

Statement of Basis

**Permit to Construct P-2010.0144
Project No. 60614**

**Dexter Chassis Group
Plant #57
Twin Falls, Idaho**

EC

Facility ID No. 083-00100

Final

**April 6, 2011
Eric Clark
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 for non-carcinogens
AACC	acceptable ambient concentrations for carcinogens
acfm	actual cubic feet per minute
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
Btu	British thermal units
CAA	Clean Air Act
CAS No.	Chemical Abstracts Service registry number
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CI	compression ignition
CO	carbon monoxide
DEQ	Department of Environmental Quality
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
gpm	gallons per minute
gph	gallons per hour
gr	grain (1 lb = 7,000 grains)
HAP	hazardous air pollutants
HMA	hot mix asphalt
hp	horsepower
hr/yr	hours per year
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
mg/dscm	milligrams per dry standard cubic meter
MMBtu	million British thermal units
MMscf	million standard cubic feet
NAAQS	National Ambient Air Quality Standard
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
O&M	operations and maintenance
PAH	polyaromatic hydrocarbons
PC	permit condition
PM	particulate matter
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
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTC/T2	permit to construct and Tier II operating permit

PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
scf	standard cubic feet
SIC	Standard Industrial Classification
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/yr	tons per consecutive 12-calendar month period
T2	Tier II operating permit
TAP	toxic air pollutants
UTM	Universal Transverse Mercator
VOC	volatile organic compounds
µg/m ³	micrograms per cubic meter

FACILITY INFORMATION

Description

Dexter Chassis Group manufactures trailers and trailer equipment. Trailer Chassis are welded together and components of the chassis are spray coated with a HAP free material. All coating is performed within a paint booth equipped with a fabric filtration system. The facility is also equipped with three space heating units. Welding is performed using an E70S wire rod and approximately 3,000 lbs of welding wire is used annually.

Paint Booth Operations

Dexter Chassis Group operates one paint booth.

Paint Booth No. 1:

Paint booth No. 1 has been in operation since 2007. This is the original booth used for painting operations by Dexter Chassis. The booth uses a pressure pump system with a high-volume, low-pressure (HVLPP) spray gun with a transfer efficiency of 65%. This paint booth has one exhaust stack.

Natural Gas-Fired Space Heaters

Natural gas-fired heaters were installed at Dexter Chassis at time of construction of the facility. One is an office Heating Unit with a maximum rating of 69,000 Btu/hr. The other two are process units within the spray booth that produce warm air. The capacity of these two units is 1.1 MMBtu/hr each. The number of heaters and the heat input capacities of the heaters are as follows:

Welding Operations

Welding operations are a component of the manufacturing operations at Dexter Chassis Group. Dexter uses a welding process identified as gas metal arc welding. Welding of steel tubing uses a specific steel core wire (electrode) and rod material. Aluminum welding uses a specific aluminum welding wire (electrode) and rod material. An E70S wire rod is used and approximately 3,000 lbs of welding wire is used annually.

Permitting History

The following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

April 6, 2011	P-2010.0144 Project 60614, Initial PTC was issued, (A)
March 13, 2008	X-2008.0016, Exemption Concurrence was issued for facility, It was determined that the exemption was issued erroneously and was therefore rescinded on September 14, 2010. Although the concurrence was rescinded, Dexter Chassis' actual and potential emissions were always below exempt levels. At no time did Dexter Chassis operate out of compliance with Idaho air permitting rules.

Application Scope

This permit is the initial PTC for an existing facility.

The applicant has proposed to permit a paint booth and accompanying space heating units.

Application Chronology

October 27, 2010	DEQ received an application and an application fee.
November 8 – Nov. 23, 2010	DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.
November 24, 2010	DEQ determined that the application was incomplete.

December 28, 2010 DEQ received supplemental information from the applicant.

January 3, 2010 DEQ determined that the application was complete.

February 7, 2011 DEQ made available the draft permit and statement of basis for peer and regional office review.

February 10, 2011 DEQ made available the draft permit and statement of basis for applicant review.

March 1 – March 31, 2011 DEQ provided a public comment period on the proposed action.

March 15, 2011 DEQ received the permit processing fee.

April 6, 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
Paint Booth	<u>Paint Booth:</u> Manufacturer: VOC Containment Systems Model: AA-4 U VRC Air Flow Type: Side Draft Manufacture Date: October 2007	<u>Paint Booth Filtration System:</u> Manufacturer: Kem-Wove Model: SPS 1.0 Type: Fabric Filter Number of Filters: 46 PM ₁₀ control efficiency: 99.4%	<u>Paint Booth Exhaust</u> Exit height: 30 ft Exit diameter: 2.83 ft Exit flow rate: 12,000 acfm Exit temperature: 180 °F
Heating Units	<u>Space Heaters</u> Two heaters with a rated heat input of 1.1 MMBtu/hr One heater with a rated heat input of 69,000 Btu/hr	N/A	3 Space heater outlets
Welding	<u>Electric Arc Welding</u> Rod: E70S Type: GMAW Lbs wire: 3,000 lb / yr	N/A	Fugitive

Emissions Inventories

An emission inventory was developed for the paint booth, three natural-gas fired heaters and welding operations at the facility (see Appendix A) associated with this proposed project. Emissions estimates of criteria pollutant PTE were based on emission factors from AP-42, Tables 12.19-2 for all welding operations. AP-42, Table 1.4-3, was used to establish emission estimates for the space heaters. These calculations assume 8,760 hours per year operating of the heating units. Coatings estimates assume a maximum of 18.8 gal/day. Summaries of the estimated uncontrolled and controlled emissions of criteria pollutants, TAPs, and HAPs from the facility are provided in the following tables.

