Missouri Department of Natural Resources
Air Pollution Control Program

INTERMEDIATE STATE PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Intermediate Operating Permit Number: OP2013-078
Expiration Date: JAN 2 7 2019
Installation ID: 099-0052
Project Number: 2011-05-077

Installation Name and Address
Engineered Coil Co.
6060 Highway PP
High Ridge, MO 63049
Jefferson County

Parent Company's Name and Address
DRS Technologies
2345 Crystal City Dr., Suite 915
Arlington, VA 22202

Installation Description:
Engineered Coil Co. (dba DRS Marlo Coil) manufactures cooling coils, steam coils, and air handling equipment. The installation is a synthetic minor source of Volatile Organic Compounds (VOC).

JAN 2 8 2014
Effective Date

Kyra L Moore
Director or Designee
Department of Natural Resources

Table of Contents

I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING 3

II. PLANT WIDE EMISSION LIMITATIONS 5

PERMIT CONDITION PW001 5
10 CSR 10-6.020(2)(I)23 and 10 CSR 10-6.065(5)(C)2 Voluntary Limitation(s) 5

III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS 6

PERMIT CONDITION 001 6
10 CSR 10-6.060 Construction Permits Required 6
Construction Permit 102012-002, Issued October 5, 2012 6
PERMIT CONDITION 002 6
10 CSR 10-6.060 Construction Permits Required 6
Construction Permit 1194-016A, Issued November 2, 1994 6
PERMIT CONDITION 003 7
10 CSR 10-5.300 Control of Emissions from Solvent Metal Cleaning 7
PERMIT CONDITION 004 9
10 CSR 10-5.300 Control of Emissions from Solvent Metal Cleaning 9
PERMIT CONDITION 005 10
10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations 10
PERMIT CONDITION 006 16
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants 16
PERMIT CONDITION 007 17
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants 17
PERMIT CONDITION 008 19
10 CSR 10-6.400 Restriction of Emission of PM From Industrial Processes 19
PERMIT CONDITION 009 19
10 CSR 10-6.020(2)(I)23 and 10 CSR 10-6.065(5)(C)2 Voluntary Limitation(s) 19
PERMIT CONDITION 010 20
10 CSR 10-6.020(2)(I)23 and 10 CSR 10-6.065(5)(C)2 Voluntary Limitation(s) 20

IV. CORE PERMIT REQUIREMENTS 21

V. GENERAL PERMIT REQUIREMENTS 28

VI. ATTACHMENTS 32

ATTACHMENT A 33
1194-016A VOC Tracking Sheet 33
ATTACHMENT B 34
Plantwide VOC Tracking Sheet 34
ATTACHMENT C 35
Fugitive Emissions Observations 35
ATTACHMENT D 36
Inspection/Maintenance/Repair/Malfunction Log 36
ATTACHMENT E 37
Method 22 Opacity Observations 37
ATTACHMENT F 38
Method 9 Opacity Observations 38
ATTACHMENT G 39
10 CSR 10-6.400 Compliance Demonstration 39

I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Engineered Coil Co. (dba DRS Marlo Coil) manufactures cooling coils, steam coils, and air handling equipment. The installation is a synthetic minor source of VOC.

Reported Air Pollutant Emissions, tons per year					
Pollutants	**2012**	**2011**	**2010**	**2009**	**2008**
Particulate Matter ≤ Ten Microns (PM_{10})	0.003	-	0.002	0.002	0.004
Sulfur Oxides (SO_x)	0.001	-	0.0003	0.0003	0.0003
Nitrogen Oxides (NO_x)	0.11	-	0.06	0.06	0.12
Volatile Organic Compounds (VOC)	10.26	5.73	5.25	5.25	9.47
Carbon Monoxide (CO)	0.02	-	0.01	0.01	0.02
Hazardous Air Pollutants (HAP)	0.81	0.41	1.06	1.06	1.27
Toluene (108-88-3)	0.22	0.15	0.24	0.24	0.29
Hexane (110-54-3)	0.21	0.15	0.23	0.23	0.29
MIBK (108-10-1)	0.16	0.03	0.06	0.06	0.08
Xylene (1330-20-7)	0.12	0.04	0.38	0.38	0.44
Glycol Ethers (20-10-0)	0.04	0.01	0.002	0.002	0.0002
Ethylbenzene (100-41-4)	0.03	0.01	0.13	0.13	0.16
Naphthalene (91-20-3)	0.02	0.01	0.01	0.01	0.01
Isopropylbenzene (98-82-8)	0.01	0.002	-	-	-
Methanol (67-56-1)	0.0005	0.001	-	-	-
Formaldehyde (50-00-0)	0.00001	0.00004	-	-	-

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emits air pollutants and identified as having unit-specific emission limitations.

Emission Unit	Description
EU-002B	(1) Fin Machine
EU-004	Maintenance Parts Washer
EU-009	Applying Adhesives to Make Thermal Barriers
EU-010	Spray Gun Cleaning
EU-014	Paint Booth #2
EU-015	Water Heater
EU-015A	Paint Booth #3 - Primer
EU-015B	Paint Booth #3 - Topcoat
EU-015C	Paint Booth #3 - Solvents
EU-015D	Paint Booth #3 Drying Oven
EU-016	Sawing Lumber
EU-023	Sandblasting
EU-031	Hand Painting
EU-032	Sealing/Lagging Insulation
EU-049	Process Water Evaporators

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment, which does not have unit specific limitations at the time of permit issuance.

Emission Unit	Description
EU-001	Tube Fabrication, Bending, Forming, & Cutting
EU-002A	(4) Fin Machines
EU-003	Solvent cleaning of pipe – solvent contains no HAP or VOC
EU-007	Boiler, Test Lab/Space Heater (Propane Fired)
EU-008	Space Heater, Warehouse (Propane)
EU-011	Welding Exhaust Vents
EU-012	Brazing Process Exhaust Fans
EU-018	Metal Degreasing
EU-022	Final Assay
EU-026	Spot Welding – consumes no electrodes
EU-027	Aqueous Cleaning of Tube and Pipe Manifolds
EU-028	Coolant Usage for Band Saws – coolant contains no HAP or GHG
EU-029	Electrical Equipment Maintenance
EU-034	Metal Cutting Cold Saws – lubricant contains no HAP
EU-035	Caulks and Sealants
EU-036	Aqueous Cleaning of Fins
EU-037	Aqueous Cleaning of Return Bends
EU-038	Aqueous Coolants for Machining Operations
EU-039	Sewage Treatment
EU-040	Fastener Lubricants and Thread Sealers
EU-041	Electroless Plating with nickel nitrate
EU-044	Plasma Cutting
EU-046	Hazardous Waste Collection and Disposal
EU-048	Lab
EU-050	Foam Injection
EU-051	Labeling of Packages for Shipment - Stenciling

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance.

PERMIT CONDITION PW001

10 CSR 10-6.020(2)(I)23 and 10 CSR 10-6.065(5)(C)2 Voluntary Limitation(s)

Emission Limitation:

The permittee shall emit less than 100 tons of VOC in any consecutive 12-month period from the entire installation.

Monitoring/Recordkeeping:

1. The permittee shall record the monthly and the 12-month rolling total VOC emissions from the entire installation using Attachment B or an equivalent form approved by the Air Pollution Control Program.
2. The permittee shall retain documents indicating the VOC content of all material handled.
3. Records may be kept in written or electronic format.
4. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
5. All records shall be maintained for five years.

