwin Williams	Acetone														
Sherwin Williams	Black Paint (Kem 400)		1.766	0.151								0.010			
Columbia	Gray Primer		0.003					0.000					0.021	0.027	
	Spray Total (lb/hr)	6.080	4.038	0.156	0.020	0.000	0.302	0.065	0.008	0.212	0.010	0.010	0.957	0.027	0.271

Manufacturer	Coating Material	Calcium Carbonate (Limestone)	Xylene	Carbon Black	Aluminum	VM&P Naptha	Stoddard Solvent	Quartz	Cristobalite	Silica NOT TAP	2-(2H-Benzotriazol-2-yl)-p-cresol NOT TAP	Cobalt 2-Ethyl-hexanoate NOT TAP	Titanium Dioxide NOT TAP	Talc NOT TAP	hydrotreated middle petroleum distillates NOT TAP
														Tons per Year	
Henkel	Quad Sealant Advanced Grey/Black	3.90	0.33	0.00	0.00	0.00	0.00	0.07	0.00	0.33	0.00	0.00	0.00	0.00	0.00
Henkel	Quad Sealant Clear	0.00	0.70	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Henkel	Quad Sealant White	0.98	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.33	0.00	0.00
Walmart	Black Spray	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 3-2: Paint Analysis

MAX Monthly Use 2015	Included in PTC Application monthly use	Manufacturer	Coating Material	Naphtha hydrotreated light NOT TAP	Mineral Spirits (Aliphatic Petroleum Distillates) NOT TAP	V. M. & P. Naphtha NOT TAP	Asphalt NOT TAP	Light Aromatic Hydrocarbons NOT TAP	Heavy Aliphatic Naphtha	Aromatic 150 NOT TAP
			CAS No.	64742-49-0	64742-88-7	64742-89-8	64742-93-4	64742-95-6	Proprietary	70693-06-0
17.7	100	Henkel	Quad Sealant Advanced Grey/Black						60.0%	
6.3	50	Henkel	Quad Sealant Clear							
6	50	Henkel	Quad Sealant White						45.0%	
3.4	50	Walmart	Black Spray			9.00%				
0.4	50	Rust-Oleum	Silver Spray							
0	50	Sherwin Williams	Touch-Up Paint		5.00%			5.00%		
0	40	Columbia	Interior Wall Paint/Floor Paint							
19.96	100	LaVanture Products	Adhesive White/Black							
26.2	100	Henkel	Almond - LOS PSS 10.00Z ACWS ALM 12CC							
4.89	50	Hi-Tech Industries	Silicone (Project 1)							
0	50	Sherwin Williams	Xylene							
4	50	Sherwin Williams	Mineral Spirits		100%					
120	250	Asphalt Co.	9900 Paint	20%		20.00%				
2.75	50	Asphalt Co.	9970 Primer	20%		20.00%				
10.2	50	Hi-Lite Solutions	AeroGreen Paint Prep							
0.25	10	Sherwin Williams	Acetone							
	250	Sherwin Williams	Black Paint (Kem 400)			18%		1.00%		
	10	Columbia	Gray Primer		6.00%	30.00%				
total gals./day	85.0		If volatile, enter "1" ==>	1	1	1		1	1	1

Manufacturer	Coating Material	Naphtha hydrotreated light NOT TAP	Mineral Spirits (Aliphatic Petroleum Distillates) NOT TAP	V. M. & P. Naphtha NOT TAP	Asphalt NOT TAP	Light Aromatic Hydrocarbons NOT TAP	Heavy Aliphatic Naphtha	Aromatic 150 NOT TAP
		lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.
Henkel	Quad Sealant Advanced Grey/Black						1.694	
Henkel	Quad Sealant Clear							
Henkel	Quad Sealant White						0.635	
Walmart	Black Spray			0.068				
Rust-Oleum	Silver Spray							
Sherwin Williams	Touch-Up Paint		0.059			0.059		
Columbia	Interior Wall Paint/Floor Paint							
LaVanture Products	Adhesive White/Black							
Henkel	Almond - LOS PSS 10.00Z ACWS ALM 12CC							
Hi-Tech Industries	Silicone (Project 1)							
Sherwin Williams	Xylene							
Sherwin Williams	Mineral Spirits		0.836					
Asphalt Co.	9900 Paint	1.115		1.115				
Asphalt Co.	9970 Primer	0.223		0.223				
Hi-Lite Solutions	AeroGreen Paint Prep							
Sherwin Williams	Acetone							
Sherwin Williams	Black Paint (Kem 400)			0.908		0.050		
Columbia	Gray Primer		0.016	0.080				
	Spray Total (lb/hr)	1.338	0.911	2.394	0.000	0.110	2.329	0.000

