Statement of Basis

Permit to Construct P-2009.0097
Project No. 60898

MotivePower, Inc.
Boise, Idaho

Facility ID No. 001-00107

Final EC

September 22, 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.

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

acfm	actual cubic feet per minute
AQCR	Air Quality Control Region
ASTM	American Society of Testing and Materials
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EL	Screening Emissions Level
EPA	Environmental Protection Agency
gal/day	gallons per day
gal/mo	gallons per month
gal/yr	gallons per any consecutive 12-month period
gr/dscf	grains per dry standard cubic feet
HAP	hazardous air pollutants
HP	horse power
HVLP	high volume, low pressure
ICE	internal combustion engines
km	kilometer
lb/gal	pounds per gallon
lb/day	pounds per day
lb/mo	pounds per month
IDAPA	A numbering designation for all administrative rules in Idaho promulgated under the Idaho Administrative Procedures Act
MMBtu/hr	million British thermal units per hour
MM ft3	million cubic feet
MPI	MotivePower, Inc., a Wabtec Company
MSDS	material safety data sheets
NOx	oxides of nitrogen
O&M	Operating and Maintenance
PM	particulate matter
PM10	particulate matter with an aerodynamic diameter of 10 micrometers or less
PTC	permit to construct
SBS	Spray Booth Systems
scfm	standard cubic feet per minute
SIC	Standard Industrial Classification

SI	spark ignition
SO2	sulfur dioxide
SWBP	Strip-Wash-Blast-Painting
TAP	toxic air pollutants
TEA	Truck and Engine Annex
T/day	tons per day
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound
wt %	percent by weight

FACILITY INFORMATION

Description

The MotivePower facility is comprised of two individual facilities that are located approximately one mile apart and operate in Boise, Idaho. The MPAS facility is located at 4600 Apple Street and the TEA is located at 2100 Braniff Street. However, both are considered a single facility with respect to air permitting and dispersion modeling.

The MPAS facility primarily manufactures and remanufactures diesel electric locomotives and locomotive components. The facility also provides overhaul and maintenance work on locomotives. The maintenance and remanufacturing process generally involves: cleaning locomotives and component parts (blasting and steam cleaning); partial or total disassembly by mechanical means or air arc and torch cutting methods; electrical/mechanical testing and qualification of component pat1s for reuse; rebuilding or replacement of the components that fail testing and qualification procedures; locomotive re-assembly by mechanical and welding methods; painting and final testing and qualification for shipment.

The TEA is a business unit of MotivePower that remanufactures locomotive trucks (wheel assembly, locomotive support, and propulsion unit) and locomotive diesel engines for MPAS and for other customers outside of MotivePower remanufacturing contracts. The remanufacturing process for the trucks and diesel engines follows the general overall procedure as for a locomotive. The trucks and engines are brought to the shop, disassembled and cleaned; the component parts arc mechanically inspected and re-qualified for reuse; components failing inspection are rebuilt or replaced; and finally, the trucks and engines are reassembled, tested, painted, and shipped to the customer or the MPAS Facility.

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).

November 11, 2010	PTC No. P-2009.0097, Project 60552, Includes Ethylene Glycol Monobutyl Ether Acetate into the permitted TAPs and HAPs list. Modify old Permit Condition 2.27 to allow for clarity and flexibility. New paint products that include permitted TAPs that exceed the lb/hr limit are allowed but at less than 46 gal/day. It is MPI's responsibility to determine the allowable amount and maintain records demonstrating compliance. If a new paint product with an un-permitted is added, MPI must demonstrate that the facility-wide emissions of each TAP are below the EL. Otherwise a permit revision is required. Also, updates to MACT HHHHHH to include the exemption option as allowed by the regulation. (A, will be "S" when this permit is issued.)
February 26, 2010	PTC No. P-2009.0097, Increased the facility-wide paint throughput limit from 19,500 gal/yr to 26,650. The daily paint throughput of shops North, South and SWBP were increased. NSPS subpart JJJJ and MACT subpart HHHHHH were added to the PTC. An old expired PTC, P-060030 was incorporated as Section 8 into new PTC. (S).
December 18, 2006	T2-060031, PTC/T2, for becoming synthetic minor source to avoid Title V program/Tier I, permit status (S)
November 28, 2006	P-060030, PTC, for the construction of two new spray paint booths Nos. 8 and 9 and two natural gas-fired space heaters located at the East Paint Shop Building, permit status (S)
December 10, 2002	Tier I No. 001-00107, initial Tier I, permit status (Terminated on January 31, 2007)

November 5, 2002	T2-010039, PTC/T2, for fulfilling Compliance Plan of Tier I that addressed the facility's installation of equipment without PTCs, permit status (S)
July 17, 2001	P-010003, a PTC modification to relocate the equipment, permit status (S)
June 23, 2000	P-000045, PTC, for constructing the facility that conducts engine emissions reduction test, permit status (S)
August 17, 1998	PTC No. 001-00107, for constructing Strip-Wash-Blast-Paint building, permit status (S)
October 18, 1994	PTC No. 001-00107, for constructing North Large Paint Shop Spray Paint Booths, permit status (S)

Application Scope

This PTC is a revision of an existing PTC.

The applicant has proposed to:

- Update the calculation of solids content of all paints. The limit remains 8.16 lb/gal, but rather than being an exclusive maximum that can never be exceeded it will become a weighted average.
- Also, the bead-blasting enclosure currently located at the component shop will be relocated to the SWBP Shop. It will continue to use the particulate control system used at the component shop, but will also be routed to the baghouse system of the SWBP Shop.

Application Chronology

July 14, 2011	DEQ received an application and an application fee.
July 25 – August 9, 2011	DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.
August 10, 2011	DEQ determined that the application was complete.
August 18, 2011	DEQ made available the draft permit and statement of basis for peer and regional office review.
August 25, 2011	DEQ made available the draft permit and statement of basis for applicant review.
September 14, 2011	DEQ received the permit processing fee.
September 22, 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
Section 3 South Large Paint Shop - Paint Booth No. 1 (SLPS1)	Name: Booth 1 Manufacturer: ND Model: ND Type: ND Rated capacity: NA Manufacture Date: 1988 Name: Spray Gun 1 Manufacturer: Devilbliss Model: JGA-504-765 Type: Conventional Manufacture Date: 1988 Rated capacity: 48.75 gal/hr Transfer efficience: 40% Name: Spray Gun 2 Manufacturer: Devilbliss Model: EXL-520P-11 Type: HVLP Manufacture Date: 1988 Rated capacity: 45 gal/hr Transfer efficience: 40% 1 to 5 spray guns can be used simultaneously	The booth has two stacks Name: Fabric Filters (CSLPS1) Manufacturer: ND Model: ND Manufacture Date: 1988 PM/PM_{10} efficiency: 99.58% Maximum pressure drop: 1.0 inch water column across each spray-paint-booth filter system	Exit height: 31 ft Exit diameter: 3 ft each Exit flow rate: 17,500 acfm for each duct/vent Exit temperature: 80 °F
Section 4 North Large Paint Shop - Paint Booth No. 3 (NLPS3)	Name: Booth 3 Manufacturer: ND Model: ND Type: ND Rated capacity: NA Manufacture Date: 1994 Name: Spray Gun type 1 Manufacturer: Devilbliss Model: JGA-504-765 Type: Conventional Manufacture Date: ND Rated capacity: 48.75 gal/hr Transfer efficience: 40% Name: Spray Gun type 2 Manufacturer: Devilbliss Model: EXL-520P-11 Type: HVLP Manufacture Date: ND Rated capacity: 45 gal/hr Transfer efficience: 40% 1 to 5 spray guns can be used simultaneously in each booth	The booth has two stacks. Each stack contains: Name: 72 Filters: each 20"x20"x20" deep (CNLPS3 – Fabric Filters) Manufacturer: Columbus Industries Inc Model: Supra II Collectors Manufacture Date: 1994 PM/PM_{10} efficiency: 99.58%	Exit height: 39 ft Exit diameter: 3 ft each Exit flow rate: 48,400 acfm total of two stacks Exit temperature: 80 °F