Reporting:

1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which records indicate an exceedance of the emission limitation.
2. The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the CFR and CSR for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance.

PERMIT CONDITION 001 10 CSR 10-6.060 Construction Permits Required Construction Permit 102012-002, Issued October 5, 2012	
Emission Unit	**Description**
EU-002B	(1) Fin Machine

Operational Limitation:

Special Condition 2.A: The permittee shall keep the lubrication for EU-002B (1) Fin Machine in sealed containers whenever the materials are not in use. When lubricant is removed from the container and added to the reservoirs of the machine, the lubricant is considered in use. The permittee shall provide and maintain suitable, easily read, permanent markings on all lubrication containers.

Reporting:

The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 002 10 CSR 10-6.060 Construction Permits Required Construction Permit 1194-016A, Issued November 2, 1994	
Emission Unit	**Description**
EU-015	Water Heater
EU-015A	Paint Booth #3 – Primer
EU-015B	Paint Booth #3 – Topcoat
EU-015C	Paint Booth #3 - Solvents
EU-015D	Paint Booth #3 Drying Oven

Emission Limitation:

Special Condition 1: The permittee shall emit less than 40 tons of VOC from paint line #3 (EU-015, EU-015A, EU-015B, EU-015C, and EU-015D) in any consecutive 12-month period.

Monitoring/Recordkeeping:

1. Special Condition 2: The permittee shall record the monthly and the rolling 12-month total VOC emissions from paint line #3 using Attachment A or an equivalent form approved by the Air Pollution Control Program.
2. The permittee shall retain documents indicating the VOC content of all material used on paint line #3.
3. Records may be kept in written or electronic format.
4. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
5. All records shall be maintained for five years.

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which records indicate an exceedance of the emission limitation.
2. The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 003 10 CSR 10-5.300 Control of Emissions from Solvent Metal Cleaning	
Emission Unit	**Description**
EU-004	Maintenance Parts Washer

Equipment Specifications:

1. Each cold cleaner shall have a cover which prevents the escape of solvent vapors from the solvent bath while in the closed position or an enclosed reservoir which limits the escape of solvent vapors from the solvent bath whenever parts are not being processed in the cleaner.
2. When one or more of the following conditions exist, the cover shall be designed to operate easily such that minimal disturbing of the solvent vapors in the tank occurs. (For covers larger than 10 ft^2, this shall be accomplished by either mechanical assistance such as spring loading or counter weighing or by power systems):
   a) The solvent vapor pressure is greater than 0.3 psi measured at 37.8°C (100°F);
   b) The solvent is agitated; or
   c) The solvent is heated.
3. Each cold cleaner shall have an internal drainage facility so that parts are enclosed under the cover while draining.
4. If an internal drainage facility cannot fit into the cleaning system and the solvent vapor pressure is less than 0.6 psi measured at 37.8°C (100°F), then the cold cleaner shall have an external drainage facility which provides for the solvent to drain back into the solvent bath.
5. Solvent sprays, if used, shall be a solid fluid stream (not a fine, atomized or shower-type spray) and at a pressure which does not cause splashing above or beyond the freeboard.
6. A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment or in a location readily visible during operation of the equipment.
7. Any cold cleaner which uses a solvent that has a solvent vapor pressure greater than 0.6 psi measured at 37.8°C (100°F) or heated above 48.9°C (120°F) shall use one of the following control devices:
   a) A freeboard ratio of at least 0.75;
   b) Water cover (solvent shall be insoluble in and heavier than water); or
   c) Other control systems with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to 65 percent. These control systems shall receive approval from the director and EPA prior to their use.

Operating Procedure Requirements:

1. Cold cleaner covers shall be closed whenever parts are not being handled in the cleaners or the solvent shall drain into an enclosed reservoir except when performing maintenance or collecting solvent samples.
2. Cleaned parts shall be drained in the freeboard area for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is

draining. During the draining, tipping or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner.

3. Whenever a cold cleaner fails to perform within the rule operating requirements, the unit shall be shut down immediately and shall remain shut down until operation is restored to meet the rule operating requirements.
4. Solvent leaks shall be repaired immediately or the cold cleaner shall be shut down until the leaks are repaired.
5. Any waste material removed from a cold cleaner shall be disposed of by one of the following methods or an equivalent method approved by the director and EPA:
   a) Reduction of the waste material to less than 20 percent VOC solvent by distillation and proper disposal of the still bottom waste; or
   b) Stored in closed containers for transfer to—
      i) A contract reclamation service; or
      ii) A disposal facility approved by the director and EPA.
6. Waste solvent shall be stored in closed containers only.

Operator and Supervisor Training:

1. Only persons trained in at least the operational and equipment requirements specified in this rule for their particular solvent metal cleaning process shall be permitted to operate the equipment.
2. The person who supervises any person who operates solvent cleaning equipment regulated by this rule shall receive equal or greater operational training than the operator.
3. A procedural review shall be given to all solvent metal cleaning equipment operators at least once each 12 months.

Reporting and Recordkeeping:

1. The permittee shall keep records of all types and amounts of solvents containing waste material from cleaning or degreasing operations transferred either to a contract reclamation service or to a disposal facility and all amounts distilled on the premises. The records also shall include maintenance and repair logs for both the degreaser and any associated control equipment. These records shall be kept current and made available for review on a monthly basis. The director may require additional recordkeeping if necessary to adequately demonstrate compliance with this rule.
2. The permittee shall maintain records which include for each purchase of cold cleaning solvent:
   a) The name and address of the solvent supplier;
   b) The date of purchase;
   c) The type of solvent; and
   d) The vapor pressure of the solvent in mmHg at 20°C (68°F).
3. A record shall be kept of solvent metal cleaning training required by this rule.
4. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
5. All records must be maintained for five years.
6. The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 004 10 CSR 10-5.300 Control of Emissions from Solvent Metal Cleaning	
Emission Unit	**Description**
EU-010	Spray Gun Cleaning

Operating Procedure Requirements:

1. Cleaning of spray guns shall be accomplished by use of one or more of the following methods:
   a) Enclosed spray gun cleaning. Enclosed system spray gun cleaning shall consist of forcing solvent through the spray gun and/or spray gun parts. Spray guns and/or spray gun parts shall only be cleaned in remote closed top spray gun cleaning machines under the following conditions:
      i) The spray gun cleaning machine is operated within the manufacturer's specifications and with the lid kept tightly closed at all times except when being accessed or maintained; and
      ii) Removable containers (which shall not exceed 30 gallons in size) for clean, used, and waste solvent, are kept tightly closed except when being accessed or maintained;
   b) Nonatomized spray gun cleaning. Nonatomized spray gun cleaning shall consist of placing solvent in the pressure pot and forcing it through the spray gun with the atomizing cap in place. Spray guns shall only be cleaned through nonatomized spray gun cleaning under the following conditions:
      i) No atomizing air shall be used; and
      ii) The cleaning solvent from the spray gun shall be directed into a pail, bucket, drum, or other waste container that is closed when not in use.
   c) Disassembled spray gun cleaning. Disassembled spray gun cleaning shall be accomplished by disassembling the spray gun to be cleaned and cleaning the components by one of the following methods:
      i) By hand in a spray gun cleaner, which shall remain closed except when in use; or
      ii) By soaking in a spray gun cleaner, which shall remain closed during the soaking period and when not inserting or removing components.
   d) Atomized spray gun cleaning. Atomized spray gun cleaning shall consist of forcing the cleaning solvent through the gun and directing the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions. Cleaning of the nozzle tips of an automated spray equipment system is exempt from the requirements of 10 CSR 10-5.300(3)(B)4, unless the system is a robotic system that is programmed to spray into a closed container.
2. Any waste material removed from a spray gun cleaning system shall be disposed of by one of the following methods or an equivalent method approved by the director and EPA:
   a) Reduction of the waste material to less than 20 percent VOC solvent by distillation and proper disposal of the still bottom waste; or
   b) Stored in closed containers for transfer to—
      i) A contract reclamation service; or
      ii) A disposal facility approved by the director and EPA.
3. Waste solvent shall be stored in closed containers only.