Manufacturer	Coating Material	Naphtha hydrotreated light NOT TAP	Mineral Spirits (Aliphatic Petroleum Distillates) NOT TAP	V. M. & P. Naphtha NOT TAP	Asphalt NOT TAP	Light Aromatic Hydrocarbons NOT TAP	Heavy Aliphatic Naphtha	Aromatic 150 NOT TAP
Henkel	Quad Sealant Advanced Grey/Black	0.00	0.00	0.00	0.00	0.00	3.90	0.00
Henkel	Quad Sealant Clear	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Henkel	Quad Sealant White	0.00	0.00	0.00	0.00	0.00	1.46	0.00
Walmart	Black Spray	0.00	0.00	0.16	0.00	0.00	0.00	0.00

Table 3-2: Paint Analysis

MAX Monthly Use 2015	Included in PTC Application monthly use	Manufacturer	Coating Material	Density	Solids	VOC (non-exempt)	Acetone	MEK	Naphthalene	1,2,4-Trimethyl-benzene	Ethyl-benzene	Methyl n-Propyl Ketone	Methyl Isobutyl Ketone	Toluene	2-Butoxyethyl Acetate	n-Butyl Acetate	Tertiary Butyl Acetate	Zinc Oxide
			CAS No.				67-64-1	78-93-3	91-20-3	95-63-6 25551-13-7	100-41-4	107-87-9	108-10-1	108-88-3	112-07-2	123-86-4	540-88-5	1314-13-2
				lbs./gal	Weight Percentage Content	Weight Percentage Content	Weight Percentage Content											
		Rust-Oleum	Silver Spray	6.16	0.52	1.33	0.46	0.00	0.00	0.00	0.02	0.00	0.00	0.92	0.00	0.00	0.00	0.00
		Sherwin Williams	Touch-Up Paint	9.10	1.45	1.28	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.27	0.11	0.41	0.00	0.00
		Columbia	Interior Wall Paint/Floor Paint	9.90	2.31	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
		LaVanture Products	Adhesive White/Black	12.29	7.29	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Henkel	Almond - LOS PSS 10.00Z ACWS ALM 12CC	14.09	5.24	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Hi-Tech Industries	Silicone (Project 1)	8.01	1.56	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Sherwin Williams	Xylene	7.18	0.00	2.15	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Sherwin Williams	Mineral Spirits	6.42	0.00	1.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Asphalt Co.	9900 Paint	8.57	5.78	4.63	0.00	0.26	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00
		Asphalt Co.	9970 Primer	8.57	1.93	0.90	0.00	0.05	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
		Hi-Lite Solutions	AeroGreen Paint Prep	8.45	2.46	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
		Sherwin Williams	Acetone	6.59	0.00	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Sherwin Williams	Black Paint (Kern 400)	7.75	4.14	7.49	0.00	0.00	0.00	0.23	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Columbia	Gray Primer	10.24	0.38	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Spray Total (tons/yr)		42.87	22.88	1.36	0.31	0.02	0.25	1.83	0.00	0.31	1.44	0.11	0.41	0.00	0.05

Example Calculation

Max Hourly Ethylbenzene in Quad Sealant Advanced Grey/Black (24-hr. average)
= 100 gal/month * 10.84 lb/gal density * 1.0 wt% Ethylbenzene in Quad Grey/Black * 1 month/4 weeks * 1 week/4 days * 1 day/24 hrs
= 0.028 lb/hr Ethylbenzene in Quad Grey/Black

Max 12-month Ethylbenzene in Quad Sealant Advanced Grey/Black
=100 ga./month * 10.84 lb/gal density * 1.0 wt% Ethylbenzene in Quad Grey/Black * 12 months/year
= 130.1 lb/year Ethylbenzene in Quad Grey/Black
130.1 lb/year Ethylbenzene in Quad Grey/Black / (2000 lbs./ton)
= 0.07 tons/year Ethylbenzene in Quad Grey/Black