Section 4 North Large Paint Shop - Paint Booth No. 4 (NLPS4)	Name: Booth 4 Manufacturer: ND Model: ND Type: ND Rated capacity: NA Manufacture Date: 1994 Name: Spray Gun type 1 Manufacturer: Devilbliss Model: JGA-504-765 Type: Conventional Manufacture Date: ND Rated capacity: 48.75 gal/hr Transfer efficience: 40% Name: Spray Gun type 2 Manufacturer: Devilbliss Model: EXL-520P-11 Type: HVLP Manufacture Date: ND Rated capacity: 45 gal/hr Transfer efficience: 40% 1 to 5 spray guns can be used simultaneously in each booth	The booth has two stacks. Each stack contains: Name: Fabric Filters, 72 Filters: each 20"x20"x20" deep(CNLPS4 – Fabric Filters) Manufacturer: Columbus Industries Inc Model: Supra II Collectors Manufacture Date: 1994 PM/PM_{10} efficiency: 99.58%	Exit height: 39 ft Exit diameter: 3 ft each Exit flow rate: 48,400 acfm total of two stacks Exit temperature: 80 °F
Section 5 Strip-Wash-Blast-Paint Building - Paint Booth No. 5 (SWBP5)	Name: Booth 5 Manufacturer: ND Model: ND Type: ND Rated capacity: NA Manufacture Date: 1998 Name: Spray Gun type 1 Manufacturer: Devilbliss Model: JGA-504-765 Type: Conventional Manufacture Date: ND Rated capacity: 48.75 gal/hr Transfer efficience: 40% Name: Spray Gun type 2 Manufacturer: Devilbliss Model: EXL-520P-11 Type: HVLP Manufacture Date: ND Rated capacity: 45 gal/hr Transfer efficience: 40% 1 to 5 spray guns can be used simultaneously in each booth	The booth has one stack for blasting operation Name: a pulse-jet dust collector (CSWBP5 – Fabric Filters) Manufacturer: Hoffman Model: Torit HOFT4-64 Manufacture Date: 1998 PM/PM_{10} efficiency: 99.9% The booth has two stacks for painting operation Name: the filter system (CSWBP5 – Fabric Filters) Manufacturer: OSM Model: first stage is an OSM Ultra Media filter of 20" x 20" x 1"deep, the second stage is an OSM-100 filter of 20" x 20" x 16" 10-gauge steeel doors protect the filters during the blasting process. Pressure drop range: 0.1 – 1.0 inch of water PM/PM_{10} efficiency: 99.58%	Stack for blasting operation Exit height: 7 ft Exit diameter: 3.1 ft Exit flow rate: 28,973 acfm Exit temperature: 68 °F Stacks for painting operation Exit height: 37 ft and 35 ft Exit diameter: 3 ft each Exit flow rate: 31,380 acfm each Exit temperature: 68 °F

Section 6 Small Paint Shop – Paint Booth No. 6 (SMPS6)	Name: Booth 6 Manufacturer: ND Model: ND Type: ND Rated capacity: NA Manufacture Date: 1968 Name: Spray Gun type 1 Manufacturer: Devilbliss Model: JGA-504-765 Type: Conventional Manufacture Date: 1968 Rated capacity: 48.75 gal/hr Transfer efficience: 40% Name: Spray Gun type 2 Manufacturer: Devilbliss Model: EXL-520P-11 Type: HVLP Manufacture Date: ND Rated capacity: 45 gal/hr Transfer efficience: 40% 1 to 5 spray guns can be used simultaneously in each booth	The booth has two stacks Name: A bank of filters (CSMPS6-Fabric Filters) Manufacturer: ND Model: ND Manufacture Date: 1968 PM/PM_{10} efficiency: 99.58%	Exit height: 23 ft Exit diameter: 4 ft Exit flow rate: 17,500 acfm each stack Exit temperature: 68 °F
Section 7 Spray Paint Booth – Paint Booth No. 7 (SPB7)	Name: TEA Paint Booth Manufacturer: Protectaire Model: 530 DTT Manufacture Date: 1990 Name: Spray Gun type 1 Manufacturer: Devilbliss Model: JGA-504-765 Type: Conventional Manufacture Date: 1988 Rated capacity: 48.75 gal/hr Transfer efficience: 40% Name: Spray Gun type 2 Manufacturer: Devilbliss Model: EXL-520P-11 Type: HVLP Manufacture Date: 1988 Rated capacity: 45 gal/hr Transfer efficience: 40%	The booth has one stack Name: a bank of filters (CSPB7) Manufacturer: ND Model: ND Manufacture Date: 1990 PM/PM_{10} efficiency: 99.58%	Exit height: 35 ft Exit diameter: 3.5 ft Exit flow rate: 23,400 acfm Exit temperature: 68 °F
Section 8 East Paint Shop Building – Paint Booth No. 8 (EPS8)	Name: Paint Booth No. 8 Manufacturer: Spray Booth Systems (SBS) Model: SBS 2346-889 Dimension: 20 ft wide x 30 ft high x 80 ft long Manufacture Date: pending Max. capacity: no data (ND)	The booth has two stacks. Name: two banks of filters (CESP8) Manufacturer: SBS Model: PDT-8018-205 Number of bags: 72 filters, each filter 20" x 20" x 2" deep Manufacture Date: pending PM/PM_{10} efficiency: 99.58%	Exit height: 36 ft Exit diameter: 3 ft each Exit flow rate: 42,000 acfm total Exit temperature: 80 °F

Section 8 East Paint Shop Building – Paint Booth No. 9 (EPS9)	Name: Paint Booth No.9 Manufacturer: Spray Booth Systems (SBS) Model: SBS 2346-889 Dimension: 20 ft wide x 30 ft high x 80 ft long Manufacture Date: pending Max. capacity: ND	The booth has two stacks. Name: two banks of filters (CEPS9) Manufacturer: SBS Model: PDT-8018-205 Number of bags: 72 filters, each filter 20" x 20" x 2" deep Manufacture Date: pending PM/PM_{10} efficiency: 99.58%	Exit height: 36 ft Exit diameter: 3 ft each Exit flow rate: 42,000 acfm total Exit temperature: 80 °F
Section 9 SWBP Shop Bead Blast Enclosure	Name: SWBP Shop Bead Blast Enclosure Manufacturer: cycloblast Model: 4836-F Manufacture Date: 1984 Max. capacity: 115 lb/hr media throughput Media type: fine-grained, rounded glass beads (Potter Quality Ballotini Impact Beads, Type VI, Class 2) Nozzle type: 1/8-inch diameter	Name: bag filter Manufacturer: ND Model: ND Manufacture Date: 1984 PM/PM_{10} efficiency: 98% Then routed to a pulse-jet dust collector associated w/ SWBP Shop	Exit height: exhausts horizontally through the wall at 8 ft elevation w/ rain cap Exit diameter: 6 inch Exit flow rate: 775 acfm Exit temperature: 68 °F
Section 9 Locomotive Shop Bead Blast Enclosure (BBLS)	Name: Locomotive Shop Bead Blast Enclosure Manufacturer: cycloblast Model: 4836-DC100 Manufacture Date: 1984 Max. capacity: 115 lb/hr media throughput Media type: fine-grained, rounded glass beads (Potter Quality Ballotini Impact Beads, Type VI, Class 2) Nozzle type: 1/8-inch diameter	Name: bag filter (CBBLS) Manufacturer: ND Model: ND Manufacture Date: 1984 PM/PM_{10} efficiency: 98%	Exit height: exhausts horizontally through the wall at 7ft elevation w /rain cap Exit diameter: 6 inch Exit flow rate: 775 acfm Exit temperature: 68 °F
Section 9 Nutshell Blasting Unit	Name: Nutshell Blasting Unit Manufacturer: Trinco (??) Model: NA Manufacture Date: 1997 Max. capacity: 63 lb/hr media throughput Media type: Trinco abrasive nutshell Nozzle type: 3/8 inch at 80 pounds per square inch (psi)	Name: baghouse Manufacturer: ND Model: ND Manufacture Date: 1997 PM/PM_{10} efficiency: 98%	The dust filtration system stack is exhausted inside the building Exit height: 5 ft Exit diameter: 0.33 ft Exit flow rate: 775 scfm Exit temperature: 70 °F

Section 10 Bead Blast Enclosure – TEA UNIT 1 (BBTEA1)	Name: Bead Blast Enclosure –TEA UNIT 1 Manufacturer: cycloblast Model: 4836-DC100 Manufacture Date: 1990 Max. capacity: 115 lb/hr media throughput Media type: fine-grained, rounded glass beads (Potter Quality Ballotini Impact Beads, Type VI, Class 2) Nozzle type: 1/8-inch diameter	Name: bag filter (CBBTEA1) Manufacturer: ND Model: ND Manufacture Date: 1996 PM/PM_{10} efficiency: 98%	Exit height: ND ft Exit diameter: ND ft Exit flow rate: 775 acfm Exit temperature: 68 °F
Section 10 Bead Blast Enclosure – TEA UNIT 2 (BBTEA2)	Name: Bead Blast Enclosure –TEA UNIT 2 Manufacturer: Pangorn Model: Pangorn-S3 Manufacture Date: 1996 Max. capacity: 115 lb/hr media throughput Media type: fine-grained, rounded glass beads (Potter Quality Ballotini Impact Beads, Type VI, Class 2) Nozzle type: 1/8-inch diameter	Name: bag filter (CBBTEA2) Manufacturer: ND Model: ND Manufacture Date: 1996 PM/PM_{10} efficiency: 98%	Exit height: ND ft Exit diameter: ND ft Exit flow rate: 1500 acfm Exit temperature: 68 °F
Section 11 Shot-Blast booth (SBB)	Name: Shot-Blast booth Manufacturer: Hoffman Model: Abrasive Steel Shot Blaster Manufacture Date: 1994 Max. capacity: 48,000 lbs/hr of steel shot	Name: Cartridge Dust Collector (CSBB) Manufacturer: Torit Model: HDFT2-16 Type: Downflow Manufacture Date: 1994 PM/PM_{10} efficiency: 99%	Exit height: 15 ft Exit diameter: 1.9 ft Exit flow rate: 8,500 acfm Exit temperature: 68 °F
Section 12 Compressor Test Stand Engine (CTSE)	Name: Compressor Test Stand Engine Manufacturer: Cummins Model: ND Burner Model: ND Manufacture Date: 1965 Max. capacity: 4-cylinder 98 horsepower Fuel: diesel-fired Max. fuel consumption: 5.7 gal/hr under a load of 1800 rpm	none	Exit height: 30 ft Exit diameter: 0.3 ft Exit flow rate: ND acfm Exit temperature: 220 °F
Section 13 Locomotive Engine Test Cell (LETC)	Name: Locomotive Engine Test Cell Manufacturer: ND Model: ND Burner Model: ND Manufacture Date: 1990 Fuel: diesel-fired Max. fuel consumption: 175 gal/hr	none	Exit height: 20 ft Exit diameter: 2.0 ft Exit flow rate: ND acfm Exit temperature: 615 °F