Operator and Supervisor Training:

1. Only persons trained in at least the operational and equipment requirements specified in this rule for their particular solvent metal cleaning process shall be permitted to operate the equipment.
2. The person who supervises any person who operates solvent cleaning equipment regulated by this rule shall receive equal or greater operational training than the operator.

3. A procedural review shall be given to all solvent metal cleaning equipment operators at least once each 12 months.

Reporting and Recordkeeping:

1. The permittee shall keep records of all types and amounts of solvents containing waste material from cleaning or degreasing operations transferred either to a contract reclamation service or to a disposal facility. The records also shall include maintenance and repair logs for both the degreaser and any associated control equipment. These records shall be kept current and made available for review on a monthly basis. The director may require additional recordkeeping if necessary to adequately demonstrate compliance with this rule.
2. A record shall be kept of solvent metal cleaning training required by this rule.
3. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
4. All records shall be maintained for five years.
5. The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 005

10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations

Emission Unit	Description
EU-009	Applying Adhesives to Make Thermal Barriers
EU-014	Paint Booth #2
EU-015A	Paint Booth #3 – Primer
EU-015B	Paint Booth #3 – Topcoat
EU-015C	Paint Booth #3 – Solvents
EU-031	Hand Painting
EU-032	Sealing/Lagging Insulation

Miscellaneous Metal Parts Coating Requirements:

1. The requirements for miscellaneous metal parts coating apply to the surface coating of all other miscellaneous metal parts or products under the SIC Code 35.
2. Emission limits:
   a) The permittee may not cause, allow, or permit the discharge into the ambient air of any VOC in excess of the following, as delivered to the coating applicator(s):

Metal Parts and Products Coatings		
Coating type	**Emission Limit in pounds of VOC per gallon of coating (minus water and exempt compounds)**	
	Air Dried	**Baked**
General, One Component	2.8	2.3
General, Multi Component	2.8	2.3
Camouflage	3.5	3.5
Clear Coat	4.3	4.3
Electric-Insulating Varnish	3.5	3.5
Etching Filler	3.5	3.5
Extreme High Gloss	3.5	3.0
Extreme Performance	3.5	3.0
Heat Resistant	3.5	3.0
High Performance Architectural	6.2	6.2
High Temperature	3.5	3.5
Metallic	3.5	3.5
Military Specification	2.8	2.3
Mold Seal	3.5	3.5
Pan Backing	3.5	3.5
Prefabricated Architectural	3.5	2.3
Pretreatment Coatings	3.5	3.5
Repair and Touch Up	3.5	3.0
Silicone Release	3.5	3.5
Solar Absorbent	3.5	3.0
Vacuum Metalizing	3.5	3.5
Drum, New, Exterior	2.8	2.8
Drum, New, Interior	3.5	3.5
Drum, Reconditioned, Exterior	3.5	3.5
Drum, Reconditioned, Interior	4.2	4.2

3. Method and determination of compliance. The miscellaneous metal parts coating emission limits shall be achieved through one of the following:
   a) VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per 10 CSR 10-5.330(5)(C)3.A. The surface coating unit is in compliance if this value is less than or equal to the miscellaneous metal parts coating emission limit;
   b) Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per 10 CSR 10-5.330(5)(C)4. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or
   c) Control system. If a control system is used to achieve compliance, the overall control system efficiency shall be 90 percent or greater.
4. Application equipment. One or a combination of the following equipment shall be used for coating application, unless achieving compliance by using an add-on control device:
   a) Electrostatic equipment;

b) HVLP spray equipment;
c) Flow coating;
d) Roller coating;
e) Dip coating, including electrodeposition;
f) Airless spray;
g) Air-assisted airless spray;
h) Ink jet technology; and
i) Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.

5. Work practices. Work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
   a) Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
   b) Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;
   c) Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
   d) Clean up spills immediately;
   e) Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one location to another; and
   f) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.
6. For metal parts coatings, the VOC emission limits do not apply to the following types of coatings and coating operations:
   a) Stencil coatings;
   b) Safety-indicating coatings;
   c) Solid film lubricants;
   d) Electric-insulating and thermalconducting coatings;
   e) Magnetic data storage disk coatings; and
   f) Plastic extruded onto metal parts to form a coating.
7. For metal parts coatings, the application equipment requirements do not apply to the following types of coatings and coating operations:
   a) Touch-up coatings;
   b) Repair coatings; and
   c) Textured coatings.
8. The limits for military specification coatings do not apply to coatings that meet the following criteria:
   a) The coating is applied to military equipment used for national defense;
   b) The coating performance is critical to the successful operation of the military equipment;
   c) The coating is mandated in a specification or contract and a substitution of coatings that meet the VOC limits is prohibited; and
   d) The director grants approval for the use of the coating at the installation.

Industrial Adhesive Coating Requirements:

1. Emission limits:

a) The permittee shall not cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Industrial Adhesive Coatings		
Category		**Emission Limit in pounds of VOC per gallon of coating (minus water and exempt compounds)**
Adhesives Applied to the Specific Substrates	Reinforced Plastic Composites	1.7
	Flexible Vinyl	2.1
	Metal	0.3
	Porous Material (Except Wood)	1.0
	Rubber	2.1
	Wood	0.3
	Other Substrates	2.1
Specialty Adhesive Application Processes	Ceramic Tile Installation	1.1
	Contact Adhesive	2.1
	Cove Base Installation	1.3
	Floor Covering Installation, Indoor	1.3
	Floor Covering Installation, Outdoor	2.1
	Floor Covering Installation, Perimeter Bonded Sheet Vinyl	5.5
	Metal to Urethane/Rubber Molding or Casting	7.1
	Motor Vehicle Adhesive	2.1
	Motor Vehicle Weatherstrip Adhesive	6.3
	Multipurpose Construction	1.7
	Plastic Solvent Welding, ABS	3.3
	Plastic Solvent Welding, Except ABS	4.2
	Sheet Rubber Lining Installation	7.1
	Single-Ply Roof Membrane Installation/Repair, Except EPDM Glue	2.1
	Structural Glazing	0.8
	Thin Metal Laminating	6.5
	Tire Repair	0.8
	Waterproof Resorcinol	1.4
Adhesive Primer Application Processes	Motor Vehicle Glass Bonding Primer	7.5
	Plastic Solvent Welding Adhesive Primer	5.4
	Single-Ply Roof Membrane Adhesive Primer	2.1
	Other Adhesive Primer	2.1

b) The VOC limits in 10 CSR 10-5.330(3)(K)2.A for adhesives or adhesive primers applied to particular substrates shall apply as follows:

i) If an adhesive is subject to a specific VOC limit in 10 CSR 10-5.330(3)(K)2.A, the specific limit is applicable rather than an adhesive-to-substrate limit; and
ii) When an adhesive is used to bond dissimilar substrates, the applicable substrate category with the highest VOC content shall be the limit.