Table 3-2: Paint Analysis

MAX Monthly Use 2015	Included in PTC Application monthly use	Manufacturer	Coating Material	Calcium Carbonate (Limestone)	Xylene	Carbon Black	Aluminum	VM&P Naptha	Stoddard Solvent	Quartz	Cristobalite	Silica NOT TAP	2-(2H-Benzotriazol-2-yl)-p-cresol NOT TAP	Cobalt 2-Ethyl-hexanoate NOT TAP	Titanium Dioxide NOT TAP	Talc NOT TAP	hydrotreated middle petroleum distillates NOT TAP
			CAS No.	1317-65-3	1330-20-7	1333-86-4	7429-90-5	8032-32-4	8052-41-3	14808-60-7	14464-46-1	112945-52-5	2440-22-4	136-52-7	13463-67-7	14807-96-6	64742-46-7
																	Weight Percentage Content
		Rust-Oleum	Silver Spray	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Sherwin Williams	Touch-Up Paint	0.00	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00
		Columbia	Interior Wall Paint/Floor Paint	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.26	0.00	0.00
		LaVanture Products	Adhesive White/Black	4.06	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
		Henkel	Almond - LOS PSS 10.00Z ACWS ALM 12CC	5.07	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.42	0.00	0.00
		Hi-Tech Industries	Silicone (Project 1)	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	0.62
		Sherwin Williams	Xylene	0.00	2.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Sherwin Williams	Mineral Spirits	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
		Asphalt Co.	9900 Paint	0.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Asphalt Co.	9970 Primer	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
		Hi-Lite Solutions	AeroGreen Paint Prep	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
		Sherwin Williams	Acetone	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
		Sherwin Williams	Black Paint (Kem 400)	0.00	4.07	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
		Columbia	Gray Primer	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.06	0.00
			Spray Total (tons/yr)	14.01	9.30	0.36	0.05	0.00	0.70	0.15	0.02	0.49	0.02	0.02	2.21	0.06	0.62

Example Calculation

Max Hourly Ethylbenzene in Quad Sealant Advanced Grey/Black
(24-hr. average)

Max 12-month Ethylbenzene in Quad Sealant Advanced Grey/Black

Table 3-2: Paint Analysis

MAX Monthly Use 2015	Included in PTC Application monthly use	Manufacturer	Coating Material	Naphtha hydrotreated light NOT TAP	Mineral Spirits (Aliphatic Petroleum Distillates) NOT TAP	V. M. & P. Naphtha NOT TAP	Asphalt NOT TAP	Light Aromatic Hydrocarbons NOT TAP	Heavy Aliphatic Naphtha	Aromatic 150 NOT TAP
			CAS No.	64742-49-0	64742-88-7	64742-89-8	64742-93-4	64742-95-6	Proprietary	70693-06-0
		Rust-Oleum	Silver Spray	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Sherwin Williams	Touch-Up Paint	0.00	0.14	0.00	0.00	0.14	0.00	0.00
		Columbia	Interior Wall Paint/Floor Paint	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		LaVanture Products	Adhesive White/Black	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Henkel	Almond - LOS PSS 10.00Z ACWS ALM 12CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Hi-Tech Industries	Silicone (Project 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Sherwin Williams	Xylene	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Sherwin Williams	Mineral Spirits	0.00	1.93	0.00	0.00	0.00	0.00	0.00
		Asphalt Co.	9900 Paint	2.57	0.00	2.57	0.00	0.00	0.00	0.00
		Asphalt Co.	9970 Primer	0.51	0.00	0.51	0.00	0.00	0.00	0.00
		Hi-Lite Solutions	AeroGreen Paint Prep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Sherwin Williams	Acetone	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Sherwin Williams	Black Paint (Kem 400)	0.00	0.00	2.09	0.00	0.12	0.00	0.00
		Columbia	Gray Primer	0.00	0.04	0.18	0.00	0.00	0.00	0.00
			Spray Total (tons/yr)	3.08	2.10	5.52	0.00	0.25	5.37	0.00

Example Calculation

Max Hourly Ethylbenzene in Quad Sealant Advanced Grey/Black
(24-hr. average)

Max 12-month Ethylbenzene in Quad Sealant Advanced Grey/Black

Table 3-3: Paint Booth Criteria Pollutant Emissions Summary

Criteria Air Pollutants	Maximum Spray Rate[1]		Spray Retention Rate[2]	Potential to Emit		Paint Filter Efficiency[3]	Controlled Emissions	
	lb/hr	ton/yr	%	lb/hr	ton/yr	%	lb/hr	ton/yr
PM_{10}	18.60	42.87	65%	6.51	15.00	98.65%	0.088	0.203
$PM_{2.5}$	18.60	42.87	65%	6.51	15.00	98.65%	0.088	0.203
VOC	9.93	22.88	0%	9.93	22.88	0%	9.93	22.88

Example Calcualtions

Maximum hourly or yearly spray rate lbs./hr. * (100%-spray retention rate %) * (100%-filter efficiency%) = controlled lbs per hr. or tons/year
Example PM10 lbs./hr. calculation: maximum total paint solids 18.6 lbs./hr. * (100%-65%) * (100%-98.65%) = 0.088 lbs. PM10/hr.
Example PM10 ton/year calculation: maximum total paint solids 42.87 tons/yr. * (100%-65%) * (100%-98.65%) = 0.203 tons PM10/yr.

Notes:

1. The maximum hourly (24-hr. average) or annual Spray Total of the paint coatings.
2. Non-volatile emissions are calculated using a coating retention rate of 65% (LPH-200 HVLP spray gun).