Section 14 Seller Boilers No. 1 (B1) (not use simultaneously with No.2)	Name: Seller Boiler No. 1 Manufacturer: Seller Model: 105-E Burner Model: ND Manufacture Date: Pre-1995 Max. capacity: 6.7 MMBtu/hr or 1,000 lb steam/hr Full load consumption rate : 6,568.6 cf/hr Fuel: natural gas	none	Exit height: 16 ft Exit diameter: 1.5 ft Exit flow rate: ND acfm Exit temperature: 400 °F
Section 14 Seller Boilers No. 2 (B2) (not use simultaneously with No.1)	Name: Seller Boiler No. 2 Manufacturer: Seller Model: 105-E Burner Model: ND Manufacture Date: Pre-1995 Max. capacity: 6.7 MMBtu/hr or 1,000 lb steam/hr Full load consumption rate : 6,568.6 cf/hr Fuel: natural gas	none	Exit height: 16 ft Exit diameter: 1.5 ft Exit flow rate: ND acfm Exit temperature: 400 °F

Emissions Inventories

MPI has been a synthetic minor source since the PTC/T2 No. T2-060031 was issued on December 18, 2006. Without permit limits, MPI emits and has potential to emit (PTE) 100 tons or more per year of PM_{10}, NOx, and VOC, respectively and 10 tons or more per year of a single hazardous air pollutant (HAP) (i.e., Xylene.)

This permitting action did not cause an increase in criteria pollutants or toxic air pollutants. Detailed calculations of PTE can be found in MPI's September 22, 2009 submittals with DEQ's corrections, the spreadsheet titled "(with DEQ's note) PTC Calculations Revised 091809_final to IDEQ.xls" and Appendix B of the PTC P-2009.0097, issued February 26, 2010.

Uncontrolled Emissions:

This facility has uncontrolled potential to emit HAPs emissions greater than the Major Source threshold of a single toxics of 10 T/yr and a total of 25 T/yr and a controlled potential to emit HAPs emissions less than the Major Source threshold of 10 and 25 T/yr. Therefore, this facility is designated as a Synthetic Minor facility. Also, the allowable emissions exceed 80% of the Major Source Thresholds (see Table 3 Xylene and Total from the November 11, 2010 Statement of Basis). Therefore, MotivePower, Inc. is designated as a SM-80 facility.

Ambient Air Quality Impact Analyses

DEQ modeling staff has reviewed submittal dated June 27, 2011 and received by DEQ on July 1, 2011. Motive Power's proposed changes to the Component Shop Bead Blast Enclosure include the following:

- Relocation from the current location at the Component Shop to the existing Strip Wash Blast and Paint (SWBP) Building. Both locations are at the Apple Street Complex.
- Reduction in permit-allowable PM_{10} emissions from 6.64E-01 pounds per hour (lb/hr) to 6.64E-04 lb/hr.
- Reduction in $PM_{2.5}$ emissions from the current potential emission rate of 6.64E-02 lb/hr to 6.64E-05 lb/hr.
- No toxic air pollutant emission increases were requested.
- Particulate matter emission reductions for the relocated bead blast enclosure would be accomplished by routing current blast unit's exhaust through the SWBP Blasting fabric filtration emission control system. This design provides two sets of fabric filtration control arranged in series on the exhaust.
- The SWBP Blast stack provides better dispersion characteristics than the existing low-level horizontal release at the Component Shop.

The appropriate method to determine whether the requested physical changes would cause ambient impacts that exceeded the applicable significant contribution levels would be to model the current permit-allowable emissions as negative emissions using the exhaust parameters and location at the Component Shop and in the same modeling run the requested change for the potential emissions using the exhaust characteristics and location of the SWBP Blast stack would be modeled as positive emissions. Considering the reduced PM_{10} and $PM_{2.5}$ emissions rates and the improved exhaust characteristics this exercise is not anticipated to cause ambient impacts that exceed the significant contribution levels for PM_{10} and $PM_{2.5}$. DEQ did not and does not request that Motive Power submit a formal modeling analysis to support this position.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in North Ada County, which is designated as attainment or unclassifiable for $PM_{2.5}$, PM_{10}, SO_2, NO_2, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

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 modified 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 Conditions 12 and 13.

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

IDAPA 58.01.01.301 Requirement to Obtain Tier I Operating Permit

Post project facility-wide emissions from this facility do not have a potential to emit greater than 100 tons per year for all criteria pollutants 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.

PSD Classification (40 CFR 52.21)

40 CFR 52.21 Prevention of Significant Deterioration of Air Quality

The facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change at a stationary source not otherwise qualifying under paragraph 40 CFR 52.21(b)(1) as a major stationary source, that would constitute a major stationary source by itself as defined in 40 CFR 52. Therefore, in accordance with 40 CFR 52.21(a)(2), PSD requirements are not applicable to this permitting action. The facility is/is not a designated facility as defined in 40 CFR 52.21(b)(1)(i)(a), and does not have facility-wide emissions of any criteria pollutant that exceed 250 T/yr.

NSPS Applicability (40 CFR 60)

The facility is subject to the requirements of 40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

40 CFR 60, Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

§ 60.4230 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (5) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(iv) on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

The emergency engine on site has a maximum load of 75 HP and a manufacture date of September 2009. Therefore the engine is subject to subpart JJJJ.

Emission Standards for Manufacturers

§ 60.4231 What emission standards must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing such engines?

(d) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) under the voluntary manufacturer certification program described in this subpart must certify those engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers who choose to certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP, must certify those engines to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate. For stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) manufactured prior to January 1, 2011, manufacturers may choose to certify these engines to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP.

MPI has received the manufacturer's emissions certification described in subparagraph (d). MPI has chosen to demonstrate compliance in accordance with 40 CFR 60.4243(b)(1).

Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, for new nonroad SI engines in 40 CFR part 90 are provided in the following:

Title 40: Protection of Environment
PART 90—CONTROL OF EMISSIONS FROM NONROAD SPARK-IGNITION ENGINES AT OR BELOW 19 KILOWATTS
Subpart B—Emission Standards and Certification Provisions

§ 90.103 Exhaust emission standards.

(a) Exhaust emissions for new Phase 1 and Phase 2 nonroad spark ignition engines at or below 19 kilowatts (kW), shall not exceed the following levels. Throughout this part, NMHC+NO_Xstandards are applicable only to natural gas fueled engines at the option of the manufacturer, in lieu of HC+NO_Xstandards.

Table 1—Phase 1 Exhaust Emission Standards

[Grams per kilowatt-hour]

Engine displacement class	Hydrocarbons+oxides of nitrogen (HC+NO_X)	Hydrocarbons	Carbon monoxide	Oxides of nitrogen (NO_X)
II	13.4		519	

Emission Standards for Owners and Operators

§ 60.4233 What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

(d) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to this subpart for their emergency stationary SI ICE.

MPI has enclosed a copy of the certification in the previous permit application from the manufacturer showing that the SI ICE is certified to meet the emissions standards specified in 40 CFR Part 90 for small non-road engines. See permit P-2009.0097, issued February 26, 2010.

§ 60.4234 How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

MPI will maintain a copy of the certification from the manufacturer showing that the SI ICE is certified to meet the emissions standards specified in 40 CFR Part 90 for small non-road engines.

Other Requirements for Owners and Operators

§ 60.4235 What fuel requirements must I meet if I am an owner or operator of a stationary SI gasoline fired internal combustion engine subject to this subpart?

Owners and operators of stationary SI ICE subject to this subpart that use gasoline must use gasoline that meets the per gallon sulfur limit in 40 CFR 80.195.

§ 60.4236 What is the deadline for importing or installing stationary SI ICE produced in the previous model year?

For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in §60.4233 after January 1, 2011.