Uncontrolled Emissions:

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

Table 2 POST PROJECT UNCONTROLLED EMISSIONS FOR CRITERIA POLLUTANTS

Emissions Unit	PM ₁₀	SO ₂	NO _x	CO	VOC	Lead
	T/yr	T/yr	T/yr	T/yr	T/yr	lb/quarter
Point Sources						
Paint Booth	11.23 ^a	N/A	N/A	N/A	8.64 ^b	N/A
Heating Units	7.40E-02	5.85E-03	0.974	0.818	5.36E-02	4.87E-06
Welding Operations ^c	0.142	N/A	N/A	N/A	N/A	N/A
Total	11.45	5.85E-03	0.97	0.82	8.69	4.87E-06

- a. Assumes a transfer efficiency of 65% and no other controls. The maximum daily usage of 18.8 gal/day is also assumed.
- b. The VOC values assumes that the PTE of 3.42 T/yr is produced during a normal operating day of 9.5 hours. If that amount is extrapolated across a 24-hr period, the uncontrolled amount could be obtained.
- c. A maximum of 15 lb wire/day for the facility is assumed. Also, the welding arc rod that is used on site is the E70S, with an emission factor of 5.2 lb fume/1,000 lb wire.

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.

Pre-Project Potential to Emit

The following table presents the pre-project potential to emit for all criteria 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 3 PRE-PROJECT POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

Emissions Unit	PM ₁₀		SO ₂		NO _x		CO		VOC		Lead	
	lb/hr ^a	T/yr ^b	lb/hr	T/yr								
Point Sources												
Paint Booth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
Heating Units	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
Welding Operations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
Post Project Totals	0.00	0.00	0.00	0.00								

- 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.

Post Project Potential to Emit

The following table presents the post project potential to emit for criteria pollutants from all emissions units at the facility 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 4 POST PROJECT POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

Emissions Unit	PM ₁₀		SO ₂		NO _x		CO		VOC		Lead	
	lb/hr ^a	T/yr ^b	lb/hr	T/yr								
Point Sources												
Paint Booth	0.05	0.1	N/A	N/A	N/A	N/A	N/A	N/A	0.8	3.42	N/A	N/A
Heating Units	0.017	0.074	1.33E-03	5.85E-03	0.222	0.974	0.187	0.818	0.0122	0.0536	1.11E-06	4.87E-06
Welding Operations	N/A	0.0078	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pre-Project Totals	0.07	0.18	1.33E-03	5.85E-03	0.22	0.97	0.19	0.82	0.81	3.47	1.11E-06	4.87E-06

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

As demonstrated in Tables 2 and 4, this facility has uncontrolled potential to emit for all pollutants emissions less than the Major Source threshold of 100 T/yr and a controlled potential to emit for all pollutants emissions less than the Major Source threshold of 100 T/yr. Therefore, this facility is designated as a Minor facility. As demonstrated in Table 4 the facility's PTE for all criteria pollutants is less than 80% of the Major Source thresholds of 100 T/yr. Therefore, this facility will not be designated as a SM-80 facility.

Change in Potential to Emit

The change in facility-wide potential to emit is used to determine if a public comment period may be required or if emissions modeling may be required, and to determine the processing fee per IDAPA 58.01.01.225. The following table presents the facility-wide change in the potential to emit for criteria pollutants.

Table 5 CHANGES IN POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

	PM ₁₀		SO ₂		NO _x		CO		VOC		Lead	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Point Sources												
Pre-Project Potential to Emit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Post Project Potential to Emit	0.07	0.18	1.33E-03	5.85E-03	0.22	0.974	0.187	0.818	0.81	3.47	1.11E-06	4.87E-06
Changes in Potential to Emit	0.07	0.18	1.33E-03	5.85E-03	0.22	0.97	0.19	0.82	0.81	3.47	1.11E-06	4.87E-06

Non-Carcinogenic TAP Emissions

A summary of the estimated uncontrolled and controlled non-carcinogenic emissions increase of toxic air pollutants (TAP) is provided in the following table. The estimated controlled emissions increases of TAP were below applicable emissions screening levels (EL). Estimated controlled TAP emissions were below the annual major source threshold. Note that all TAP emissions are associated with the heating units except for carbon black which is from the coating materials. Also, chromium, cobalt, manganese and lead are in trace amounts from welding. They are additive to the heater emissions.

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

**Table 6 PRE- AND POST PROJECT NON-CARCINOGENIC TAP EMISSIONS SUMMARY
POTENTIAL TO EMIT**

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	9.79E-06	9.79E-06	3.30E-02	No
Carbon Black	0.00E-03	3.00E-04	3.00E-04	0.23	No
Chromium	0.00E-03	3.74E-06	3.74E-06	3.30E-02	No
Cobalt	0.00E-03	8.12E-07	8.12E-07	3.30E-03	No
Copper	0.00E-03	1.89E-06	1.89E-06	1.30E-02	No
Hexane	0.00E-03	4.00E-03	4.00E-03	12	No
Manganese	0.00E-03	1.99E-04	1.99E-04	6.70E-02	No
Mercury	0.00E-03	5.78E-07	5.78E-07	3.00E-03	No
Molybdenum	0.00E-03	2.45E-06	2.45E-06	0.333	No
Napthalene	0.00E-03	4.95E-04	4.95E-04	3.33	No
Selenium	0.00E-03	5.34E-08	5.34E-08	1.30E-02	No
Toluene	0.00E-03	7.56E-06	7.56E-06	25	No
Vanadium	0.00E-03	5.12E-06	5.12E-06	3.00E-03	No
Zinc	0.00E-03	6.45E-05	6.45E-05	0.667	No

Therefore, modeling is not required for any TAPs because the 24-hour average non-carcinogenic screening EL identified in IDAPA 58.01.01.585 was not exceeded.