2. Method and determination of compliance. The emission limits in 10 CSR 10-5.330(3)(K)2 shall be achieved through one of the following:
   a) VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in an adhesive application process, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per 10 CSR 10-5.330(5)(C)3.A. The adhesive application process is in compliance if this value is less than or equal to the emission limits in 10 CSR 10-5.330(3)(K)2;
   b) Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per 10 CSR 10-5.330(5)(C)4. The adhesive application process is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or
   c) Control system. If a control system is used to achieve compliance, the overall control system efficiency must be 85 percent or greater.
3. Application equipment. One or a combination of the following equipment shall be used for adhesive application, unless achieving compliance by using an add-on control device per 10 CSR 10-5.330(3)(K)3.C:
   a) Electrostatic spray;
   b) HVLP spray;
   c) Flow coat;
   d) Roller coat or hand application, including non-spray application methods similar to hand- or mechanically-powered caulking gun, brush, or direct hand application;
   e) Dip coat, including electrodeposition;
   f) Airless spray;
   g) Air-assisted airless spray;
   h) Ink jet technology; and
   i) Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.
4. Work practices. Work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
   a) Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
   b) Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;
   c) Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
   d) Clean up spills immediately;
   e) Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one location to another; and
   f) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

Test Methods:
The permittee shall refer to 10 CSR 10-5.330(5) for test methods applicable to this regulation.

Recordkeeping and Reporting:
1. The permittee shall keep records as necessary to determine compliance. Records kept should be appropriate for the facility, their products, and operations. These may include, as applicable, one or more of the following:
   a) Current list of coatings used and the VOC content as applied;
   b) Daily volume usage of each coating;
   c) Records of the weighted average VOC content for each coating type included in averaging for coating operations that achieve compliance through coating VOC content or a combination of coating VOC content and control system;
   d) Annual VOC emissions from surface coating equipment cleaning; and
   e) All test results to determine capture efficiency, control efficiency, and coating properties.
2. Records such as daily production rates may be substituted for actual daily coating use measurements provided the permittee submits a demonstration, approved by the director, that these records are adequate for the purposes of this rule.
3. If using an emission control device to achieve compliance, the permittee shall maintain daily records of key system operating parameters for emission control equipment including, but not limited to:
   a) Identification of the type of emissions control system used;
   b) Hours of operation;
   c) Routine and non-routine maintenance, including dates and duration of any outages;
   d) Records of test reports conducted;
   e) If employing a thermal or catalytic oxidizer to achieve compliance, the permittee shall comply with the following requirements:
      i) Continuous temperature monitoring and recording equipment shall be installed and operated to accurately measure the operating temperature(s) for the control device; and
      ii) The following information shall be collected and recorded each day of operation of the surface coating unit and the control device:
         (1) A log or record of the operating time for the control device, monitoring equipment, and the associated surface coating unit;
         (2) For thermal oxidizers, all three-hour periods of operation during which the average combustion temperature was more than 50ºF below the average combustion temperature during the most recent emission test that demonstrated that the surface coating unit was in compliance; and
         (3) For catalytic oxidizers, all three-hour periods of operation during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50ºF below the average temperature of the exhaust gases during the most recent emission test that demonstrated that the surface coating unit was in compliance, and all three-hour periods during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated that the surface coating operation was in compliance; and
   f) If employing a carbon adsorption system to achieve compliance, the permittee shall comply with the following requirements:
      i) The following types of monitoring and recording equipment shall be installed and operated for the carbon adsorption system:

(1) A continuous emission monitoring and recording system (CEMS) that is capable of accurately measuring and recording the concentration of organic compounds in the exhaust gases from the carbon adsorption system;
(2) Monitoring and recording equipment that is capable of accurately measuring and recording the total mass steamflow rate for each regeneration cycle of each carbon bed; and
(3) Monitoring and recording equipment that is capable of accurately measuring and recording the temperature of each carbon bed after regeneration (and after completion of any cooling cycle(s)); and

ii) The following information shall be collected and recorded each day of operation of the surface coating unit and the carbon adsorption system:
(1) A log or record of the operating time for the carbon adsorption system, monitoring equipment, and the associated surface coating unit;
(2) For a carbon adsorption system that employs a CEMS to measure and record the concentration of organic compounds in the exhaust gases, all three- hour periods of operation during which the average concentration level or reading in the exhaust gases is more than 20 percent greater than the exhaust gas organic compound concentration level or reading measured by the most recent performance test that demonstrated that the surface coating unit was in compliance;
(3) For a carbon adsorption system that employs monitoring and recording equipment to measure and record the total mass steam flow rate for each regeneration cycle of each carbon bed, all carbon bed regeneration cycles during which the total mass steam flow rate was more than ten percent below the total mass steam flow rate during the most recent performance test that demonstrated that the surface coating unit was in compliance; and
(4) For a carbon adsorption system that employs monitoring and recording equipment to measure and record the temperature of each carbon bed after regeneration (and after completion of any cooling cycle(s)) was more than ten percent greater than the carbon bed temperature during the most recent performance test that demonstrated that the surface coating unit was in compliance.

4. Records shall be retained by the permittee for a minimum of five years. These records shall be made available to the director upon request.
5. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of any of the emission limitations.
6. The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 006
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Unit	Description
EU-014	Paint Booth #2
EU-015A	Paint Booth #3 – Primer
EU-015B	Paint Booth #3 - Topcoat

Emission Limitations:

1. The permittee shall not cause or permit to be discharged into the atmosphere from these emission sources any visible emissions with an opacity greater than 20 percent.
   a) Exception: Existing sources in the St. Louis metropolitan area that emit less than 25 lb/hr of PM shall be limited to 40 percent opacity.
   b) Exception: The permittee may discharge into the atmosphere from any source of emissions for a period aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 40 percent.

Operational Limitations:

1. The permittee shall control particulate emissions from the paint booths using filters. The filters shall be equipped with a gauge or meter by no later March 1, 2014, which indicates the pressure drop across the filter. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them. Replacement filters shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
2. The permittee shall maintain and operate the dry filters according to the manufacturer's specifications and recommendations.
3. The permittee shall replace the filter if the pressure drop increases over 0.5 inches of water on the gauge.

Monitoring/Recordkeeping:

1. The permittee shall maintain an operating and maintenance log for each control device using Attachment D or an equivalent form approved by the Air Pollution Control Program. The log(s) shall include the following:
   a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions;
   b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
   c) Dates and times of all filter replacements.
2. The permittee shall retain a copy of the manufacturer's specifications.
3. Records may be kept in either written or electronic form.
4. These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
5. All records shall be maintained for five years.

Reporting:

The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 007 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	
Emission Unit	**Description**
EU-016	Sawing Lumber
EU-049	Process Water Evaporators

Emission Limitations:

1. The permittee shall not cause or permit to be discharged into the atmosphere from these emission sources any visible emissions with an opacity greater than 20 percent.
   a) Exception: Existing sources in the St. Louis metropolitan area that emit less than 25 lb/hr of PM shall be limited to 40 percent opacity.
   b) Exception: The permittee may discharge into the atmosphere from any source of emissions for a period aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 40 percent.

Monitoring:

1. The permittee shall conduct opacity readings on these emission units using the procedures contained in U.S. EPA Test Method 22. Readings are only required when the emission units are operating and when the weather conditions allow. If no visible emissions are observed using Method 22, then no further observations would be required. For emission units with visible emissions, the permittee would then conduct maintenance on the control device and/or emission unit to correct the emission or conduct a Method 9 observation.
2. The following monitoring schedule shall be maintained:
   a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then
   b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
   c) Observations shall be made once per month. If a violation is noted, monitoring reverts to weekly.
3. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
4. If at the time of permit issuance the installation has already progressed to biweekly or monthly observations, the permittee may continue from that point forward in the monitoring schedule reverting back to weekly monitoring if a violation is noted.