This section applies because MPI plans to install a gas-fired emergency generator with a maximum engine power of greater than 25 hp. MPI plans to install the emergency generator prior to Jan 1, 2011.

§ 60.4237 What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?

(c) If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

MPI's emergency engine does not meet the standards applicable to non-emergency engines as listed in Table 1 of the subpart. However, it meets the standards as specified in 40 CFR 4231(d) due to 4243(b)(1) or 4243(a)(1). Refer to the standards under 40 CFR 4231(d). The manufacturer's certification indicates that emissions of THC+NOx and CO are 8.17 g/kw-hr and 32.02 g/kw-hr, respectively.

Compliance Requirements for Owners and Operators

§ 60.4243 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

(a)(1)If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator.

(b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.
(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(d) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

The procedures to certify the emergency generator is highlighted in 40 CFR 60.4231(d). MPI is subject to 60.4243(b)(1) and will demonstrate compliance in accordance with paragraph (a)(1) by keeping records of conducted maintenance on the engine.

Notification, Reports, and Records for Owners and Operators

§ 60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.
(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.
(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(b) For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.

(1) Name and address of the owner or operator;
(2) The address of the affected source;
(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
(4) Emission control equipment; and
(5) Fuel used.

(d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed.

Paragraphs (a) 1-3 are applicable.
Paragraph (a) 4 is not applicable becuase MPI is using a certified engine.
Paragraph (b) is not applicable because the engine meets the requirements for non-emergency engines.
Paragraph (c) is not applicable because the engine is less than 500 hp.
Paragraph (d) is not applicable because the engine is not subject to performance testing.

General Provisions

§ 60.4246 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you with the exception of 60.18.

Table 3 to Subpart JJJJ of Part 60—Applicability of General Provisions to Subpart JJJJ

[As stated in §60.4246, you must comply with the following applicable General Provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4248.

§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4245.
§60.8	Performance tests	Yes	Except that §60.8 only applies to owners and operators who are subject to performance testing in subpart JJJJ.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	Yes	Requirements are specified in subpart JJJJ.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	No	
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

NESHAP Applicability (40 CFR 61)

The facility is no subject to any subparts of 40 CFR 61.

MACT Applicability (40 CFR 63)

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

§ 63.11169 ***What is the purpose of this subpart?***

In accordance with §63.11169, subpart HHHHHH establishes national emission standards for hazardous air pollutants (HAP) for area sources involved in auto body refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations.

§ 63.11170 ***Am I subject to this subpart?***

In accordance with §63.11170(a), this 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 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 coating operation is an existing source because it commenced construction prior to September 17, 2007, by installing new paint stripping or surface coating equipment, and the new surface coating equipment will be used at a source that was actively engaged in paint stripping and/or miscellaneous surface coating prior to September 17, 2007.

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

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

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

Because the facility has not proposed paint-stripping activities, the requirements of §63.11173(a) through (f) are not applicable. Because the facility has a 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 coating operation must ensure and certify that all new and existing personnel, including contract personnel, who spray apply surface coatings, as defined in §63.11180, are trained in the proper application of surface coatings as required by paragraph (e)(1) of this section. The training program must include, at a minimum, the items listed in paragraphs (f)(1) through (f)(3) of this section.

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

Compliance with these requirements is assured by PTC condition 37.

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

In accordance with §63.11174(a), Table 1 of this subpart shows which parts of the General Provisions in subpart A apply. Compliance with these requirements is assured by PTC condition 37.

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

§ 63.11175 ***What notifications must I submit?***

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

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

Compliance with these requirements is assured by PTC condition 40.

§ 63.11176 What reports must I submit?

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

Compliance with these requirements is assured by PTC condition 41.

§ 63.11177 What records must I keep?

In accordance with §63.11177, because the permittee is the owner or operator of a surface coating operation, the permittee must keep the records specified in paragraphs (a) through (d) and (g) of this section. Because the permittee has not proposed to conduct paint stripping operations, the requirements of paragraphs (e) and (f) of this section are not applicable. Compliance with these requirements is assured by PTC condition 38.

§ 63.11178 In what form and for how long must I keep my records?

In accordance with 40 CFR 63.11178(a) because the permittee is the owner or operator of an affected source, the permittee must maintain copies of the records specified in §63.11177 for a period of at least five years after the date of each record. Copies of records must be kept on site and in a printed or electronic form that is readily accessible for inspection for at least the first two years after their date, and may be kept off-site after that two year period. Compliance with these requirements is assured by PTC condition 38.

§ 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

40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

§ 63.6580 What is the purpose of subpart ZZZZ?

In accordance with § 63.6580, Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§ 63.6585 Am I subject to this subpart?

In accordance with § 63.6585, you are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions. MPI operates a stationary RICE at an area source of HAPs. An area source is

defined in 63.6585(c) as any source that is not a major source. A major source emits 10 T/yr of any single HAP or 25 T/yr of total HAPs. MPI has specific permit conditions to avoid major status.

§ 63.6590 What parts of my plant does this subpart cover?

In accordance with 63.6590(a)(2)(iii) the engine at MPI is defined as a New Stationary Engine constructed commenced on or after June 12, 2006. However, because MPI must comply with 40 CFR 60, Subpart JJJJ they are by defaulting complying with Subpart ZZZZ. In accordance with 63.6590(c) an affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part. MPI's engine meets (c)(1), a new or reconstructed stationary RICE located at an area source. The remaining requirements of the subpart are not applicable to MPI.

Permit Conditions Review

This section describes the permit conditions for this revised permit or only those permit conditions that have been added, revised, modified or deleted as a result of this permitting action.

Existing Permit Condition 29

The permittee shall only use a paint product meeting all of the following criteria:

- *The solid content of a paint product shall not exceed 8.16 lb/gal.*
- *Except for MSDS 1828, MSDS 966, MSDS 1769, and MSDS 3001 paint products, the content of 1,6-hexamethylene diisocyanate of any paint product shall not exceed 0.01804 lb/gal and a daily maximum usage of 14 gallons.*
- *The solid content of a paint product in lb/gal will be calculated by multiplying the paint density (lb/gal) and the solid content in weight percentage (wt%).*
- *The TAP content of a paint product in lb/gal will be calculated by multiplying the paint density (lb/gal) and TAP content in weight percentage (wt%).*

Revised Permit Condition 29

The permittee shall only use a paint product meeting all of the following criteria:

- *Except for MSDS 1828, MSDS 966, MSDS 1769, and MSDS 3001 paint products, the content of 1,6-hexamethylene diisocyanate of any paint product shall not exceed 0.01804 lb/gal and a daily maximum usage of 14 gallons.*
- *The TAP content of a paint product in lb/gal will be calculated by multiplying the paint density (lb/gal) and TAP content in weight percentage (wt%).*
- *The solid content of a paint product in lb/gal will be calculated by multiplying the paint density (lb/gal) and the solid content in weight percentage (wt%).*
- *Daily Weighted Average Solids content shall be calculated using the following equation:*

$$\frac{[(Usage\ A\ (gal) * Solid\ Content\ A) + (Usage\ B\ (gal) * Solid\ Content\ B) + \cdots (Usage\ n\ (gal) + Solid\ content\ n)]}{[Usage\ A + Usage\ B + \cdots Usage\ n]}$$

The maximum limit of 8.16 lb/gal was eliminated and replaced with an equation that shall be used when calculating the weighted average solids content. The average must remain below 8.16 lb/gal. This requirement is stated in several conditions throughout the permit in each paint booth section. Note that the changes shown above only include a portion of Permit Condition 29. All other aspects of the condition remained unchanged.

Existing Permit Condition 45

The maximum amount of each individual paint product shall not exceed 46 gallons per day.

The maximum amount of all paint products sprayed at the South Large Paint Shop shall not exceed 75 gallons per day (gal/day).

The maximum amount of all paint products sprayed at the South Large Paint Shop shall not exceed 16,000 gallons per any consecutive 12-month period (gal/yr).

Revised Permit Condition 45

The maximum amount of each individual paint product shall not exceed 46 gallons per day.

The maximum amount of all paint products sprayed at the South Large Paint Shop shall not exceed 75 gallons per day (gal/day).

The maximum amount of all paint products sprayed at the South Large Paint Shop shall not exceed 16,000 gallons per any consecutive 12-month period (gal/yr).

The Daily Weighted Average solids content of all paint products sprayed at the South Large Paint Shop shall not exceed 8.16 lb/gal.

The new daily weighted average component was added for the South Large Paint Shop. It's limit is 8.16 lb/gal as was previously stated in the facility-wide condition.