Carcinogenic TAP Emissions

A summary of the estimated uncontrolled and controlled carcinogenic emissions increase of toxic air pollutants (TAP) is provided in the following table. The estimated controlled emissions increases of TAP were below applicable emissions screening levels (EL). Estimated controlled TAP emissions were below the annual major source threshold.

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

Table 7 PRE- AND POST PROJECT CARCINOGENIC TAP EMISSIONS SUMMARY POTENTIAL TO EMIT

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)
2-Methylnaphthalene	0.00E-03	5.34E-08	5.34E-08	9.10E-05	No
3-Methylchloranthrene	0.00E-03	4.00E-09	4.00E-09	2.50E-06	No
Acenaphthene	0.00E-03	4.00E-09	4.00E-09	9.10E-05	No
Acenaphthylene	0.00E-03	4.00E-09	4.00E-09	9.10E-05	No
Anthracene	0.00E-03	5.34E-09	5.34E-09	9.10E-05	No
Benzo(g,h,i) perylene	0.00E-03	2.67E-09	2.67E-09	9.10E-05	No
Dichlorobenzene	0.00E-03	2.67E-06	2.67E-06	9.10E-05	No
Fluoranthene	0.00E-03	6.67E-09	6.67E-09	9.10E-05	No
Fluorene	0.00E-03	6.23E-09	6.23E-09	9.10E-05	No
Napthalene	0.00E-03	1.36E-06	1.36E-06	9.10E-05	No
Polycyclic Organic Matter	0.00E-03	2.54E-08	2.54E-08	2.00E-06	No
Phenanathrene	0.00E-03	3.78E-08	3.78E-08	9.10E-05	No
Pyrene	0.00E-03	1.11E-08	1.11E-08	9.10E-05	No
Benzene	0.00E-03	4.67E-06	4.67E-06	8.00E-04	No
Formaldehyde	0.00E-03	1.67E-04	1.67E-04	5.10E-04	No
Arsenic	0.00E-03	4.45E-07	4.45E-07	1.50E-06	No
Beryllium	0.00E-03	2.67E-08	2.67E-08	2.80E-05	No
Cadmium	0.00E-03	2.45E-06	2.45E-06	3.70E-06	No
Nickel	0.00E-03	5.30E-06	5.30E-06	2.70E-05	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.

Therefore, modeling is not required for because the annual average carcinogenic screening EL identified in IDAPA 58.01.01.586 was not 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 8 HAP EMISSIONS SUMMARY POTENTIAL TO EMIT

HAP Pollutants	PTE (T/yr)
2-Methylnaphthalene	5.34E-08
3-Methylchloranthrene	4.00E-09
7,12 – Dimethylbenz(a)anthracene	1.56E-07
Acenaphthene	4.00E-09
Acenaphthylene	4.00E-09
Anthracene	5.34E-09
Benzo(g,h,i) perylene	2.67E-09
Dichlorobenzene	2.67E-06
Fluoranthene	6.67E-09
Fluorene	6.23E-09
Napthalene	2.17E-03
Polycyclic Organic Matter	2.54E-08
Phenanthrene	3.78E-08
Pyrene	1.11E-08
Benzene	4.67E-06
Formaldehyde	1.67E-04
Hexane	1.75E-02
Toluene	3.31E-05
Arsenic	4.45E-07
Beryllium	4.29E-05
Cadmium	2.45E-06
Chromium	1.36E-05
Cobalt	8.18E-07
Manganese	3.70E-06
Mercury	2.53E-06
Nickel	4.67E-06
Selenium	2.34E-07
Total	2.00E-02

Ambient Air Quality Impact Analyses

No modeling requirements were necessary for this project. Facility-wide controlled emissions were below all modeling thresholds. A detailed discussion can be found in Appendix A.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Twin Falls County, which is designated as attainment or unclassifiable for PM_{2.5}, PM₁₀, SO₂, NO₂, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 Permit to Construct Required

The 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 PM₁₀ emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Conditions 8 and 10.

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 PM₁₀, SO₂, NO_x, CO, VOC or 10 tons per year for any one HAP or 25 tons per year for all HAPs 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 58.01.01.006.113 and the requirements of IDAPA 58.01.01.301 do not apply.

It needs to be determined if this facility is a criteria pollutant Major Source. As discussed previously the Dexter Chassis Group facility is located in Twin Falls County (AQCR 63), which is designated as unclassifiable/attainment for PM_{2.5}, PM₁₀, SO₂, 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 9 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	0.18	100	No
SO ₂	5.85E-03	100	No
NO _x	0.97	100	No
CO	0.82	100	No
VOC	3.47	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 52.21(b)(1). 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)

Dexter Chassis Group asserted in their submittal of form FRA that the facility was not subject to 40 CFR 63, Subpart HHHHHH - National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources. They cited the definition of Motor Vehicle or mobile equipment. They are stating that this excludes mobile equipment parts or subassemblies at a vehicle assembly plant or parts manufacturing plant. §63.11180 defines mobile equipment as “any device that may be drawn and/or driven on a roadway including, but not limited to, heavy-duty trucks, truck trailers, fleet delivery trucks, buses, mobile cranes, bulldozers, street cleaners, agriculture equipment, motor homes, and other recreational vehicles (including camping trailers and fifth wheels).” Also, according to the definition at §63.11180, mobile equipment surface coating does not include surface coating of mobile equipment subassemblies at a vehicle assembly plant. On the surface it would appear that Dexter is not subject to the Subpart. However, EPA has stated that if a unit is typically drawn on a roadway during travel to the final point of installation, it would be considered mobile equipment under the rule. With that in mind, DEQ has included the Subpart requirements in the permit. This was concluded for two reasons. First, per a June 20, 2010 EPA delegation letter, the Idaho DEQ does not have delegation of Subpart HHHHHH. Therefore, the final decision regarding applicability falls under the EPA’s jurisdiction. Secondly, Dexter does not currently use any coating materials that contain any of the target HAPs defined in the Subpart. Therefore, they may petition the EPA to either decide whether they are subject to the Subpart or request an exemption. The language DEQ has included in each permit condition has a caveat built in to account for Dexter’s ability to obtain an exemption from EPA. Once EPA makes a decision regarding applicability or the exemption, those conditions may become unenforceable per the caveat language included in the conditions.