Recordkeeping:

1. The permittee shall maintain records of all observation results (see Attachments E & F, or equivalent forms approved by the Air Pollution Control Program), noting:
   a) Whether any air emissions (except for water vapor) were visible from the emission units and
   b) All emission units from which visible emissions occurred.
2. The permittee shall maintain records of any Method 9 opacity test performed in accordance with this permit condition.
3. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
4. All records must be maintained for five years.

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 008 10 CSR 10-6.400 Restriction of Emission of PM From Industrial Processes	
Emission Unit	**Description**
EU-016	Sawing Lumber

Emission Limitation:
The permittee shall not emit PM in excess of 7.58 lb/hr from EU-016 Sawing Lumber.

Monitoring/Recordkeeping:
1. The permittee shall retain the potential to emit calculations in Attachment G which demonstrate that the above emission limitation will never be exceeded. No further recordkeeping shall be required to demonstrate compliance with the emission limitation.
2. The calculation shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. All records shall be kept for a period of five years.

Reporting:
The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 009 10 CSR 10-6.020(2)(I)23 and 10 CSR 10-6.065(5)(C)2 Voluntary Limitation(s)	
Emission Unit	**Description**
EU-023	Sandblasting

Operational Limitation:
1. The permittee shall control PM emissions from EU-023 Sandblasting using a filter bag by no later than March 1, 2014. Replacement filter bags shall be kept on hand at all times. The filter bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance). The permittee shall shake and/or replace the filter bag if visible emissions are observed exiting the control device.
2. The permittee shall maintain and operate the filter bag according to the manufacturer's specifications and recommendations.

Monitoring/Recordkeeping:
1. The permittee shall monitor visible emissions from the filter bag at least once during every 24 hours of operation while the unit is operating.
2. The permittee shall maintain an operating and maintenance log for each control device using Attachment D or an equivalent form approved by the Air Pollution Control Program. The log(s) shall include the following:
   a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions;
   b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
   c) Dates and times of all filter replacements.
3. The permittee shall retain a copy of the manufacturer's specifications.
4. Records may be kept in either written or electronic form.

5. These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
6. All records shall be maintained for five years.

Reporting:
The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 010 10 CSR 10-6.020(2)(I)23 and 10 CSR 10-6.065(5)(C)2 Voluntary Limitation(s)	
Emission Unit	**Description**
EU-049	Process Water Evaporators

Operational Limitation:
1. The permittee shall control PM emissions from EU-049 Process Water Evaporators using a chevron mist eliminator with a mesh pad. The chevron mist eliminator with a mesh pad shall be equipped with a gauge or meter by no later than March 1, 2014, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.
2. The permittee shall maintain and operate the chevron mist eliminator and mesh pad according to the manufacturer's specifications and recommendations.

Monitoring/Recordkeeping:
1. The permittee shall monitor and record the operating pressure drop across the chevron mist eliminator and mesh pad at least once each week while the unit is operating. The operating pressure drop range shall be specified based on normal operation and manufacturer's recommendations.
2. The permittee shall maintain an operating and maintenance log for each control device using Attachment D or an equivalent form approved by the Air Pollution Control Program. The log(s) shall include the following:
   a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions; and
   b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
3. The permittee shall retain a copy of the manufacturer's specifications.
4. Records may be kept in either written or electronic form.
5. These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
6. All records shall be maintained for five years.

Reporting:
The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the CFR, CSR, and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

1. General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
2. Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
   a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exception:
      i) The open burning of household refuse is prohibited.
   b) Yard waste, with the following exception:
      i) The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed 16 ft^2. Any open burning shall be conducted only between the hours of 10 a.m. and 4 p.m. and is limited to areas outside of incorporated municipalities.
3. Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the permittee fails to comply with the conditions or any provisions of the permit.
4. The permittee may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least 200 yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if the permittee fails to comply with the provisions or any condition of the open burning permit.
   a) In a nonattainment area, as defined in 10 CSR 10-6.020(2)(N)5., the director shall not issue an open burning permit unless the permittee can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
5. Reporting and Recordkeeping. 40 CFR Part 60, Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in §60.2245 - §60.2260. The provisions of 40 CFR Part 60, Subpart CCCC promulgated as of September 22, 2005 shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with §60.2245 - §60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.
6. Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A – Test Methods, Method 9 – Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A – Method 9

promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

1. In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
   a) Name and location of installation;
   b) Name and telephone number of person responsible for the installation;
   c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
   d) Identity of the equipment causing the excess emissions;
   e) Time and duration of the period of excess emissions;
   f) Cause of the excess emissions;
   g) Air pollutants involved;
   h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
   i) Measures taken to mitigate the extent and duration of the excess emissions; and
   j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
2. The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
3. Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under §643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under §643.080 or §643.151, RSMo.
4. Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under §§643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
5. Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than 18 months. [10 CSR 10-6.065(5)(B)1.A(III)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(5)(C)(1)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request. [10 CSR 10-6.065(5)(C)(1)]

10 CSR 10-6.080 Emission Standards for HAP and
40 CFR Part 61, Subpart M - National Emission Standard for Asbestos

1. The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M - National Emission Standard for Asbestos.
2. The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.100 Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

1. The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
2. The permittee may be required by the director to file additional reports.
3. Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
4. The permittee shall submit a full EIQ for the 2014, 2017, and 2020 reporting years. In the interim years the installation may submit a Reduced Reporting Form; however, if the installation's emissions increase or decrease by more than five tons when compared to their last submitted full EIQ, the installation shall submit a full EIQ rather than a Reduced Reporting Form.
5. In addition to the EIQ submittal schedule outlined above, any permit issued under 10 CSR 10-6.060(5) or (6) triggers a requirement that a full EIQ be submitted in the first full calendar year after the permitted equipment initially operates.
6. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
7. The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.

8. The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the 12-month period immediately preceding the end of the reporting period.
9. The permittee shall collect, record, and maintain the information necessary to complete the required forms during each year of operation of the installation.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170 Restriction of PM to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

1. The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive PM emissions to go beyond the premises of origin in quantities that the PM may be found on surfaces beyond the property line of origin. The nature or origin of the PM shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
2. The permittee shall not cause nor allow to occur any fugitive PM emissions to remain visible in the ambient air beyond the property line of origin.
3. Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
   a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
   b) Paving or frequent cleaning of roads, driveways and parking lots;
   c) Application of dust-free surfaces;
   d) Application of water; and
   e) Planting and maintenance of vegetative ground cover.