Existing Permit Condition 48

The permittee shall monitor and record the following information in records:

- *The total amount of paint products sprayed in the South Large Paint Shop in gallons per day and gallons per year to demonstrate compliance with the emissions and throughput limit permit conditions. Annual throughput shall be determined by summing each monthly throughput over the previous 12-month period.*
- *The pressure drop across each spray paint booth filter system shall be recorded once per week when operating to demonstrate compliance with the pressure drop monitoring permit condition.*
- *The amount of each individual paint product sprayed in the South Large Paint Shop in gallons per day to demonstrate compliance with the paint throughput limit permit condition.*

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Revised Permit Condition 48

The permittee shall monitor and record the following information in records:

- *The total amount of paint products sprayed in the South Large Paint Shop in gallons per day and gallons per year to demonstrate compliance with the emissions and throughput limit permit conditions. Annual throughput shall be determined by summing each monthly throughput over the previous 12-month period.*
- *The pressure drop across each spray paint booth filter system shall be recorded once per week when operating to demonstrate compliance with the pressure drop monitoring permit condition.*
- *The amount of each individual paint product sprayed in the South Large Paint Shop in gallons per day to demonstrate compliance with the paint throughput limit permit condition.*
- *The Daily Weighted Average solids content of all paint products sprayed at the shop in one day in lb/gal to demonstrate compliance with the solid content limit.*

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Recordkeeping and monitoring of the daily weighted average solids content requirements were added to the condition to reflect the new calculation and corresponding limit.

Existing Permit Condition 53

The maximum amount of each individual paint product shall not exceed 46 gal/day.

The maximum amount of all paint products sprayed at the North Large Paint Shop shall not exceed 75 gal/day.

The maximum amount of all paint products sprayed at the North Large Paint Shop shall not exceed 16,000 gal/yr.

Revised Permit Condition 53

The maximum amount of each individual paint product shall not exceed 46 gal/day.

The maximum amount of all paint products sprayed at the North Large Paint Shop shall not exceed 75 gal/day.

The maximum amount of all paint products sprayed at the North Large Paint Shop shall not exceed 16,000 gal/yr.

The Daily Weighted Average solids content of all paint products sprayed at the North Large Paint Shop shall not exceed 8.16 lb/gal.

The new daily weighted average component was added for the North Large Paint Shop. Its limit is 8.16 lb/gal as was previously stated in the facility-wide condition.

Existing Permit Condition 56

The permittee shall monitor and record the following information in records:

- *The total amount of paint products sprayed in the North Large Paint Shop in gallons per day and gallons per year to demonstrate compliance with the emissions and throughput limit permit conditions. Annual throughput shall be determined by summing each monthly throughput over the previous 12-month period.*
- *The pressure drop across each spray paint booth filter system shall be recorded once per week when operating to demonstrate compliance with the pressure drop monitoring permit condition.*
- *The amount of each individual paint product sprayed in the North Large Paint Shop in gallons per day to demonstrate compliance with the paint throughput limit permit condition.*

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Revised Permit Condition 56

The permittee shall monitor and record the following information in records:

- *The total amount of paint products sprayed in the North Large Paint Shop in gallons per day and gallons per year to demonstrate compliance with the emissions and throughput limit permit conditions. Annual throughput shall be determined by summing each monthly throughput over the previous 12-month period.*
- *The pressure drop across each spray paint booth filter system shall be recorded once per week when operating to demonstrate compliance with the pressure drop monitoring permit condition.*
- *The amount of each individual paint product sprayed in the North Large Paint Shop in gallons per day to demonstrate compliance with the paint throughput limit permit condition.*
- *The Daily Weighted Average solids content of all paint products sprayed at the shop in one day in lb/gal to demonstrate compliance with the solid content limit.*

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Recordkeeping and monitoring of the daily weighted average solids content requirements were added to the condition to reflect the new calculation and corresponding limit.

Existing Permit Condition 58

The Strip-Wash-Blast-Paint (SWBP) Building is located near the northern property boundary of the MPI Apple Street facility. The building is comprised of four separate sections, including a strip section, a wash section, an abrasive shot blasting and primer painting section, and a mechanical and locker/break room section. The strip section is designed for the disassembly of locomotives. The wash section is used to wash the locomotive frame, car body, and miscellaneous equipment. Minor welding takes place in the mechanical room. The blast and paint section is used for steel-grit blasting of locomotive frames and components to remove old paint and rust. The booth is designed so that either painting or blasting can occur at any one time, but never simultaneously. Blasting and primer painting make-up air is provided by two, 4.5 MMBtu/hr natural gas-fired heaters. The dual-use shot-blasting/primer booth has a separate exhaust system for shot-blasting and painting. Emissions from each booth are vented through two stacks, each with an average flow rate of 31,380 acfm.

Revised Permit Condition 58

The Strip-Wash-Blast-Paint (SWBP) Building is located near the northern property boundary of the MPI Apple Street facility. The building is comprised of four separate sections, including a strip section, a wash section, an abrasive shot blasting and primer painting section, and a mechanical and locker/break room section. The strip section is designed for the disassembly of locomotives. The wash section is used to wash the locomotive frame, car body, and miscellaneous equipment. Minor welding takes place in the mechanical room. The blast and paint section is used for steel-grit blasting of locomotive frames and components to remove old paint and rust. The booth is designed so that either painting or blasting can occur at any one time, but never simultaneously. Blasting and primer painting make-up air is provided by two, 4.5 MMBtu/hr natural gas-fired heaters. The dual-use shot-blasting/primer booth has a separate exhaust system for shot-blasting and painting. Emissions from each booth are vented through two stacks, each with an average flow rate of 31,380 acfm. Permit conditions specific to blasting operations in Booth #5 are contained in Permit Conditions 91 through 96.

The last sentence was added to identify that all the blasting content previously located in this section has been moved to the Bead-blasting section of the permit for consistency.

Existing Permit Condition 59

The PM_{10} emissions from the shot-blasting operation at the SWBP building are controlled by a pulse-jet dust collector system with a control efficiency of 99.9% as per the manufacturer. The PM_{10} emissions from the painting operation at the SWBP building are controlled by a paint-arrestor filter system with a control efficiency of 99.58% as per the manufacturer. The VOC emissions are uncontrolled.

Revised Permit Condition 59

The PM_{10} emissions from the painting operation at the SWBP building are controlled by a paint-arrestor filter system with a control efficiency of 99.58% as per the manufacturer. The VOC emissions are uncontrolled.

The discussion of the shot-blasting operation was removed from this condition because all blasting permitting conditions and descriptions were relocated into its own section of the permit for clarity.

Existing Permit Condition 60

The PM_{10} emissions from the shot-blast booth stacks at the SWBP building shall not exceed 1.24 lb/day.

The PM_{10} from each spray booth stack at the SWBP building shall not exceed 0.1616 lb/day.

In absence of any other creditable evidence, compliance with emission limits is assured by complying with this permit's operating, monitoring and record keeping requirements.

Revised Permit Condition 60

The PM_{10} from each spray booth stack at the SWBP building shall not exceed 0.1616 lb/day.

In absence of any other creditable evidence, compliance with emission limits is assured by complying with this permit's operating, monitoring and record keeping requirements.

The shot-blasting limit was removed and relocated into the blasting section of the permit under condition 93.

Removed Permit Condition 61

The maximum amount of steel grit, blasting media throughput shall not exceed 282 tons per day (T/day).

The throughput limit was removed from this section permit and relocated as Permit Condition 94.

Existing Permit Condition 62

The permittee shall comply with the following limits:

- *The maximum amount of each individual paint product shall not exceed 25 gal/day.*
- *The total amount of all paint products containing 1,6 - hexamethylene diisocyanate shall not exceed 25 gal/day.*
- *The maximum amount of paint products used at the paint booth shall not exceed 50 gal/day.*
- *The maximum amount of paint products used at the paint booth shall not exceed 10,500 gal/yr.*

Paint products that contain cadmium or chromium shall not be used in the paint booth, as per applicant submittal.

Existing Permit Condition 65

The permittee shall comply with the following limits:

- *The maximum amount of each individual paint product shall not exceed 25 gal/day.*
- *The total amount of all paint products containing 1,6 - hexamethylene diisocyanate shall not exceed 25 gal/day.*
- *The maximum amount of paint products used at the paint booth shall not exceed 50 gal/day.*
- *The maximum amount of paint products used at the paint booth shall not exceed 10,500 gal/yr.*
- *The Daily Weighted Average solids content of all paint products sprayed at the SWBP Paint Shop shall not exceed 8.16 lb/gal.*

Paint products that contain cadmium or chromium shall not be used in the paint booth, as per applicant submittal.

The new daily weighted average component was added for the SWBP Shop. It's limit is 8.16 lb/gal as was previously stated in the facility-wide condition.

Existing Permit Condition 63

The permittee shall install, calibrate, maintain, and operate, according to manufacturer's specifications and recommendations, a pressure drop monitoring device to measure the pressure drop across the pulse-jet dust collector system and across the paint-arrestor filter system.

Revised Permit Condition 62

The permittee shall install, calibrate, maintain, and operate, according to manufacturer's specifications and recommendations, a pressure drop monitoring device to measure the pressure drop across the paint-arrestor filter system.

The reference to the pulse-jet dust collector was removed and was included as part of Permit Condition 94. This was done as part of the relocation of the bead-blasting conditions to condition 91-96.