Table 3-4: Undercoating Analysis

MAX Monthly Use 2015	Included in PTC Application monthly use	Manufacturer	Coating Material	Density	Solids	VOC (non-exempt)	Acetone	Stoddard Solvent	Naphtha hydrotreated light NOT TAP	Asphalt NOT TAP
							67-64-1	8052-41-3	64742-49-0	64742-93-4
				lbs./gal.	Weight Percentage Content	Weight Percentage Content	Weight Percentage Content	Weight Percentage Content	Weight Percentage Content	Weight Percentage Content
229	350	Z Technologies	Z Guard 1021FRX	9.591	69%	26.27%	8.50%	12.60%	8.7%	27.20%
total/day	21.9		If volatile, enter "1" ==>			1	1	1	1	

	Manufacturer	Coating Material	Density	Solids	VOC (non-exempt)	Acetone	Stoddard Solvent	Naphtha hydrotreated light NOT TAP	Asphalt NOT TAP
			lbs./gal.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.
	Z Technologies	Z Guard 1021FRX	9.59	6.032	2.297	0.743	1.101	0.761	2.378
		Spray Total (lb/hr)		6.032	2.297	0.743	1.101	0.761	2.378

	Manufacturer	Coating Material	Density	Solids	VOC (non-exempt)	Acetone	Stoddard Solvent	Naphtha hydrotreated light NOT TAP	Asphalt NOT TAP
			lbs./gal.	Tons per Year	Tons per Year	Tons per Year	Tons per Year	Tons per Year	Tons per Year
	Z Technologies	Z Guard 1021FRX	9.59	13.90	5.29	1.71	2.54	1.75	5.48
		Spray Total (tons/yr)		13.90	5.29	1.71	2.54	1.75	5.48

Example Calculation

Max Hourly PM in Z Guard 1021FRX (24-hr. average)	= 350 gal Z Guard 1021FRX/month * 9.591 lb/gal density * 69% solids in Z Guard 1021FRX * 1 month/4 weeks * 1 week/4 days * 1 day/24 hrs = 6.03 lb/hr Solids in Z Guard 1021FRX
Max Hourly Acetone in Z Guard 1021FRX (24-hr. average)	= 350 gal Z Guard 1021FRX/month * 9.591 lb/gal density * 8.5 wt% Acetone in Z Guard 1021FRX * 1 month/4 weeks * 1 week/4 days * 1 day/24 hrs = 0.74 lb/hr Acetone in Z Guard 1021FRX
Max 12-month PM in Z Guard 1021FRX	= 350 gal Z Guard 1021FRX/month * 9.591 lb/gal density * 69% solids * 12 months = 27,791.8 lbs. PM/year 27,791.8 lbs. PM/yr. / (2000 lbs/ton) = 13.90 tons PM/year
Max 12-month Acetone in Z Guard 1021FRX	= 350 gal Z Guard 1021FRX/month * 9.591 lb/gal density * 8.5% Acetone * 12 months = 3,424.0 lbs. Acetone/year 3,424.0 lbs. PM/yr. / (2000 lbs/ton) = 1.71 tons Acetone/year

Table 3-5: Undercoating Criteria Pollutant Emissions Summary

Criteria Air Pollutants	Maximum Spray Rate[1]		Spray Retention Rate[2]	Potential to Emit		Paint Filter Efficiency[4]	Controlled Emissions	
	lb/hr	ton/yr	%	lb/hr	ton/yr	%	lb/hr	ton/yr
PM_{10}	6.03	13.90	40%	3.62	8.34	96.00%	0.145	0.334
$PM_{2.5}$	6.03	13.90	40%	3.62	8.34	96.00%	0.145	0.334
VOC	2.30	5.29	0%	2.30	5.29	0%	2.30	5.29

Example Calcualtions

Maximum hourly or yearly spray rate lbs./hr. * (100%-spray retention rate %) * (100%-filter efficiency%) = controlled lbs per hr. or tons/year
Example PM10 lbs./hr. calculation: maximum total undercoating solids 6.03 lbs./hr. * (100%-65%) * (100%-96%) = 0.145 lbs. PM10/hr.
Example PM10 ton/year calculation: maximum total paint solids 13.9 tons/yr. * (100%-65%) * (100%-96%) = 0.334 tons PM10/yr.

Notes:

1. The maximum hourly (24-hr. average) or annual Spray Total of the paint coatings.
2. Non-volatile emissions are calculated using a coating retention rate of 40% (Contractor II/FTX II spray gun).
3. Controlled non-volatile emissions are calculated using an exhaust filter removal efficiency of 96%.