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.

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

§ 63.11171 How do I know if my source is considered a new source or an existing source?

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

In accordance with §63.11171(c), this automotive coating operation is a new source because it will commenced 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. The paint booth was manufactured in October 2007 and was therefore constructed and installed after September 17, 2007.

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

In accordance with §63.11172(a)(1), because the initial startup of the facility occurred prior to January 9, 2008, and the facility is considered “new”, the compliance date was January 9, 2008.

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

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

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

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

Compliance with these requirements is assured by permit condition 20.

§ 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 20.

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 24.

§ 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 25.

Because the facility has not proposed to conduct paint stripping operations, the MeCl minimization plan requirements are not applicable (see permit condition 13).

§ 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 21.

§ 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 21.

§ 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 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 PM₁₀ and VOC emissions from the automotive coating operation.

Permit Condition 6 requires that the permit demonstrate that no screening emission level of any TAP is exceeded should a new paint product be used. However, if there is an exceedance, a modeling demonstration needs to be performed and show compliance with the AAC or AACC.

As mentioned previously, Permit Condition 7 establishes a 20% opacity limit for the paint booth stacks, vents, or functionally equivalent openings associated with the automotive coating operation.

As mentioned previously, Permit Condition 8 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.

New Permit Condition 9 was added to the permit to ensure that the facility's paint booth filter systems are operating properly. This was done using current DEQ guidance for permitting baghouse/filter systems.

Permit Condition 10 was added to the permit to ensure that the facility develops, maintains, and submits to DEQ a paint booth filter systems procedures document. This was done using current DEQ guidance for permitting baghouse/filter systems.

Permit Condition 11 establishes that only natural gas is allowed to be used as fuel in the paint booth heater as proposed by the applicant.

Permit condition 12 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. 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 13 establishes that the permittee conduct all automotive coating operations in the paint booth or preparation station with the filters in place, exhaust fan(s) operating, and door(s) or curtain(s) closed, that the operation shall use a HVLP spray gun, and that the permittee shall maintain and operate the paint booth and preparation station exhaust filter system in accordance with the manufacturer's specifications. This condition also defines what a booth and preparation station used for applying coating is.

Permit condition 14 establishes that the permittee shall maintain records of all odor complaints received, perform appropriate corrective actions, and maintain records of corrective actions taken at the facility for the automotive coating process. This was required because automotive operation operations are expected to have odors that might be offensive to their immediate neighbors.

Permit condition 15 establishes that the permittee shall maintain material purchase records and Material Safety Data Sheets (MSDS) for the automotive coating process. This condition was placed in the permit to ensure compliance with the Coating Materials Use Limit Permit Condition.

Permit condition 16 establishes that the permittee shall maintain daily usage records of pre-treatment wash primer, primer, topcoat, clear coat, and thinner/reducer materials used for the automotive coating process. This condition was placed in the permit to ensure compliance with the Coating Materials Use Limit permit condition.

Permit Condition 17 establishes that the permittee shall maintain monthly records of PM₁₀ emissions from the trailer coating process. This was done to provide the permittee flexibility to use additional paints and still demonstrate compliance with the current PM₁₀, VOC, HAPs, and TAPs emissions limits.

Permit Condition 18 establishes that the permittee shall maintain monthly records of VOC emissions from the trailer coating process. This was done to provide the permittee flexibility to use additional paints and still demonstrate compliance with the current PM₁₀, VOC, HAPs, and TAPs emissions limits.

Permit Condition 19 establishes that the permittee shall maintain monthly records of TAPs emissions from the trailer coating process. This was done to provide the permittee flexibility to use additional paints and still demonstrate compliance with the current PM₁₀, VOC, HAPs, and TAPs emissions limits. Because Subpart HHHHHH regulates chromium, lead, manganese, nickel, or cadmium these TAPs were excluded from the TAPs.

Permit condition 20 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 21 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 22 establishes that the federal requirements of 40 CFR Part 63 are incorporated by reference into the requirements of this permit per current DEQ guidance.

Permit Condition 23 establishes that the permittee shall maintain records as required by the General Provisions.

Permit condition 24 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 25 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. During this time, there were comments on the application and there was a request for a public comment period on DEQ's proposed action. Refer to the chronology for public comment opportunity dates.

APPENDIX A – EMISSIONS INVENTORIES

Dexter Chassis Emission Inventory

Dexter Chassis consists of five (5) total emission units. These include the paint booth, 69,000 Btu/hr space heater, two (2) 1.1 MMBtu/hr process heating units and welding operations. The three heating units are operated solely on natural gas and associated emissions were calculated using AP-42, Section 1.4 emission factors. It was assumed that all three units operated simultaneously and continually. All welding operations also were determined using AP-42, Section 12.19 emission factors. An E70S welding rod was also assumed. All painting emissions were based on a maximum usage rate of 18.8 gal/day. A transfer efficiency of 65% and a control efficiency of the filtration system of 99.4% were used.