Existing Permit Condition 65

The permittee shall monitor and record the following information in records:

- *For each paint product used in the paint booth, record the usage rate in gallons per month (gal/mo) and gallons per year.*
- *For each paint product used in the paint booth, record the VOC content in pounds per gallon (lb/gal).*

- *For each paint product used in the paint booth, calculate and record the VOC usage in pounds per month (lb/mo). To calculate the VOC usage, multiply the usage rate (gal/mo) by the VOC content (lb/gal) for each paint product used.*
- *Once monthly, calculate and record the total amount of VOC usage of the paint booth in pounds per month. To calculate the total VOC usage, add all of the individual VOC usage amounts for each paint product that was recorded in the bullet point above. This VOC usage amount will then be used to demonstrate compliance with the facility-wide VOC limit permit condition.*
- *The amount of steel grit in tons per day throughput in the blasting booth at the SWBP building.*
- *The pressure drop across the blasting pulse-jet dust collector system once on a daily basis.*
- *The pressure drop across the paint-arrestor filter system once on a daily basis when operating to demonstrate compliance with the pressure drop monitoring permit condition.*
- *The amount of each individual paint product sprayed in the Strip-Wash-Blast-Paint building in gallons per day to demonstrate compliance with the paint throughput limit permit condition.*
- *The total amount of all paint products containing 1,6 - hexamethylene diisocyanate in gallons per day to demonstrate compliance with the paint throughput limit permit condition (bullet point#2).*

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Revised Permit Condition 64

The permittee shall monitor and record the following information in records:

- *For each paint product used in the paint booth, record the usage rate in gallons per month (gal/mo) and gallons per year.*
- *For each paint product used in the paint booth, record the VOC content in pounds per gallon (lb/gal).*
- *For each paint product used in the paint booth, calculate and record the VOC usage in pounds per month (lb/mo). To calculate the VOC usage, multiply the usage rate (gal/mo) by the VOC content (lb/gal) for each paint product used.*
- *Once monthly, calculate and record the total amount of VOC usage of the paint booth in pounds per month. To calculate the total VOC usage, add all of the individual VOC usage amounts for each paint product that was recorded in the bullet point above. This VOC usage amount will then be used to demonstrate compliance with the facility-wide VOC limit permit condition.*
- *The pressure drop across the paint-arrestor filter system once on a daily basis when operating to demonstrate compliance with the pressure drop monitoring permit condition.*
- *The amount of each individual paint product sprayed in the Strip-Wash-Blast-Paint building in gallons per day to demonstrate compliance with the paint throughput limit permit condition.*
- *The total amount of all paint products containing 1,6 - hexamethylene diisocyanate in gallons per day to demonstrate compliance with the paint throughput limit permit condition (bullet point#2).*
- *The Daily Weighted Average solids content of all paint products sprayed at the shop in one day in lb/gal to demonstrate compliance with the solid content limit.*

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Recordkeeping and monitoring of the daily weighted average solids content requirements were added to the condition to reflect the new calculation and corresponding limit. Also the steel grit T/day throughput and the pressure drop across the blasting pulse-jet dust collector system recordkeeping requirements were moved to Permit Condition 96.

Existing Permit Condition 70

The maximum amount of each individual paint product shall not exceed 46 gal/day.

The maximum amount of all paint products sprayed at the Small Paint Shop shall not exceed 75 gal/day.

The maximum amount of all paint products sprayed at the Small Paint Shop shall not exceed 5,000 gal/yr.

Revised Permit Condition 69

The maximum amount of each individual paint product shall not exceed 46 gal/day.

The maximum amount of all paint products sprayed at the Small Paint Shop shall not exceed 75 gal/day.

The maximum amount of all paint products sprayed at the Small Paint Shop shall not exceed 5,000 gal/yr.

The Daily Weighted Average solids content of all paint products sprayed at the Small Paint Shop shall not exceed 8.16 lb/gal.

The new daily weighted average component was added for the Small Paint Shop. It's limit is 8.16 lb/gal as was previously stated in the facility-wide condition.

Existing Permit Condition 73

The permittee shall monitor and record the following information in records:

- *The total amount of paint products sprayed in the Small Paint Shop in gallons per day and gallons per year to demonstrate compliance with the emissions and throughput limit permit conditions. Annual throughput shall be determined by summing each monthly throughput over the previous 12-month period.*
- *The pressure drop across the spray paint booth filter system shall be recorded once per day when operating to demonstrate compliance with the pressure drop monitoring permit condition.*
- *The amount of each individual paint product sprayed in the small paint shop in gallons per day to demonstrate compliance with the paint throughput limit permit condition.*

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Revised Permit Condition 72

The permittee shall monitor and record the following information in records:

- *The total amount of paint products sprayed in the Small Paint Shop in gallons per day and gallons per year to demonstrate compliance with the emissions and throughput limit permit conditions. Annual throughput shall be determined by summing each monthly throughput over the previous 12-month period.*
- *The pressure drop across the spray paint booth filter system shall be recorded once per day when operating to demonstrate compliance with the pressure drop monitoring permit condition.*
- *The amount of each individual paint product sprayed in the small paint shop in gallons per day to demonstrate compliance with the paint throughput limit permit condition.*
- *The Daily Weighted Average solids content of all paint products sprayed at the shop in one day in lb/gal to demonstrate compliance with the solid content limit.*

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Recordkeeping and monitoring of the daily weighted average solids content requirements were added to the condition to reflect the new calculation and corresponding limit.

Existing Permit Condition 78

The maximum amount of all paint products sprayed at the Spray Paint Booth shall not exceed 20 gal/day.

The maximum amount of all paint products sprayed at the Spray Paint Booth shall not exceed 3,000 gal/yr.

Revised Permit Condition 77

The maximum amount of all paint products sprayed at the Spray Paint Booth shall not exceed 20 gal/day.

The maximum amount of all paint products sprayed at the Spray Paint Booth shall not exceed 3,000 gal/yr.

The Daily Weighted Average solids content of all paint products sprayed at the Spray Paint Booth shall not exceed 8.16 lb/gal.

The new daily weighted average component was added for the Spray Paint Booth. It's limit is 8.16 lb/gal as was previously stated in the facility-wide condition.

Existing Permit Condition 81

The permittee shall monitor and record the following information in records:

- *The total amount of paint products sprayed in the Spray Paint Booth in gallons per day and gallons per year to demonstrate compliance with the emissions and throughput limit permit conditions. Annual throughput shall be determined by summing each monthly throughput over the previous 12-month period.*
- *The pressure drop across the spray paint booth filter system shall be recorded once per day when operating to demonstrate compliance with the pressure drop monitoring permit condition.*

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Revised Permit Condition 80

The permittee shall monitor and record the following information in records:

- *The total amount of paint products sprayed in the Spray Paint Booth in gallons per day and gallons per year to demonstrate compliance with the emissions and throughput limit permit conditions. Annual throughput shall be determined by summing each monthly throughput over the previous 12-month period.*
- *The pressure drop across the spray paint booth filter system shall be recorded once per day when operating to demonstrate compliance with the pressure drop monitoring permit condition.*
- *The Daily Weighted Average solids content of all paint products sprayed at the shop in one day in lb/gal to demonstrate compliance with the solid content limit.*

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Recordkeeping and monitoring of the daily weighted average solids content requirements were added to the condition to reflect the new calculation and corresponding limit.

Existing Permit Condition 86

The maximum amount of any one paint product sprayed at the East Paint Shop Building shall not exceed 46 gallons per day.

The maximum amount of all paint products sprayed at the East Paint Shop Building shall not exceed 46 gallons per day.

The maximum amount of paint products sprayed at the East Paint Shop Building shall not exceed 5,850 gal/yr.

Revised Permit Condition 85

The maximum amount of any one paint product sprayed at the East Paint Shop Building shall not exceed 46 gallons per day.

The maximum amount of all paint products sprayed at the East Paint Shop Building shall not exceed 46 gallons per day.

The maximum amount of paint products sprayed at the East Paint Shop Building shall not exceed 5,850 gal/yr.

The Daily Weighted Average solids content of all paint products sprayed at the East Paint Booth shall not exceed 8.16 lb/gal.

The new daily weighted average component was added for the East Paint Shop. It's limit is 8.16 lb/gal as was previously stated in the facility-wide condition.

Existing Permit Condition 90

The permittee shall monitor and record the total amount of paint sprayed in the spray paint booths monthly and annually to demonstrate compliance with the paint throughput limit permit condition. Annual throughput shall be determined by summing each monthly throughput over the previous consecutive 12-month period.

The permittee shall monitor and record the differential pressure across the spray paint booth filter systems once per week when operating to demonstrate compliance with the pressure drop monitoring permit condition.

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Revised Permit Condition 89

The permittee shall monitor and record the total amount of paint sprayed in the spray paint booths monthly and annually to demonstrate compliance with the paint throughput limit permit condition. Annual throughput shall be determined by summing each monthly throughput over the previous consecutive 12-month period.