Table 4-2:
Heater Natural-Gas Combustion Toxic Air Pollutant Emissions

Non-Carcinogenic Toxic Air Pollutant (24 hr Average)	CAS	Controlled Hourly Emissions		Emission Change (lb/hr)	Screening Emission Level (lb/hr)	Exceeds Screening Emission Level?
		Pre-Project (lb/hr)	Post Project (lb/hr)			
Naphthalene	91-20-3	0	1.570E-06	1.570E-06	3.33E+00	No
Toluene	108-88-3	0	7.583E-06	7.583E-06	2.50E+01	No
Barium	7440-39-3	0	9.814E-06	9.814E-06	3.30E-02	No
Chromium	7440-47-3	0	3.123E-06	3.123E-06	3.30E-02	No
Copper	7440-50-8	0	3.208E-06	3.208E-06	6.70E-02	No
Manganese	7439-96-5	0	8.475E-07	8.475E-07	3.33E-01	No
Molybdenum	7439-98-7	0	2.453E-06	2.453E-06	6.67E-01	No
Selenium	7782-49-2	0	2.497E-04	2.497E-04	1.30E-02	No
Vanadium	1314-62-1	0	5.130E-06	5.130E-06	3.00E-03	No
Zinc	7440-66-6	0	6.468E-05	6.468E-05	6.67E-01	No
Carcinogenic Toxic Air Pollutant (Annual Average)	**CAS**	**Controlled Hourly Emissions**		**Emission Change (lb/hr)**	**Screening Emission Level (lb/hr)**	**Exceeds Screening Emission Level?**
		Pre-Project (lb/hr)	**Post Project (lb/hr)**			
Formaldehyde	50-00-0	0	1.7E-04	1.7E-04	5.1E-04	No
Benzo(a)pyrene	50-32-8	0	2.7E-09	2.7E-09	2.0E-06	No
3-Methylchloranthene	56-49-5	0	4.0E-09	4.0E-09	2.5E-06	No
Benzene	71-43-2	0	4.7E-06	4.7E-06	8.0E-04	No
Arsenic	7440-38-2	0	4.5E-07	4.5E-07	1.5E-06	No
Beryllium	7440-41-7	0	2.7E-08	2.7E-08	2.8E-05	No
Cadmium	7440-43-9	0	2.5E-06	2.5E-06	3.7E-06	No
Nickel	7440-02-0	0	4.7E-06	4.7E-06	2.7E-05	No
Polyaromatic Hydrocarbon (Max)		0	1.4E-07	1.4E-07	9.1E-05	No
Polycyclic Organics: 7-PAH Group[1]		0	2.5E-08	2.5E-08	2.0E-06	No

1. Polycyclic Organic Matter (POM) is considered as one TAP comprised of: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, chrysene, indeno(1,2,3-cd)pyrene, benzo(a)pyrene. The total is compared to benzo(a)pyrene.

Table 2-4: Welding Emissions

Interstate Max. Projected Welding Material Purchases	TAP/HAP Metal	Al	AlO	Ba	Be	Cr	Cr+6	Cu	Co	Fe	Iron Oxide	Mg	MgO	Mn	Molyb	Ni	Niobium	Silica	Silicon	Titanium	Zirconium	Zn	P	V
Welding Process/Electrode	CAS No.	7440-47-3	7429-90-5 1344-28-1	7440-39-3	7440-41-7	7440-47-3	18540-29-9	7440-50-8	7440-48-4	7439-89-6	1309-37-1 1317-61-9	7439-96-5	1309-48-4	7439-96-5	7439-98-7	7440-21-3	7440-03-1	1317-95-9 Not Tap	7440-21-3	7440-32-6 Not TAP	7440-67-7	7440-66-6	7723-14-0	1314-62-1 as V_2O_5
Carbon Fillers	Annual Use(lbs.)	Al	AlO	Ba	Be	Cr	Cr+6	Cu	Co	Fe	Iron Oxide	Mg	MgO	Mn	Molyb	Ni	Niobium	Silica	Silicon	Titanium	Zirconium	Zn	P	V
[1]GMAW Pinnacle ER70S-6	29,250					0.0%		0.15%						1.54%	0.0048%	0.01%	0.3%	3.0%	0.9%	0.5%	1.0%		0.0140%	0.0032%
Metal	PM10 total	Al	AlO	Ba	Be	Cr	Cr+6	Cu	Co	Fe	Iron Oxide	Mg	MgO	Mn	Molyb	Ni	Niobium	Silica	Silicon	Titanium	Zirconium	Zn	Zn	V
TAP		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X?	X		X	X	X	X
HAP					X	X	X		X					X		X								
Table 12.19-1 and SDAPCD w/NASSCO fume correction		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	A	X	X
Table 12.19-2 and SDAPCD w/NASSCO fume correction						X			X					X		X								
SDAPCD w/ GMAW/SMAW NASSCO fume correction		X	X	X	X		X	X		X	X	X	X		X		X	X	X	X	X	X	X	X
IDEQ EL Dust (lbs./hr.)	—	6.7E-01	6.7E-01	3.3E-02	2.80E-05	3.3E-02	5.6E-07	6.7E-02	3.30E-03	—	—	—		3.3E-01	6.7E-01	2.70E-05	0.0067	—	6.7E-01	—	3.3E-01	6.7E-01	7.0E-03	3.0E-03
Fume lbs/yr @EF[2]	1.6E+02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4.6E-02	0.0E+00	2.4E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2.5E+00	7.7E-03	1.6E-02	4.8E-01	4.8E+00	1.4E+00	8.0E-01	1.6E+00	0.0E+00	2.2E-02	5.1E-03
lbs./hr. (Assume use in 4 days/week, 52 weeks/yr=208 days/yr; 24-hour average/day PM/585 TAPs; annual average 586 TAPs;	0.032	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9.1E-06	0.0E+00	4.8E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4.9E-04	1.5E-06	1.8E-06	9.6E-05	9.6E-04	2.9E-04	1.6E-04	3.2E-04	0.0E+00	4.5E-06	1.0E-06
IDEQ EL Fume (lbs./hr.)		—			—	—	—	1.3E-02	3.3E-03	—	3.3E-01	6.7E-01	6.7E-01	6.7E-02	—	—	—	—	—	—		3.330E-01	—	3.0E-03