Heating Units Emissions

Combined rating = 2.269 MMBtu/hr
Conversion from MMBtu to MMscf = 1,020
Assumed operations = 8,760 hr/yr

$PM_{2.5} = 2.269 \text{ MMBtu/hr} * 1 \text{ MMBtu}/1,020 \text{ MMscf} * 7.6 \text{ lb/MMscf}^1 = 1.69\text{E-}02 \text{ lb/hr}$
 $1.69\text{E-}02 \text{ lb/hr} * 8,760 \text{ hr/yr} \div 2000 \text{ lb/ton} = 7.40\text{E-}02 \text{ T/yr}$

$PM_{10} = 2.269 \text{ MMBtu/hr} * 1 \text{ MMBtu}/1,020 \text{ MMscf} * 7.6 \text{ lb/MMscf} = 1.69\text{E-}02 \text{ lb/hr}$
 $1.69\text{E-}02 \text{ lb/hr} * 8,760 \text{ hr/yr} \div 2000 \text{ lb/ton} = 7.40\text{E-}02 \text{ T/yr}$

$CO = 2.269 \text{ MMBtu/hr} * 1 \text{ MMBtu}/1,020 \text{ MMscf} * 84 \text{ lb/MMscf} = 0.187 \text{ lb/hr}$
 $0.187 \text{ lb/hr} * 8,760 \text{ hr/yr} \div 2000 \text{ lb/ton} = 0.818 \text{ T/yr}$

$NO_x = 2.269 \text{ MMBtu/hr} * 1 \text{ MMBtu}/1,020 \text{ MMscf} * 100 \text{ lb/MMscf} = 0.22 \text{ lb/hr}$
 $0.22 \text{ lb/hr} * 8,760 \text{ hr/yr} \div 2000 \text{ lb/ton} = 0.974 \text{ T/yr}$

$SO_2 = 2.269 \text{ MMBtu/hr} * 1 \text{ MMBtu}/1,020 \text{ MMscf} * 0.6 \text{ lb/MMscf} = 1.33\text{E-}03 \text{ lb/hr}$
 $1.33\text{E-}03 \text{ lb/hr} * 8,760 \text{ hr/yr} \div 2000 \text{ lb/ton} = 5.85\text{E-}03 \text{ T/yr}$

$VOC = 2.269 \text{ MMBtu/hr} * 1 \text{ MMBtu}/1,020 \text{ MMscf} * 5.5 \text{ lb/MMscf} = 1.22\text{E-}02 \text{ lb/hr}$
 $1.22\text{E-}02 \text{ lb/hr} * 8,760 \text{ hr/yr} \div 2000 \text{ lb/ton} = 5.36\text{E-}02 \text{ T/yr}$

$Pb = 2.269 \text{ MMBtu/hr} * 1 \text{ MMBtu}/1,020 \text{ MMscf} * 0.0005 \text{ lb/MMscf} = 1.11\text{E-}06 \text{ lb/hr}$
 $1.11\text{E-}06 \text{ lb/hr} * 8,760 \text{ hr/yr} \div 2000 \text{ lb/ton} = 4.87\text{E-}06 \text{ T/yr}$

Welding Emissions

Fugitive PM Emissions – assuming 3,000 lb wire/yr
Emission factor for E70S rod – 5.2 lb fume/1,000 lb wire

$\text{lb fume/yr} = 3,000 \text{ lb wire/yr} * 5.2 \text{ lb fume}/1,000 \text{ lb wire} = 15.6 \text{ lb fume/yr}$
 $15.6 \text{ lb fume/yr} \div 2000 \text{ lb/ton} = 0.0078 \text{ T fume/yr}$

¹ Note that the PM_{2.5} factor is from the EPA database – Webfire. SCC 10200602

Paint Booth Emissions

Solids (PM₁₀)

Maximum daily gallons - 18.8 gal/day

Paint Density – 9.35 lb/gal

Transfer Efficiency – 65%

Control Efficiency – 99.4%

Assumed 100% solids in calculation

$18.8 \text{ gal/day} \div 24 \text{ hr/day} * 9.35 \text{ lb/gal} = 7.3 \text{ lb/hr}$ 24-hour average

$7.3 \text{ lb/hr} * (1-65%) * (1-99.4%) = \mathbf{0.015 \text{ lb/hr}}$

$18.8 \text{ gal/day} * 365 \text{ day/yr} * 9.35 \text{ lb/gal} * (1-65%) * (1-99.4%) \div 2000 \text{ lb/ton} = \mathbf{0.067 \text{ T/yr}}$

VOC

Assuming 22 hours of operation (produces a worse-case than 24 hour average)

$7.3 \text{ lb/hr} * (24/22) = 7.99 \text{ lb/hr} * 10\% \text{ VOC content} = \mathbf{0.80 \text{ lb/hr}}$

$18.8 \text{ gal/day} * 365 \text{ day/yr} * 9.98^2 \text{ lb/gal} * 10\% \div 2000 \text{ lb/ton} = \mathbf{3.42 \text{ T/yr}}$

Total Criteria Pollutant Emissions

$\text{PM}_{2.5} = 1.69\text{E-}02 \text{ lb/hr}, 7.40\text{E-}02 \text{ T/yr}$

Modeling Threshold = 24hr: $5.4\text{E-}02 \text{ lb/hr}$ and Annual: 0.35 T/yr ∴ modeling not required

$\text{PM}_{10} = 1.69\text{E-}02 \text{ lb/hr} + 0.015 \text{ lb/hr} = 0.0319 \text{ lb/hr}, 7.40\text{E-}02 \text{ T/yr} + 0.067 \text{ T/yr} + 0.0078 \text{ T fume/yr} = 0.149 \text{ T/yr}$

Modeling Threshold = 24hr: 0.22 lb/hr ∴ modeling not required

$\text{CO} = 0.187 \text{ lb/hr}, 0.818 \text{ T/yr}$

Modeling Threshold = 1hr: 15 lb/hr ∴ modeling not required

$\text{NO}_x = 0.22 \text{ lb/hr}, 0.974 \text{ T/yr}$

Modeling Threshold = 1hr: 0.21 lb/hr , Annual: 1.2 T/yr ∴ modeling not required per evaluation by DEQ Modeling Coordinator, Kevin Schilling. See email correspondence below.