The permittee shall monitor and record the differential pressure across the spray paint booth filter systems once per week when operating to demonstrate compliance with the pressure drop monitoring permit condition.

The Daily Weighted Average solids content of all paint products sprayed at the shop in one day in lb/gal to demonstrate compliance with the solid content limit.

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request.

Recordkeeping and monitoring of the daily weighted average solids content requirements were added to the condition to reflect the new calculation and corresponding limit.

Existing Permit Condition 92

The bead-blast enclosures use fine-grained, rounded, glass beads – potter quality Ballotini impact beads, type vi, class 2. The enclosures consist of the following two units: Component Shop Unit and Locomotive Shop Unit.

Component shop bead blast enclosure is a Cycloblast Model 4836-F with bag filters. The exhaust flow rate is approximately 775 acfm at ambient temperature (293 K). Air from the dust filtration system stack is exhausted outside the building. The unit was installed in 1984.

Locomotive shop bead blast enclosure is a Cycloblast Model 4836-DC100 with bag filters. The exhaust flow rate is approximately 775 acfm at ambient temperature (293 K). Air from the dust filtration system stack is exhausted outside the building. The unit was installed in 1984.

The nutshell blasting unit with a dust filtration system uses Trinco nutshells as the abrasive media and is located outside the air brake room of the Component Shop building. The maximum capacity is 63 lb/hr media throughput. The exhaust flow rate is approximately 775 scfm. Air from the dust filtration system stack is exhausted inside the building. The unit was installed in 1997.

Revised Permit Condition 91

The Locomotive shop bead blast enclosure is a Cycloblast Model 4836-DC100 with bag filters. The blast media is fine-grained, rounded, glass beads – potter quality Ballotini impact beads, type vi, class 2. The exhaust flow rate is approximately 775 acfm at ambient temperature (293 K). Air from the dust filtration system stack is exhausted outside the building. The unit was installed in 1984.

SWBP Shop bead blast enclosure was originally installed in the Component Shop in 1984, and was relocated adjacent to SWBP Shop Booth #5 in 2011. This enclosure is a Cycloblast Model 4836-F with bag filters. The blast media is fine-grained, rounded, glass beads – potter quality Ballotini impact beads, type vi, class 2. The exhaust flow rate is approximately 775 acfm at ambient temperature (293 K). Exhaust from the bag filters receives secondary treatment as it passes through the pulse-jet dust collector system which services Booth #5.

SWBP Shop Booth #5 is used for both blasting and painting (never simultaneously) through the use of a dual blast and prime system with some shared components. The area is about 100 ft. by 50 ft. by 34 ft. high. Steel grit is used as the blasting media. The particulate emissions from blasting are controlled by a pulse-jet dust collector system.

The Component Shop nutshell blasting unit with a dust filtration system uses Trinco nutshells as the abrasive media and is located outside the air brake room. The maximum capacity is 63 lb/hr media throughput. The exhaust flow rate is approximately 775 scfm. Air from the dust filtration system stack is exhausted inside the building. The unit was installed in 1997.

The description of this section of the permit was modified to account for the bead-blasting enclosure being moved from the Component Shop adjacent to the SWBP. It also accounts for other blasting enclosure, currently within the SWBP, to have its permit requirements shifted into this section. The movement of some permit condition was done to add clarity so that all bead-blasting conditions are located within the same section of the permit rather than in multiple locations.

Existing Permit Condition 93

The PM_{10} emissions from each of the enclosures are controlled by a baghouse with 98% control efficiency. Air from the dust filtration system for nutshell blasting unit is exhausted inside the building.

Revised Permit Condition 92

Locomotive Shop bead blast enclosure: particulate emissions are controlled by a baghouse with 98% control efficiency.

SWBP Shop bead blast enclosure: particulate emissions are controlled by a baghouse, followed in series by a pulse-jet dust collector with 99.9% control efficiency.

SWBP Shop Booth #5: particulate emissions from the shot-blasting operations are controlled by a pulse-jet dust collector system with 99.9% control efficiency.

Component Shop nutshell blasting unit: the dust filtration system is exhausted inside the building.

The updated verbiage states that the particulate emissions associated with the Locomotive Shop are controlled by a separate filtration system, while all other basting emissions are routed with the pulse-jet system associated with the SWBP building.

Existing Permit Condition 94

The PM_{10} emissions from the Component Shop Unit stack shall not exceed 15.9 lb/day

The PM_{10} emissions from the Locomotive Shop Unit stack shall not exceed 15.9 lb/day

In absence of any other creditable evidence, compliance with emission limits is assured by complying with this permit's operating, monitoring and record keeping requirements.

Revised Permit Condition 93

The PM_{10} emissions from the shot-blast booth stacks at the SWBP building shall not exceed 1.24 lb/day.

The PM_{10} emissions from the Locomotive Shop Unit stack shall not exceed 15.9 lb/day

In absence of any other creditable evidence, compliance with emission limits is assured by complying with this permit's operating, monitoring and record keeping requirements.

The limit from the Component Shop was removed as there is no longer blasting being performed at that location. Secondly, the SWBP limit was moved from the previous section of the permit to this condition. The limit has not changed because all blasting is still be routed through the pulse-jet dust collection system. In fact, the unit that is being relocated is being filtered twice as stated earlier in this Statement of Basis.

Existing Permit Condition 95

The maximum amount of blast media throughput for Component Shop Unit shall not exceed 960 lb/hr, based on 24-hour average time period or 11.52 T/day

The maximum amount of blast media throughput for the Locomotive Shop Unit shall not exceed 960 lb/hr, based on 24-hour average time period or 11.52 T/day

Emissions from component shop bead blast enclosure, locomotive shop bead blast enclosure, and the nutshell blasting unit shall be controlled by each respective dust filtration system.

Air from the dust filtration system stack of nutshell blasting unit shall be exhausted inside the building.

Revised Permit Condition 94

Locomotive Shop bead blast enclosure: the maximum amount of blast media throughput shall not exceed 960 lb/hr, based on 24-hour average time period or 11.52 T/day.

SWBP Shop bead blast enclosure: the maximum amount of blast media throughput shall not exceed 960 lb/hr, based on 24-hour average time period or 11.52 T/day.

SWBP Shop Booth #5:

the maximum amount of steel grit blasting media throughput shall not exceed 282 T/day.

The permittee shall install, calibrate, maintain, and operate, according to manufacturer's specifications and recommendations, a pressure drop monitoring device to measure the pressure drop across the pulse-jet dust collector system.

Component Shop nutshell blasting unit: air from the dust filtration system shall be exhausted inside the building.

Emissions from all four units (the Locomotive Shop bead blast enclosure, the SWBP Shop bead blast enclosure, SWBP Booth #5, and the Component Shop nutshell blasting unit) shall be controlled by each respective dust filtration system.

The annual throughput from the relocated enclosure was moved into this condition for the previous section and the two SWBP Shop enclosures were differentiated and designed as SWBP Shop bead blast enclosure and SWBP Shop Booth #5, where Booth #5 is the unit currently at the SWBP Shop and the bead blast enclosure is the relocated unit from the Component Shop.

Existing Permit Condition 96

If there are any changes to the self-developed operation and maintenance manual for the nutshell blasting unit and the two Bead Blast Enclosures air pollution control systems an updated manual shall be submitted to DEQ within 15 days of the changes. The air pollution control equipment operating parameters shall be maintained within manufacturer and O&M manual specifications. The O&M manual shall address the operation, maintenance, and repair of the nutshell blasting unit and the Bead Blast Enclosures air pollution control systems, and shall include, at a minimum, the following: the general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate corrective actions to be taken, and provisions for

weekly inspections. The O&M manual shall remain on site at all times and shall be made available to DEQ representatives upon request.

The permittee shall operate each dust filtration system in accordance with the respective O&M manual required in this permit condition.

Revised Permit Condition 95

The permittee shall have developed an operation and maintenance manual for the air pollution control equipment for each blasting unit according to manufacturer specifications and recommendations. The O&M manual shall address the operation, maintenance, and repair of the unit, and shall include, at a minimum, the following: the general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate corrective actions to be taken, and provisions for weekly inspections. The O&M manual shall remain on site at all times and shall be made available to DEQ representatives upon request.

If there are any changes to the self-developed operation and maintenance manual for any unit, an updated manual shall be submitted to DEQ within 15 days of the changes.

The permittee shall operate each unit in accordance with the respective O&M manual required in this permit condition.

The verbiage was adjusted a bit to better incorporate all the bead-blasting units rather than only the two enclosure units that were formally described in this condition.