Monitoring:

1. The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.
2. The permittee shall maintain the following monitoring schedule:
   a) The permittee shall conduct weekly observations for a minimum of eight consecutive weeks after permit issuance.
   b) Should no violation of this regulation be observed during this period then-
      i) The permittee may observe once every two weeks for a period of eight weeks.

ii) If a violation is noted, monitoring reverts to weekly.
iii) Should no violation of this regulation be observed during this period then-
(1) The permittee may observe once per month.
(2) If a violation is noted, monitoring reverts to weekly.

c) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

1. The permittee shall document all readings on Attachment C, or its equivalent, noting the following:
   a) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
   b) Whether equipment malfunctions contributed to an exceedance.
   c) Any violations and any corrective actions undertaken to correct the violation.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

1. The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
2. The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
3. The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations (Contained in State Implementation Plan)

The permittee shall not burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

The permittee may not cause, permit, or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

10 CSR 10-5.240 Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area

1. The Air Conservation Commission may prescribe more restrictive air quality control requirements that are more restrictive and more extensive than provided in regulations of general application for:
   a) Areas in which there are one or more existing sources and/or proposed new sources of PM in any circular area with a diameter of two miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from these sources by regulations of general application are or would be greater than 2000 tons per year or 500 pounds per hour.
   b) Areas in which there are one or more existing sources and/or proposed new sources of SO_2 in any circular area with a diameter of two miles from which the sum of SO_2 emissions from these sources allowed by regulations of general application are or would be greater than 1000 tons for any consecutive three months or 1000 pounds per hour.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
   b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
   c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
   d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in 40 CFR Part 82, Subpart B:
   a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
   b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A - Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B - Servicing of MVACs. The term "motor vehicle" as used in 40 CFR Part 82, Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in 40 CFR Part 82, Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program promulgated pursuant to 40 CFR Part 82, Subpart G - Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

10 CSR 10-6.280 Compliance Monitoring Usage

1. The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
   c) Any other monitoring methods approved by the director.
2. Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
   c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
3. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
   a) Applicable monitoring or testing methods, cited in:
      i) 10 CSR 10-6.030, “Sampling Methods for Air Pollution Sources”;
      ii) 10 CSR 10-6.040, “Reference Methods”;
      iii) 10 CSR 10-6.070, “New Source Performance Standards”;
      iv) 10 CSR 10-6.080, “Emission Standards for Hazardous Air Pollutants”; or
   b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the CFR and CSR for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

10 CSR 10-6.065(5)(E)2 Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(5)(C)1 General Recordkeeping and Reporting Requirements

1. Recordkeeping
   a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
   b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
2. Reporting
   a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
   b) The permittee shall submit a report of all required monitoring by:
      i) April 1st for monitoring which covers the January through December time period.
      ii) Exception. Monitoring requirements which require reporting more frequently than annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
   c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit.
   d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
      i) Notice of any deviation resulting from an emergency (or upset) condition as defined in 10 CSR 10-6.065(5)(C)1 shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
      ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.

e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.

f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(5)(C)1 Risk Management Plan Under §112(r)

1. The permittee shall comply with the requirements of 40 CFR Part 68 - Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by §68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:
   a) June 21, 1999;
   b) Three years after the date on which a regulated substance is first listed under §68.130; or
   c) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(5)(C)1.A General Requirements

1. The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
2. The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
3. The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
4. This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
5. The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.
6. Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

10 CSR 10-6.065(5)(C)1.C Reasonably Anticipated Operating Scenarios

Based upon the coatings and other materials currently being used, the installation is a minor source of HAP. The installation may switch to coatings and other materials containing higher HAP contents provided the following requirements are met:

- If usage of the new coating/material results in an increase in potential combined HAP emissions greater than 0.5 lb/hr, the permittee shall apply for a construction permit prior to using the new coating/material.
- If usage of the new coating/material results in an increase in potential individual HAP emissions greater than that individual HAP's respective SMAL, the installation permittee apply for a construction permit prior to using the new coating/material. The Air Pollution Control Program's current list of SMALs is available at: http://www.dnr.mo.gov/env/apcp/docs/cp-hapsmaltbl6.pdf
- If the new coating/material has a higher combined HAP content than the current coating/material being used, the permittee shall track combined HAP emissions from the entire installation on a monthly and 12-month rolling total basis. Combined HAP emissions from the entire installation shall be limited to 25.0 tons per consecutive 12-month period.
- If the new coating/material has a higher individual HAP content than the current coating/material being used, the permittee shall track the emissions of that individual HAP from the entire installation on a monthly and 12-month rolling total basis. Individual HAP emissions from the entire installation shall be limited to 10.0 per consecutive 12-month period.

10 CSR 10-6.065(5)(B)4, (C)1, and (C)3 Compliance Requirements

1. Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
2. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
   a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
   b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
   d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
3. All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
   a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
   b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
4. The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable

requirement specifies more frequent submission. These certifications shall be submitted to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances must be included in the compliance certifications. The compliance certification shall include the following:

a) The identification of each term or condition of the permit that is the basis of the certification;
b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
c) Whether compliance was continuous or intermittent;
d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(5)(C)1 Emergency Provisions

1. An emergency or upset as defined in 10 CSR 10-6.065(5)(C)1 shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
   a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
   b) That the installation was being operated properly,
   c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
   d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
2. Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(5)(C)5 Off-Permit Changes

1. Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
   a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification. Please note: changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
   b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, no later than the next annual emissions report. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and

c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by Nick Angelini, VP/GM DRS Marlo Coil. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the permittee shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the permittee to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(5)(E)4 Reopening-Permit for Cause

1. This permit may be reopened for cause if:
   a) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
   b) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
      i) The permit has a remaining term of less than three years;
      ii) The effective date of the requirement is later than the date on which the permit is due to expire; or
      iii) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
   c) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(5)(E)1.A Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

Attachment A

1194-016A VOC Tracking Sheet

Date:

Material Used (Name, Type)	**Amount Used (gal)**	**Density (lb/gal)**	**VOC Content (wt%)**	**VOC Emissions[1] (tons/month)**

Propane Combusted (1,000 gallons)	**VOC Emission Factor (lb/1,000 gallons)**	**VOC Emissions[2] (tons/month)**
19.25	0.8	0.008
Monthly VOC Emissions (tons/month):		
12-Month Rolling Total VOC Emissions[3] (tpy):		

[1]VOC Emissions = Amount Used (gal) x Density (lb/gal) x VOC Content (wt%) x 0.0005 (ton/lb).
[2]VOC Emissions = Propane Combusted (1,000 gallons) x VOC Emission Factor (lb/1,000 gallons) x 0.0005 (ton/lb).
[3]12-Month Rolling Total (tpy) = This month's Monthly VOC Emissions (tons) + the previous 11 months' Monthly VOC Emissions (tons). **The permittee is in compliance with Permit Condition 002 if 12-Month Rolling Total VOC emissions are less than 40.0 tpy.**

Attachment B
Plantwide VOC Tracking Sheet

Date:

Material Used (Name, Type)	Amount Used (gal)	Density (lb/gal)	VOC Content (wt%)	VOC Emissions[1] (tons/month)

Propane Combusted (1,000 gallons)	VOC Emission Factor (lb/1,000 gallons)	VOC Emissions[2] (tons/month)
	0.8	
Natural Gas Combusted (MMscf)	**VOC Emission Factor (lb/MMscf)**	**VOC Emissions (tons/month)**
0.89	5.3	0.002
Amount of Process Waste Water Treated (1,000,000 gallons)	**VOC Emission Factor (lb/1,000,000 gallons)**	**VOC Emissions (tons/month)**
0.073	8.9	0.0003
Monthly VOC Emissions (tons/month):		
12-Month Rolling Total VOC Emissions[3] (tpy):		

[1]VOC Emissions = Amount Used (gal) x Density (lb/gal) x VOC Content (wt%) x 0.0005 (ton/lb).
[2]VOC Emissions = Amount of Propane Combusted (1,000 gallons) x VOC Emission Factor (lb/1,000 gallons) x 0.0005 (ton/lb).
[3]12-Month Rolling Total (tpy) = This month's Monthly VOC Emissions (tons) + the previous 11 months' Monthly VOC Emissions (tons). **The permittee is in compliance with Permit Condition PW001 if 12-Month Rolling Total VOC emissions are less than 100.0 tpy.**

Attachment C
Fugitive Emissions Observations

Date	Time	Visible Emissions Beyond Property Boundary		Excess Emissions		
		No	Yes[1]	Cause	Corrective Action	Initial

[1]If there are visible emissions beyond the property boundary the permittee shall complete the excess emissions columns.