$\text{SO}_2 = 1.33\text{E-}03 \text{ lb/hr}, 5.85\text{E-}03 \text{ T/yr}$

Modeling Threshold = 1hr: 0.21 lb/hr , 24hr: 0.22 lb/hr , Annual: 1.2 T/yr ∴ modeling not required

$\text{VOC} = 1.22\text{E-}02 \text{ lb/hr} + 0.80 \text{ lb/hr} = 0.81 \text{ lb/hr}, 5.36\text{E-}02 \text{ T/yr} + 3.42 \text{ T/yr} = 3.47 \text{ T/yr}$

² The 9.98 lb/gal contains both VOC HAP (9.35 lb/gal) and VOC Non-HAP (0.63 lb/gal).

HAPs/TAPs Emissions

All natural gas emissions assume that the heating units are operating continuously. All emission factors are based on AP-42 Section 1-4. A few metals are also added from the welding operations. These include chromium, cobalt, manganese and lead; all of which are in trace amounts. All emission factors are based on AP-42 Section 12-19 for an E70S welding rod. The following are sample calculations. All others can be seen in the attached spreadsheets.

Formaldehyde = Combined max rating ÷ btu/scf conversion for NG * AP-42 EF

Formaldehyde = 2.269 MMBtu/hr ÷ 1,020 MMBtu/MMscf * 7.50 E-02 lb/MMscf = 1.67E-04 lb/hr

Screen Emission Level = 5.10E-04, modeling not required

Cobalt = 2.269 MMBtu/hr ÷ 1,020 MMBtu/MMscf * 8.40 E-05 lb/MMscf = 1.87E-07 lb/hr + 0.01 lb/10,000 lb wire * 15 lb wire/day ÷ 24 hr/day = 6.25E-07 lb/hr

Total Cobalt = 1.87E-07 + 6.25E-07 = 8.12E-07 lb/hr

Screen Emission Level = 0.0033 lb/hr, modeling not required

Dexter Chassis Plant 57 Emission Calculations - Permit Request

Operational Data

a	Max Gallons of Paint Consumed (gal/day)	18.8
b	Max Gallons of Paint Consumed (a x 365)	6,862
c	Hours per day	24
d	Paint sprayed (24 hr Average) (gal/hr)	0.78
e	Paint density (from MSDS) (lbs/gal)	9.35
f	Paint sprayed (24 Hr Average) (lbs/hr)	7.3
g	Paint sprayed (max based on 22 hrs spray time) (lbs/hr)	7.99

Emission Calculations - Solids

h	Maximum possible solids (% by wt) (MSDS states 41.5 %)	100.0
i	Max possible solids content (lbs/gal)	9.35
j	Paint solids transfer efficiency (%)	65%
k	Percent of solids reaching filter (1- j) (%)	35%
l	Paint filter efficiency (%)	0.994
m	Max possible PM emitted (lbs/hr 24 Hr-Avr)	0.015

Emission Calculations - Solid TAPs

	Solid TAP/HAP Content (% by wt) (carbon black 1333-86-4)	1.9
	Solid TAP/HAP Content (lbs/gal) (carbon black 1333-86-4)	0.18
	Paint solids transfer efficiency (%)	65%
	Percent of solids reaching filter (1- q) (%)	35%
	Paint filter efficiency (%)	99.4%

Emission Calculations - Solid TAPs (From Welding)

Chromium (AP-42 0.01lb/10,000 lbs wire) (15 lbs wire/day max)
Chromium IV (AP-42 No Data)
Cobalt (AP-42 <0.01lb/10,000 lbs wire) (15 lbs wire/day max)
Manganese (AP-42 3.18 lb/10,000 lbs wire) (15 lbs wire/day max)
Nickel (AP-42 0.01lb/10,000 lbs wire) (15 lbs wire/day max)
Lead (AP-42 No Data)

Modeling Criteria		
Before Controls (lbs/hr)	After Controls (lbs/hr)	Emissions Screening Level (lbs/hr)

0.05		
	0.0003	0.23

0.000001	6.25E-07	0.033 <i>No Value</i>
0.000001	6.25E-07	0.0033
0.000199	1.99E-04	0.067
0.000001	6.25E-07	0.000027 <i>No Value</i>

Emission Calculations - VOC TAPs

VOC TAP/HAP Content (% by wt) (EGBG 111-76-2)	10.0
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0.80	0.80	8.0
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Emission Calculations - Fugitive Weld Fumes

From AP-42: 3,000 lbs weld wire/yr x 5.2 lbs fume/1,000 pounds wire = pounds fume/year	15.6
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NATURAL GAS COMBUSTION, AP-42 SECTION 1.4 (7/98)

Enter 0 in the hr/day and hr/yr cells if there is no natural gas boiler

Operating Assumptions: 2.269 MMBtu/hr / 1,020 MMBtu/MMscf = 2.22E-03 MMscf/hr Fuel Use: 0.053 MMscf/day
 24 hr/day 19.487 MMscf/year
 8,760 hr/yr