Calculation Method With AP-42 Emission Factors, AP-42 Table 12.19-1, Table 12.19-2						
	lbs/1000 lbs electrode			0.00% fume generation		
TAP	Cr	Cr+6	Cobalt	Mn	Ni	Pb

Calculation Method Without AP-42 Emission Factors

Eh = max hourly emissions of each TAP Ea= annual emissions of each TAP
Ea= Ua X EF (fume rate rod lbs fume/lbs rod) X Nasso fume Correction Factor X Concentration metal
Eh=Uh X EF (fume rate rod lbs fume/lbs rod) X Nasso fume Correction Factor X Concentration metal
[2]SDAPCD G99 Gas Metal Arc Weldging
(GMAW), Unspecified Electrode, General District-
ARB-NASSCO GMAW Emission Estimation
Procedure lbs fume/lbs rod
default fume rates GMAW, MIG, TIG 1%
default fume rates SMAW, FCAW 2%
default fume rates unspecified 5%

default fume Correction Factor GMAW, MIG, TIG 0.5464
default fume Correction Factor SMAW, FCAW 0.2865
default fume Correction Factor unspecified 1.0

default Cr+6 conversion rates GMAW, MIG, TIG 0.05
default Cr+6 conversion rates SMAW, FCAW 0.63
default Cr+6 conversion rates unspecified 0.1

default emission factor (lbs./lbs rod)
PM10 (PM2.5) 0.01
Cr+3 0.01*0.5464*.95*Cl
Cr+6 0.01*0.5464*.05*Cl
Cobalt 0.01*0.5464*Cl
Manganese 0.01*0.5464*Cl
Nickel 0.01*0.5464*Cl
Lead 0.01*0.5464*Cl
Metals w/o EF 0.01*0.5464*Cl

Calculation Map For Welding Wire Products

Welding Wire	Row	AP-42 Table 12.1	AP-42 Table 12.2 Cr, Cr+6, Mn, Co, Pb	Process Type	Correction
GTAW Mig/Tig ALC 4043		NA	NA	1% default	0.5464
GTAW Mig/Tig ALC 5356		NA	NA	1% default	0.5464
GMAW Mig/Tig ESAB 5356		NA	NA	1% default	0.5464
GMAW Mig/Tig Hobart Maxal 5356		NA	NA	1% default	0.5464
GMAW Pinnacle ER70S-6	16	NA	NA	1% default	0.5464
GMAW Hobart E70 Quantum Arc D2		X	X	NA	NA
GMAW Premier Arc 6		X	X	NA	NA
SAW Lincoln Weld L-70 and L-705		NA	NA	5% default	1
SAW Lincoln Weld 781 Flux		X	X	NA	NA
GMAW Harris HPG 308LS		X	X	NA	NA
GMAW Harris HPG 308L		X	X	NA	NA
Avesta 309L				1% default	0.5464
Lincoln Electric Mig 308LSi		X	X	NA	NA

Example Calculation Copper (585 TAP) in ER70S-6
Max. estimated Copper Emission lbs./yr. = lbs/yr. E70S-3 * % copper * fume emission factor * Fume correction factor
= 29250 lbs/yr. * 0.15% copper * 1 % fume emission factor *0.5464 fume correction factor = 0.24 lbs/yr
Max. estimated Copper Emission lbs./hr. = 0.24 lbs/yr / (208 days * 24 hrs) = 4.8 E-5 lbs./hr.