Attachment D
Inspection/Maintenance/Repair/Malfunction Log

Emission Unit # _____

Date/Time	Inspection/ Maintenance Activities	Malfunction Activities					
		Malfunction	Impact	Duration	Cause	Action	Initials

Attachment E
Method 22 Opacity Observations

Date	Time	Emission Source	Visible Emissions		Excess Emissions		
			No	Yes[1]	Cause	Corrective Action	Initial

[1]If there are visible emissions, the permittee shall complete the excess emissions columns and perform maintenance or conduct a Method 9 observation .

Attachment F
Method 9 Opacity Observations

Opacity Emissions Observations	
Company	Observer
Location	Observer Certification Date
Date	Emission Unit
Time	Control Device

Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY

Set Number	Time		Opacity	
	Start	End	Sum	Average

Readings ranged from _____ to _____ % opacity.

Was the emission unit in compliance at the time of evaluation? _____ _____ _____
YES NO Signature of Observer

Attachment G
10 CSR 10-6.400 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-6.400 *Restriction of Emission of PM From Industrial Processes.*

Allowable PM Emission Rate (E) for Process Weights (P) of less than or equal to 30 tph is calculated by:

$$E\ (lb/hr) = 4.1(P)^{0.67}$$

Allowable PM E for P greater than 30 tph is calculated by:

$$E\ (lb/hr) = 55(P)^{0.11} - 40$$

Potential PM Emission Rate = MHDR (tph) x Emission Factor (lb/ton)

Uncontrolled Calculations

Emission Unit	Description	MHDR (tph)	Emission Factor (lb/ton)	Emission Factor Source	Potential PM Emission Rate (lb/hr)	PM Emission Limit (lb/hr)
EU-016	Sawing Lumber	2.5	0.2	Project 2002-06-059	0.50	7.58

EU-016 Sawing Lumber is in compliance with this regulation without the aid of a control device.

STATEMENT OF BASIS

Voluntary Limitations
In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(5)(C)1.A(VI), if these limitations are exceeded, the installation immediately becomes subject to 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit. It is the permittee's responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than 18 months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

Permit Reference Documents
These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1. Intermediate Operating Permit Renewal Application, received May 27, 2011
2. Intermediate Operating Permit Application Amendment, received May 23, 2013
3. 2012, 2011, 2010, 2009, and 2008 EIQs
4. U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition
5. U.S. EPA's Factor Information Retrieval System (FIRE)
6. Construction Permit 0489-001A
7. Construction Permit 1194-016A
8. Intermediate Operating Permit OP2006-093, Project 2002-06-059
9. No Construction Permit Required, Project 2005-03-032
10. Construction Permit 102012-002

Other Air Regulations Determined Not to Apply to the Operating Permit
The Air Pollution Control Program has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds* is not applicable to the installation and has not been applied within this permit. EU-007 Boiler, EU-008 Warehouse Space Heater, EU-015 Water Heater, EU-015D Paint Booth #3 Drying Oven, and EU-043 Natural Gas Burner Testing are all exempt per 10 CSR 10-6.260(1)(A)2 as they exclusively combust pipeline grade natural gas or liquefied petroleum gas.

10 CSR 10-6.405 *Restriction of PM Emissions From Fuel Burning Equipment Used For Indirect Heating* is not applicable to the installation and has not been applied within this permit. EU-007 Boiler, EU-008 Warehouse Space Heater, EU-015 Water Heater, EU-015D Paint Booth #3 Drying Oven, and EU-043 Natural Gas Burner Testing are deemed in compliance with this regulation per 10 CSR 10-6.405(1)(C) as they are fueled by propane and natural gas.

Construction Permits

Construction Permit 102012-002, Issued October 5, 2012:

- This de minimis construction permit is for the installation of a fifth fin press under EU-002.
- Special Condition 1 limited EU-002, EU-009, EU-010, EU-014, EU-015, and EU-018 to less than 100 tpy VOC. This special condition was not included in the permit as it is less stringent than Permit Condition PW001 which limits the entire installation to less than 100 tpy VOC.
- Special Condition 2 has been included in the permit (see Permit Condition 001).
- Special Condition 3 contained the recordkeeping and reporting requirements for Special Condition 1. As Special Condition 1 was not included in the permit, neither was Special Condition 3.

Construction Permit 1194-016A, Issued November 2, 1994:

- This de minimis construction permit is for modifications to paint line #3 (EU-015A, EU-015B, EU-015C, and EU-015D).
- Special Conditions 1 – 3 have been applied within this permit (see Permit Condition 002).
- Special Condition 4 requires the installation to comply with 10 CSR 10-5.330. 10 CSR 10-5.330 has been applied in Permit Condition 005.
- Special Condition 5 requires paint line #3 to operate control devices contained within their application. The installation is required to operate filters on the paint booth by Permit Condition XXX; therefore, Special Condition 5 was not included in the permit.
- Special Condition 6 relates to odor violations and was not applied within the permit as 10 CSR 10-6.165 *Restriction of Emission of Odors* was applied within Section IV Core Permit Requirements.

Construction Permit 0489-001A, Issued April 3, 1989:

- This de minimis construction permit is for the installation of paint line #3.
- The special conditions of this permit were superseded by Construction Permit 1194-016A.

New Source Performance Standards Applicability

40 CFR Part 60, Subpart Dc – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* is not applicable to the installation and has not been applied within this permit. EU-007 Boiler has an MHDR of 1.5 MMBtu/hr and EU-015 Water Heater has an MHDR of 2.4 MMBtu/hr each of which is less than the 10 MMBtu/hr threshold of §60.40c(a).

40 CFR Part 60, Subpart TT – *Standards of Performance for Metal Coil Surface Coating* is not applicable to the installation and has not been applied within this permit. The installation receives metal coil which then goes through EU-002 (5) Fin Machines were it is flattened. The installation does not perform any surface coating prior to the metal being flattened.

Maximum Achievable Control Technology Applicability

40 CFR Part 63, Subpart T - *National Emission Standards for Halogenated Solvent Cleaning* is not applicable to the installation and has not been applied within this permit. EU-004 Parts Washer does not use any solvent containing methylene chloride (75-09-2), perchloroethylene (127-18-4), trichloroethylene (79-01-6), 1,1,1-trichloroethane (71-55-6), carbon tetrachloride (56-23-5), or chloroform (67-66-3) and thus does not meet the applicability requirements of §63.460(a).

40 CFR Part 63, Subpart MMMM – *National Emission Standards for HAP for Surface Coating of Miscellaneous Metal Parts and Products* is not applicable to the installation and has not been applied

within this permit. The installation is an area source of HAP and thus does not meet the applicability requirements of §63.3881(b).

40 CFR Part 63, Subpart NNNN – *National Emission Standards for HAP: Surface Coating of Large Appliances* is not applicable to the installation and has not been applied within this permit. The installation is an area source of HAP and thus does not meet the applicability requirements of §63.4081(a).

40 CFR Part 63, Subpart SSSS – *National Emission Standards for HAP: Surface Coating of Metal Coil* is not applicable to the installation and has not been applied within this permit. The installation is an area source of HAP and thus does not meet the applicability requirements of §63.5090(a).

40 CFR Part 63, Subpart DDDDD – *National Emission Standards for HAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* is not applicable to the installation and has not been applied within this permit. The installation is an area source of HAP and thus does not meet the applicability requirements of §63.7485.

40 CFR Part 63, Subpart HHHHHH – *National Emission Standards for HAP: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources* is not applicable to the installation and has not been applied within this permit. The installation is an area source that spray applies coating to metals; however, the coatings used by the installation do not contain chromium, lead, manganese, nickel, or cadmium and thus do not meet the applicability requirements of §63.11169(c).

40 CFR Part 63, Subpart JJJJJJ – *National Emission Standards for HAP for Industrial, Commercial, and Institutional Boilers Area Sources* is not applicable to the installation and has not been applied within this permit. EU-007 Boiler and EU-015 Water Heater combust propane and are considered *gas-fired boilers* as defined at §63.11237 and thus are exempt per §63.11195(e).

40 CFR Part 63, Subpart WWWWWW – *National Emission Standards for HAP: Area Source Standards for Plating and Polishing Operations* is not applicable to the installation and has not been applied within this permit. EU-041 Electroless Plating with nickel nitrate is exempt from this regulation per §63.11505(d)(6) as the plating tank's final bath contents "as used" contain less than 0.1 wt% nickel. The manufacturer indicated the material contains 0.5% nickel nitrate (nickel nitrate MW = 182.7, nickel MW = 58.69) or 0.16% nickel. The material is combined with equal parts water (50/50) to create the final bath; therefore, the final bath contents are only 0.08% nickel.

40 CFR Part 63, Subpart XXXXXX – *National Emission Standards for HAP Area Source Standards for Nine Metal Fabrication and Finishing Sources* is not applicable to the installation and has not been applied within this permit. The installation has a primary SIC Code of 3585 which is not one of the nine SIC Codes (3621, 3699, 3499, 3443, 3441, 3433, 3531, 3533, 3561, 3462, 3399, and 3494) covered by this regulation.

National Emission Standards for Hazardous Air Pollutants Applicability
40 CFR Part 61, Subpart M – *National Emission Standards for Asbestos* is applicable to the installation and has been applied within this permit (see Section IV. Core Permit Requirements).

Updated Potential to Emit (PTE) for the Installation

Pollutant	Potential to Emit (tpy)[1]
CO	1.89
GHG	3,216.96
NO_x	3.27
PM	9.66
PM_{10}	9.50
PM_{25}	1.10
SO_x	0.03
VOC	286.58[2]
HAP	17.11
Xylene	8.59
Manganese Compounds	4.75
Ethylene Glycol	4.01
Ethylbenzene	2.11
Toluene	0.86
Cobalt Compounds	0.81
Hexane	0.68
Methyl Isobutyl Ketone	0.51
Hydrochloric Acid	0.40
Methanol	0.38
Dibutyl Phthalate	0.38
Glycol Ethers	0.21
Antimony Compounds	0.12
Naphthalene	0.10
Cumene	0.04
Methyl Methacrylate	0.01
Isopropylbenzene	0.01

[1]Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation:

- The PTE includes control for the paint booth filters required by Permit Condition 006, the filter bag required by Permit Condition 009, and the chevron mist eliminator required by Permit Condition 010.

[2]The installation is limited to 100 tpy VOC by Permit Condition PW001 in order to obtain this Intermediate Operating Permit.

Other Regulatory Determinations

10 CSR 10-5.300 *Control of Emissions from Solvent Metal Cleaning* is applicable to the installation and has been applied within this permit (see Permit Conditions 003 and 004). EU-018 Metal Degreasing is exempt from this regulation as 10 CSR 10-5.300(1)(D)1.E exempts hand cleaning/wiping operations.

10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants* is applicable to the installation and has been applied within this permit (see Permit Conditions 006 and 007). The following emission units are subject to this regulation, but as potential PM emissions from each emission unit are less than 0.5 lb/hr, no further monitoring, recordkeeping, or reporting is required at this time:

Emission Unit	Description
EU-007	Boiler
EU-008	Warehouse Space Heater
EU-011	Welding Exhaust Vents
EU-012	Brazing Process Exhaust Vents
EU-015	Water Heater
EU-015D	Paint Booth #3 Drying Oven
EU-043	Natural Gas Burner Testing
EU-044	Plasma Cutting

EU-023 Sandblasting is subject to this regulation; however, the installation has accepted a voluntary condition (Permit Condition 009) to maintain zero visible emissions from the control device – a more stringent requirement.

10 CSR 10-6.400 *Restriction of Emission of PM From Industrial Processes* is applicable to the installation and has been applied within this permit (see Permit Conditions 008 and 010). The following emission units are exempt from this regulation per 10 CSR 10-6.400(1)(B)12 as they have potential PM emissions of less than 0.5 lb/hr at MHDR:

Emission Unit	Description
EU-007	Boiler
EU-008	Warehouse Space Heater
EU-011	Welding Exhaust Vents
EU-012	Brazing Process Exhaust Vents
EU-015	Water Heater
EU-015D	Paint Booth #3 Drying Oven
EU-043	Natural Gas Burner Testing
EU-044	Plasma Cutting

The following coating operations are exempt from this regulation per 10 CSR 10-6.400(1)(B)14 as they are required to operate filters achieve at least 95 percent control efficiency by Permit Condition 006:

Emission Unit	Description
EU-014	Paint Booth #2
EU-015A	Paint Booth #3 – Primer
EU-015B	Paint Booth #3 - Topcoat

EU-023 Sandblasting and EU-049 Process Water Evaporators are exempt from this regulation per 10 CSR 10-6.400(1)(B)15 as Permit Conditions 009 and 010 are federally enforceable conditions requiring the use of a control device that controls at least 90 percent of PM emissions.

EU-019 Waste Oil Space Heater was dismantled and removed from the installation in 2013.

The installation no longer performs abrasive sawing under EU-033.

EU-006 Kerosene Fuel Storage Tank was removed from the installation by their supplier in 2012.

EU-030 Grinding, EU-042 Portable Pressure Washing Equipment, EU-043 Natural Gas Burning Testing, EU-045 Forklift Engines, EU-047 (2) Portable Kerosene Space Heaters, and EU-052 Portable Propane-fired Heat Gun or Shrinking Plastic Packaging are not emission units subject to permitting due to their portable/mobile nature.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis
Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons.

1. The specific pollutant regulated by that rule is not emitted by the installation.
2. The installation is not in the source category regulated by that rule.
3. The installation is not in the county or specific area that is regulated under the authority of that rule.
4. The installation does not contain the type of emission unit which is regulated by that rule.
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

Alana L. Rugen, P.E.
Environmental Engineer III

Mr. Nick Angelini
Engineered Coil Co.
6060 Highway PP
High Ridge, MO 63049

Re: Engineered Coil Co., 099-0052
Permit Number: **OP2013-078**

Dear Mr. Angelini:

Enclosed with this letter is your intermediate operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo §643.078.16 and §621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If you send your appeal by registered or certified mail, we will deem it filed on the date you mailed it. If you send your appeal by a method other than registered or certified mail, we will deem it filed on the date the AHC receives it.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Alana Rugen at the Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS/ark

Enclosures

c: St. Louis Regional Office
PAMS File: 2011-05-077