Criteria Air Pollutants	Emission Factor	Emissions		CBP + Boiler Emissions	Modeling Threshold	Modeling Required?	Modeling Threshold	Modeling Required?
		lb/MMscf	lb/hr					
NO2	100	2.22E-01	9.74E-01	9.74E-01	1 T/yr	No	7 T/yr	No
CO	84	1.87E-01	8.18E-01	8.18E-01	14 lb/hr	No	70 lb/hr	No
PM10	7.6	1.69E-02	7.40E-02	3.91E-01	0.2 lb/hr	No	0.9 lb/hr	No
PM2.5	7.6	1.69E-02	7.40E-02	1.87E-01	1 T/yr	No	7 T/yr	No
		1.69E-02	7.40E-02					
SOx	0.6	1.33E-03	5.85E-03	5.85E-03	0.2 lb/hr	No	0.9 lb/hr	No
		1.33E-03	5.85E-03		1 T/yr	No	7 T/yr	No
VOC	5.5	1.22E-02	5.36E-02	5.36E-02	40 T/yr	No		
Lead	0.0005	1.11E-06	4.87E-06	1.09E-02	0.6 T/yr	No		
Lead, continued			5.37E-03	lb/quarter	10 lb/mo	No		
TOTAL			1.93E+00	T/yr				

Note: 100 lb/mo Pb in guidance reduced by factor of 10 based on latest Pb NAAQS (reduced in 2008 from 1.5 ug/m3 to 0.15 ug/m3)

Hazardous Air Pollutants (HAPs) and Toxic Air Pollutants (TAPs)				EL (lb/hr)	Exceeds EL/Modeling Required?
	lb/MMscf	lb/hr	T/yr		
PAH HAPs					
2-Methylnaphthalene	2.40E-05	5.34E-08	5.34E-08	9.10E-05	No
3-Methylchloranthrene	1.80E-06	4.00E-09	4.00E-09	2.50E-06	No
7,12-Dimethylbenz(a)anthracene	1.60E-05	3.56E-08	1.56E-07		
Acenaphthene	1.80E-06	4.00E-09	4.00E-09	9.10E-05	No
Acenaphthylene	1.80E-06	4.00E-09	4.00E-09	9.10E-05	No
Anthracene	2.40E-06	5.34E-09	5.34E-09	9.10E-05	No
Benzo(a)anthracene	1.80E-06	4.00E-09	4.00E-09	9.10E-05	See POM
Benzo(a)pyrene	1.20E-06	2.67E-09	2.67E-09	2.00E-06	See POM
Benzo(b)fluoranthene	1.80E-06	4.00E-09	4.00E-09		See POM
Benzo(g,h,i)perylene	1.20E-06	2.67E-09	2.67E-09	9.10E-05	No
Benzo(k)fluoranthene	1.80E-06	4.00E-09	4.00E-09		See POM
Chrysene	1.80E-06	4.00E-09	4.00E-09		See POM
Dibenzo(a,h)anthracene	1.20E-06	2.67E-09	2.67E-09		See POM
Dichlorobenzene	1.20E-03	2.67E-06	2.67E-06	9.10E-05	No
Fluoranthene	3.00E-06	6.67E-09	6.67E-09	9.10E-05	No
Fluorene	2.80E-06	6.23E-09	6.23E-09	9.10E-05	No
Indeno(1,2,3-cd)pyrene	1.80E-06	4.00E-09	4.00E-09		See POM
Naphthalene	6.10E-04	4.95E-04	2.17E-03	3.33	No
Naphthalene	6.10E-04	1.36E-06	1.36E-06	9.10E-05	No
Phenanthrene	1.70E-05	3.78E-08	3.78E-08	9.10E-05	No
Pyrene	5.00E-06	1.11E-08	1.11E-08	9.10E-05	No
Polycyclic Organic Matter (POM) 7-PAH Group		2.54E-08	2.54E-08	2.00E-06	No
Non-PAH HAPs					
Benzene	2.10E-03	4.67E-06	4.67E-06	8.00E-04	No
Formaldehyde	7.50E-02	1.67E-04	1.67E-04	5.10E-04	No
Hexane	1.80E+00	4.00E-03	1.75E-02	12	No
Toluene	3.40E-03	7.56E-06	3.31E-05	25	No
Non-HAP Organic Compounds					
Butane	2.10E+00	4.67E-03	2.05E-02		
Ethane	3.10E+00	6.90E-03	3.02E-02		
Pentane	2.60E+00	5.78E-03	2.53E-02	118	No
Propane	1.60E+00	3.56E-03	1.56E-02		
Metals (HAPs)					
Arsenic	2.00E-04	4.45E-07	4.45E-07	1.50E-06	No
Barium	4.40E-03	9.79E-06	4.29E-05	0.033	No
Beryllium	1.20E-05	2.67E-08	2.67E-08	2.80E-05	No
Cadmium	1.10E-03	2.45E-06	2.45E-06	3.70E-06	No
Chromium	1.40E-03	3.11E-06	1.36E-05	0.033	No
Cobalt	8.40E-05	1.87E-07	8.18E-07	0.0033	No
Copper	8.50E-04	1.89E-06	8.28E-06	0.013	No
Manganese	3.80E-04	8.45E-07	3.70E-06	0.067	No
Mercury	2.60E-04	5.78E-07	2.53E-06	0.003	No
Molybdenum	1.10E-03	2.45E-06	1.07E-05	0.333	No
Nickel	2.10E-03	4.67E-06	4.67E-06	2.70E-05	No
Selenium	2.40E-05	5.34E-08	2.34E-07	0.013	No
Vanadium	2.30E-03	5.12E-06	2.24E-05	0.003	No
Zinc	2.90E-02	6.45E-05	2.83E-04	0.667	No

NOTE: TAPs lb/hr emissions are 24-hour averages unless shown in bold. Bold emissions are annual averages for carcinogens.

Case-by-Case Modeling Thresholds may be used ONLY with DEQ Approval

TOTAL CBP + BOILER EMISSIONS (POINT SOURCES, T/yr) 2.44

APPENDIX B – FACILITY DRAFT COMMENTS

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

Facility Comment #1: The Permitting History section includes a statement that an Exemption Concurrence was rescinded on September 14, 2010. Dexter Chassis is concerned that in the future it may be assumed that Dexter Chassis was somehow out of compliance which resulted in the rescinding of the exemption concurrence. In fact, following the rescinding of the concurrence calculations revealed that Dexter Chassis was still exempt by having actual and potential emissions below the limits that require permitting. Dexter Chassis is obtaining this permit voluntarily. Because of this, Dexter Chassis feels this line is immaterial and requests that this line be removed.

If IDEQ feels strongly this line is material and must remain, Dexter Chassis requests that a sentence be added stating... "Although Exemption Concurrence X-2008.0016 was rescinded, Dexter Chassis' actual and potential emissions were always below exempt levels. At no time did Dexter Chassis operate out of compliance with Idaho air permitting rules."

DEQ Response #1: The additional language stating that Dexter Chassis has not operated out of compliance was added.

Facility Comment #2: These are the emission rates that Dexter Chassis has reported as 24-Hour Average (PM10) and 22-Hour Average (VOC) numbers. The numbers are correct as averages. The facility cannot exceed these emissions as averaged throughout the day. However, the metal chassis washing and painting operation is a batch process. Dexter Chassis is concerned that there may be some combination of cycles that would result in an hour with slightly less than the hourly limit followed by an hour with slightly more than the exact hourly limit. Dexter Chassis does not request any modification to the annual emission limits. The facility is not capable of exceeding these annual limits. Dexter Chassis requests one of the following options:

- a.) Add a note below the table indicating that the hourly emissions are calculated as a 24- Hour average, or
- b.) Increase the hourly limits to 0.02 lb/hr for PM10 and 1.0 lb/hr for VOC.

DEQ Response #2: A footnote on Table 3 of the permit was added to identify that the hourly rates are 24-hour averages.

Facility Comment #3: Dexter Chassis requests that this be changed to "Filter System Procedure". Dexter Chassis is concerned that there could be confusion in the future that the facility once had or should have a baghouse.

DEQ Response #3: DEQ is in agreement with Dexter and any reference to "baghouse" has been removed from the permit.

Facility Comment #4: Section 13 states that "All painting shall be conducted with a HVLP spray gun with a minimum 65% transfer efficiency..."

Dexter Chassis currently uses an airless spray gun. Details on the Silver Plus RAC5 gun and tip were provided as part of the original application. Dexter Chassis requests that the wording be expanded to include all EPA encouraged technologies. Dexter Chassis requests the following wording... "All painting shall be conducted with a HVLP, electrostatic, airless or air assisted spray gun with a minimum 65% transfer efficiency..."

DEQ Response #4: The requested language changes were made to allow for more flexibility.

Facility Comment #5: Sections 20-25 state that Dexter Chassis shall comply with the requirements of 40 CFR 63, Subpart HHHHHH.

Additionally, page 13 of the Statement of Basis provides a detailed explanation of why IDEQ believes this NESHAP applies to the facility. Dexter Chassis now understands why IDEQ believes the NESHAP applies to this facility. Fortunately, Dexter Chassis has identified the subtle, but critical, process detail that has caused this misunderstanding.

Unlike other local chassis manufacturers, the Dexter Chassis facility manufacturers steel frames that are shipped to the customer where axles and wheels are added. The Dexter Chassis facility has no axles and no wheels on-site.

As the Statement of Basis explains, the HHHHHH NESHP applies to "any device that may be drawn and/or driven...". However, the finished product shipped from the Dexter Chassis facility may not be drawn or driven.

Dexter Chassis is surface coating mobile equipment parts or subassemblies at a parts manufacturing plant. The 6H NESHP rule specifically excludes "...surface coating of motor vehicle or mobile equipment parts or subassemblies at a vehicle assembly plant or parts manufacturing plant."

DEQ Response #5: It appears that Dexter has presented a valid argument and they very well may not be subject to the subpart. However, Idaho DEQ is not the final arbiter of the rule; rather the EPA has delegation.

As stated in the Statement of Basis, Dexter has two options to help determine final applicability. First, they may present their argument identifying why the facility is not subject. Secondly, because the paint used onsite doesn't contain any target HAPs, an exemption request is a virtual guarantee.

The permit contains language with such a caveat. Note that this type of language has been used by Idaho DEQ (including trailer facilities) for almost a year and to maintain consistency between our permits it has been included here as well. Should an exemption be obtained, those requirements become irrelevant. In DEQ's opinion this is the safest approach because all the bases are covered on both Dexter and DEQ's end. Obtaining written documentation from the EPA would be sufficient to nullify any of the HHHHHH conditions. Removal of the conditions in the event that the facility really is subject to the HHHHHH would be much more problematic for Dexter as opposed to requesting a final decision by the EPA up front. Contact information to EPA Region 10 has been supplied to Dexter.

APPENDIX C – 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: Dexter Chassis Group
Address: 427 Hankins Road South
City: Twin Falls
State: Idaho
Zip Code: 83301
Facility Contact: George Tierce
Title: Plant Manager
AIRS No.: 083-00100

- 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	0.97	0	1.0
SO ₂	0.01	0	0.0
CO	0.82	0	0.8
PM10	0.18	0	0.2
VOC	3.47	0	3.5
TAPS/HAPS	0.02	0	0.0
Total:	5.5	0	5.5
Fee Due	\$ 2,500.00		

Comments: There is a total increase of emissions from this project of 5.5 T/yr. Therefore, a processing of \$2500 is in accordance with IDAPA 58.01.01.225