Example Calculation Nickel (586 TAP) in ER70S-6
Max. estimated nickel lbs./yr. = lbs/yr. ER70S-6 * % nickel * fume emission factor * Fume correction factor
= 29250 lbs/yr. * 0.01% nickel * 1% fume emission factor * 0.5464 Fume correction factor = 0.016 lbs./yr.
Max. estimated Nickel Emission lbs./hr. = 1.6E-2 lbs/yr / (8760 hrs) = 1.82E-6 lbs./hr.

Table 4-4 Paint Coating Uncontrolled Toxic Air Pollutant Emissions

		TAP	Acetone	MEK	Naphthalene	1,2,4-Trimethyl-benzene	Ethyl-benzene	Methyl n-Propyl Ketone	Methyl Isobutyl Ketone	Toluene	2-Butoxyethyl Acetate	n-Butyl Acetate	Tertiary Butyl Acetate	Zinc Oxide
		CAS No.	91-20-3											
		EL (lbs./hr.)	1.19E+02	6.53E+01	1.00E+01	8.20E+00	2.90E+01	1.47E+00	1.37E+01	2.50E+01	8.33E+00	4.73E+01	6.33E+01	6.67E-01
	TAP lbs./hr <EL													
	TAP lbs./hr >EL													
Use (gals./month)	Manufacturer	Material	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)
65	Henkel	Quad Sealant Advanced Grey/Black					1.84E-02							
50	Henkel	Quad Sealant Clear			1.01E-02		1.01E-01							
50	Henkel	Quad Sealant White					1.41E-02							
50	Walmart	Black Spray	2.19E-01			7.55E-03				1.06E-01				
50	Rust-Oleum	Silver Spray	2.01E-01				8.03E-03			4.01E-01				
50	Sherwin Williams	Touch-Up Paint					5.92E-02			1.18E-01	4.74E-02	1.78E-01		
40	Columbia	Interior Wall Paint/Floor Paint												7.22E-03
100	LaVanture Products	Adhesive White/Black												
50	Henkel	Almond - LOS PSS 10.00Z ACWS ALM 12CC												
50	Hi-Tech Industries	Silicone (Project 1)												
50	Sherwin Williams	Xylene					2.80E-01							
50	Sherwin Williams	Mineral Spirits												
250	Asphalt Co.	9900 Paint		1.12E-01					1.12E-01					
50	Asphalt Co.	9970 Primer		2.23E-02					2.23E-02					
50	Hi-Lite Solutions	AeroGreen Paint Prep												
10	Sherwin Williams	Acetone	1.72E-01											
250	Sherwin Williams	Black Paint (Kem 400)				1.01E-01	3.03E-01							
10	Columbia	Gray Primer					5.33E-04							

Table 4-4 Paint Coating Uncontrolled Toxic Air Pollutant Emissions

		TAP	Calcium Carbonate (Limestone)	Xylene	Carbon Black	Aluminum	VM&P Naptha	Stoddard Solvent	Quartz	Cristobalite
		CAS No.								
		EL (lbs./hr.)	6.67E-01	2.90E+01	2.30E-01	6.67E-01	9.13E+01	3.50E+01	6.70E-03	3.30E-03
	TAP lbs./hr <EL									
	TAP lbs./hr >EL									
Use (gals./month)	Manufacturer	Material	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)	(lbs./hr.)
65	Henkel	Quad Sealant Advanced Grey/Black	3.85E-01	9.18E-02					6.42E-03	
50	Henkel	Quad Sealant Clear		3.02E-01				1.43E-03		
50	Henkel	Quad Sealant White	1.48E-01	7.06E-02						
50	Walmart	Black Spray			1.59E-03					
50	Rust-Oleum	Silver Spray		2.01E-02		7.02E-03				
50	Sherwin Williams	Touch-Up Paint		5.33E-01						
40	Columbia	Interior Wall Paint/Floor Paint								3.90E-05
100	LaVanture Products	Adhesive White/Black	6.16E-01							
50	Henkel	Almond - LOS PSS 10.00Z ACWS ALM 12CC	3.85E-01						6.42E-03	
50	Hi-Tech Industries	Silicone (Project 1)								
50	Sherwin Williams	Xylene		9.35E-01						
50	Sherwin Williams	Mineral Spirits								
250	Asphalt Co.	9900 Paint		2.23E-01						
50	Asphalt Co.	9970 Primer		4.46E-02						
50	Hi-Lite Solutions	AeroGreen Paint Prep								
10	Sherwin Williams	Acetone								
250	Sherwin Williams	Black Paint (Kem 400)		1.77E+00	5.30E-02					
10	Columbia	Gray Primer		2.67E-03					9.33E-05	