Existing Permit Condition 97

The permittee shall keep the following documentation and demonstrate that the media throughput capacity does not exceed 960 lb/hr:

- *The nozzle size in use*
- *The pressure at the nozzle*
- *The corresponding blast media throughput capacity*
- *Records of any changes to the nozzle size and the pressure at the nozzle*

Revised Permit Condition 96

Locomotive Shop bead blast enclosure: the permittee shall keep the following documentation to demonstrate that the media throughput capacity does not exceed 960 lb/hr:

- *The nozzle size in use*
- *The pressure at the nozzle*
- *The corresponding blast media throughput capacity*
- *Records of any changes to the nozzle size and the pressure at the nozzle*

SWBP Shop bead blast enclosure: the permittee shall keep the following documentation to demonstrate that the media throughput capacity does not exceed 960 lb/hr:

- *The nozzle size in use*
- *The pressure at the nozzle*
- *The corresponding blast media throughput capacity*
- *Records of any changes to the nozzle size and the pressure at the nozzle*

SWBP Shop Booth #5: the permittee shall keep the following documentation to demonstrate compliance with media throughput and particulate matter control efficiency:

- *The amount of steel grit in tons per day throughput in the blasting booth at the SWBP building.*
- *The pressure drop across the blasting pulse-jet dust collector system once on a daily basis.*

Some requirements were on moved from Permit condition 65 because they are strictly related to recordkeeping regarding bead blasting and not painting operating.

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 – FACILITY DRAFT COMMENTS

The following comments were received from the facility on September 8, 2011:

Facility Comment #1: Comments on Revised Permit Condition 58
Suggest adding following sentence at end of paragraph.
Permit conditions specific to blasting operations in Booth #5 are contained in Permit Conditions 91 through 96.

DEQ Response #1: The suggested sentence was added to the end of the condition for clarity.

Facility Comment #2: Comments on Revised Permit Condition 62
Suggest moving the pressure drop monitoring requirements pertaining to blasting operations to Condition 94. Delete "across the pulse-jet dust collector system and".

DEQ Response #2: The requested verbiage to be deleted was removed as it relates to the bead blasting units rather than the paint booth. Pertinent information regarding bead blasting has been moved to permit condition 94.

Facility Comment #3: Comments on Revised Permit Condition 63
Suggest moving the O&M manual requirements pertaining to blasting operations to Condition 95. Replace "both" with "the".

DEQ Response #3: The language was updated to remove any reference to the bead blasting and moved to condition 95.

Facility Comment #4: Comments on Revised Permit Condition 64
Suggest moving these two bullets pertaining to blasting operations to Condition 96.

- The amount of steel grit in tons per day throughput in the blasting booth at the SWBP building.
- The pressure drop across the blasting pulse-jet dust collector system once on a daily basis.

DEQ Response #4: The requested change has been made and added to condition 96.

Facility Comment #5: Comments on Revised Section Title for Permit Conditions 91 through 96.
Suggest replacing title with the following wording for clarity.
BLASTING ENCLOSURES (4 UNITS), MPI, APPLE STREET

DEQ Response #5: The requested change has been made.

Facility Comment #6: Comments on Revised Permit Condition 91
Suggest replacing this section with following wording to clarify the specifications of each of the four enclosures.

91. Process Descriptions

The Locomotive shop bead blast enclosure is a Cycloblast Model 4836-DC100 with bag filters. The blast media is fine-grained, rounded, glass beads – potter quality Ballotini impact beads, type vi, class 2. The exhaust flow rate is approximately 775 acfm at ambient temperature (293 K). Air from the dust filtration system stack is exhausted outside the building. The unit was installed in 1984.

SWBP Shop bead blast enclosure was originally installed in the Component Shop in 1984, and was relocated adjacent to SWBP Shop Booth #5 in 2011. This enclosure is a Cycloblast Model 4836-F with bag filters. The blast media is fine-grained, rounded, glass beads – potter quality Ballotini impact beads, type vi, class 2. The exhaust flow rate is approximately 775 acfm at ambient temperature (293 K). Exhaust from the bag filters receives secondary treatment as it passes through the pulse-jet dust collector system which services Booth #5.

SWBP Shop Booth #5 is used for both blasting and painting (never simultaneously) through the use of a dual blast and prime system with some shared components. The area is about 100 ft. by 50 ft. by 34 ft. high. Steel grit is used as the blasting media. The particulate emissions from blasting are controlled by a pulse-jet dust collector system.

The Component Shop nutshell blasting unit with a dust filtration system uses Trinco nutshells as the abrasive media and is located outside the air brake room. The maximum capacity is 63 lb/hr media throughput. The exhaust flow rate is approximately 775 scfm. Air from the dust filtration system stack is exhausted inside the building. The unit was installed in 1997.

DEQ Response #6: The requested language modification was made because the verbiage better describes the changes that are being made and clearly identifies the specific blasting units.

Facility Comment #7: Comments on Revised Permit Condition 92
Suggest replacing this section with the following wording to clarify the specifications of each of the four enclosures.

92. Emissions Control Description

Locomotive Shop bead blast enclosure: particulate emissions are controlled by a baghouse with 98% control efficiency.

SWBP Shop bead blast enclosure: particulate emissions are controlled by a baghouse, followed in series by a pulse-jet dust collector with 99.9% control efficiency.

SWBP Shop Booth #5: particulate emissions from the shot-blasting operations are controlled by a pulse-jet dust collector system with 99.9% control efficiency.

Component Shop nutshell blasting unit: the dust filtration system is exhausted inside the building.

DEQ Response #7: The requested description changes were made again because each unit is more clearly identified.

Facility Comment #8: Comments on Revised Permit Condition 94
Suggest the following wording to clarify the unit's names.

94. Through Limits & Operating Requirements

Locomotive Shop bead blast enclosure: the maximum amount of blast media throughput shall not exceed 960 lb/hr, based on 24-hour average time period or 11.52 T/day.

SWBP Shop bead blast enclosure: the maximum amount of blast media throughput shall not exceed 960 lb/hr, based on 24-hour average time period or 11.52 T/day.

SWBP Shop Booth #5:

- the maximum amount of steel grit blasting media throughput shall not exceed 282 T/day.
- The permittee shall install, calibrate, maintain, and operate, according to manufacturer's specifications and recommendations, a pressure drop monitoring device to measure the pressure drop across the pulse-jet dust collector system.

Component Shop nutshell blasting unit: air from the dust filtration system shall be exhausted inside the building.

Emissions from all four units (the Locomotive Shop bead blast enclosure, the SWBP Shop bead blast enclosure, SWBP Booth #5, and the Component Shop nutshell blasting unit) shall be controlled by each respective dust filtration system.

DEQ Response #8: The requested changes were made again because each unit is more clearly identified. It is easier to distinguish between the units and the specific throughput limits and operating requirements.

Facility Comment #9: Comments on Revised Permit Condition 95
Suggest the following wording to clarify the unit's names.

95. O&M Manual

The permittee shall have developed an operation and maintenance manual for the air pollution control equipment for each blasting unit according to manufacturer specifications and recommendations. The O&M manual shall address the operation, maintenance, and repair of the unit, and shall include, at a minimum, the following: the general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate

corrective actions to be taken, and provisions for weekly inspections. The O&M manual shall remain on site at all times and shall be made available to DEQ representatives upon request.

If there are any changes to the self-developed operation and maintenance manual for any unit, an updated manual shall be submitted to DEQ within 15 days of the changes.

The permittee shall operate each unit in accordance with the respective O&M manual required in this permit condition.

DEQ Response #9: The requested updated was made for clarity.

Facility Comment #10: Comments on Revised Permit Condition 96
Add requirements moved from existing Revised Permit Condition 64 and clarify units.

96. Documentation

Locomotive Shop bead blast enclosure: the permittee shall keep the following documentation to demonstrate that the media throughput capacity does not exceed 960 lb/hr:

- The nozzle size in use
- The pressure at the nozzle
- The corresponding blast media throughput capacity
- Records of any changes to the nozzle size and the pressure at the nozzle

SWBP Shop bead blast enclosure: the permittee shall keep the following documentation to demonstrate that the media throughput capacity does not exceed 960 lb/hr:

- The nozzle size in use
- The pressure at the nozzle
- The corresponding blast media throughput capacity
- Records of any changes to the nozzle size and the pressure at the nozzle

SWBP Shop Booth #5: the permittee shall keep the following documentation to demonstrate compliance with media throughput and particulate matter control efficiency:

- The amount of steel grit in tons per day throughput in the blasting booth at the SWBP building.
- The pressure drop across the blasting pulse-jet dust collector system once on a daily basis.

DEQ Response #10: The requested updated was made for clarity and to incorporate some requirements moved from another section of this permit, Permit Condition 64.

APPENDIX B – 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: MotivePower, Inc.
Address: 4600 Apple Street
City: Boise
State: Idaho
Zip Code: 83716
Facility Contact: Art Anderson
Title: Environmental Health & Safety Manager
AIRS No.: 001-00107

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	0.0	0	0.0
SO_2	0.0	0	0.0
CO	0.0	0	0.0
PM10	0.0	0	0.0
VOC	0.0	0	0.0
TAPS/HAPS	0.0	0	0.0
Total:	0.0	0	**0.0**
Fee Due	$ 1,000.00		

Comments: In accordance with IDAPA 58.01.01.225, the processing of this project is $1,000.