Interstate Group
Nampa, ID

Table 4-5 Undercoating Uncontrolled Toxic Air Pollutant Emissions

			Acetone	Stoddard Solvent
		CAS No.	91-20-3	
		EL (lbs./hr.)	1.19E+02	6.53E+01
	TAP lbs./hr <EL			
	TAP lbs./hr >EL			
Use (gals./month)	Manufacturer	Material	(lbs./hr.)	(lbs./hr.)
350	Z Technologies	Z Guard 1021FRX	7.43E-01	1.10E+00

Table 4-6:
Facility-Wide Hazardous Air Pollutant Emissions

Hazardous Air Pollutant	CAS	Sources			Potential to Emit (tons/yr)
		MAU+UH	Paint	Welding	
2-Methylnaphthalene	91-57-6				2.7E-07
3-Methylchloranthrene	56-49-5	X			2.0E-08
Acenaphthene	83-32-9				2.0E-08
Acenaphthylene	208-96-8	X			2.0E-08
Anthracene	120-12-7	X			2.7E-08
Arsenic	7440-38-2	X			2.0E-06
Barium	7440-39-3	X		X	5.0E-05
Benzene	71-43-2	X			1.2E-05
Benzo(a)anthracene	56-55-3	X			1.4E-08
Benzo(a)pyrene	50-32-8	X			2.0E-08
Benzo(b)fluoranthene	205-99-2	X			1.4E-08
Benzo(g,h,i)perylene	191-24-2	X			2.0E-08
Benzo(k)fluoranthene	207-08-9	X			2.0E-08
Beryllium	7440-41-7	X		X	1.2E-07
Cadmium	7440-43-9	X			1.1E-05
Chromium	7440-47-3	X		X	2.3E-05
Chrysene	218-01-9	X			2.0E-08
Cobalt	7440-48-4	X		X	8.2E-07
Dibenzo(a,h)anthracene	53-73-3	X			1.4E-08
Dichlorobenzene	25321-22-6	X			1.2E-05
Ethylbenzene	100-41-4		X		1.8E+00
Fluoranthene	206-44-0	X			3.4E-08
Fluorene	86-73-7	X			3.2E-08
Formaldehyde	50-00-0	X			7.3E-04
Hexane	110-54-3	X			1.8E-02
Indeno(1,2,3-cd)pyrene	193-39-5	X			2.0E-08
Lead Compounds	7439-92-1	X			4.9E-06
Manganese	7439-96-5	X		X	5.2E-04
Mercury Compounds	7439-97-6	X			2.5E-06
Methyl Isobutyl Ketone	108-10-1		X		3.1E-01
Naphthalene	91-20-3	X			6.0E-06
Nickel	7440-02-0	X		X	2.2E-05
Phenanthrene	85-01-8	X			1.9E-07
Pyrene	1290-00-0	X			5.6E-08
Polycyclic Organic Matter	NA	X			1.1E-07
Selenium	7782-49-2	X			2.3E-07
Toluene	108-88-3	X	X		1.4E+00
Xylene	1330-20-7	X	X		9.3E+00
TOTAL =		0.02	**12.88**	0.001	**12.9**

APPENDIX B – FACILITY DRAFT COMMENTS

The following comments were received from the facility on September 16, 2016:

Facility Comment: Propose removing unit heaters from the permit since indirect heaters < 50 MMBtu/hr are exempt from PTC (58.01.01.222(c)).

DEQ Response: The unit heaters will remain in the PTC as they are an emission source at the facility. Only permit condition 2.8 limits the heaters to natural gas only. No other restrictions are placed on the unit heaters.

Facility Comment: Propose removing lbs/hr PM and VOC limits in permit condition 3.3 since recordkeeping requirements (Sections 3.8 and 3.9) focus on lbs/month and tons/yr.

DEQ Response: The requested lb/hr limits have been removed and replaced with lb/month limits to correspond better with the recordkeeping requirements of lb/mo and tons/yr.

Facility Comment: Permit Condition 3.8, materials are not purchased on a daily basis. Interstate could document the date and amount purchases are brought on-site throughout the year. Suggest the permit language be changed to read "expressed as the gallons purchased and received at the facility and the day, month, and year received.

DEQ Response: The requested change has been made.

APPENDIX C – PROCESSING FEE

PTC Prcessing Fee Calculation Worksheet

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: Interstate Group, LLC
Address: 605 N 39th St
City: Nampa
State: ID
Zip Code: 83687
Facility Contact: Kevin Bennett
Title: Operations Manager
AIRS No.: 027-00153

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	1.0	0	1.0
SO_2	0.1	0	0.1
CO	0.8	0	0.8
PM10	0.9	0	0.9
VOC	28.1	0	28.1
TAPS/HAPS	12.8	0	12.8
Total:	43.6	0	**43.6**
Fee Due	**$ 5,000.00**		

Comments: