Missouri Department of Natural Resources
Air Pollution Control Program

PART 70
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.

Operating Permit Number: OP2011-037
Expiration Date: AUG 1 1 2016
Installation ID: 510-0027
Project Number: 2006-09-027

Installation Name and Address
Precoat Metals
4301 South Spring Avenue
St. Louis, MO 63116
City of St. Louis

Parent Company's Name and Address
Sequa Corporation
Three University Plaza
Hackensack, NJ 07601

Installation Description:
Precoat Metals operates two continuous metal coil surface coating lines. Coil Line 1 consists of an aqueous pretreatment section (cleaning, rinsing, chemical treatment), a prime coating section (coater and oven), a printer coater and ultraviolet curing station and a finish coating section (coater, oven and combined oxidizer for the prime and finish ovens and dual fired waste heat boiler). Coil Line 2 consists of an aqueous pretreatment section (cleaning, scrubbing, rinsing, and chemical treatment), a prime coating section (coater, oven, and oxidizer) and a finish coating section (coater, oven, oxidizer, and combined waste heat boiler). The installation has six bulk solvent storage tanks, a gas-fired boiler, and a variety of maintenance activities including grinding, degreasing, and sandblasting.

AUG 12 2011
Effective Date

Kyra L Moore
Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Precoat Metals operates two continuous metal coil surface coating lines. Coil Line 1 consists of an aqueous pretreatment section (cleaning, rinsing, chemical treatment), a prime coating section (coater and oven), a printer coater and ultraviolet curing station and a finish coating section (coater, oven and combined oxidizer for the prime and finish ovens and dual fired waste heat boiler). Coil Line 2 consists of an aqueous pretreatment section (cleaning, scrubbing, rinsing, and chemical treatment), a prime coating section (coater, oven, and oxidizer) and a finish coating section (coater, oven, oxidizer, and combined waste heat boiler). The installation has six bulk solvent storage tanks, a gas-fired boiler, and a variety of maintenance activities including grinding, degreasing, and sandblasting. The emissions for the past five years for the installation are listed below:

Reported Air Pollutant Emissions, tons per year					
Pollutants	2009	2008	2007	2006	2005
Particulate Matter $\leq$ Ten Microns (PM_{10})	0.34	0.46	0.52	0.56	0.60
Particulate Matter $\leq$ 2.5 Microns ($PM_{2.5}$)	0.00	0.00	0.00	0.00	0.00
Sulfur Oxides (SO_x)	0.03	0.04	0.04	0.04	0.05
Nitrogen Oxides (NO_x)	4.48	6.07	6.86	7.35	7.87
Volatile Organic Compounds (VOC)	19.01	29.21	26.46	25.32	27.59
Carbon Monoxide (CO)	3.77	5.10	5.76	6.17	6.61
Lead (Pb)	0.00	0.00	0.00	0.00	0.00
Hazardous Air Pollutants (HAPs)*	10.82	10.82	10.82	9.80	10.25
Ammonia (NH_3)	0.00	0.00	0.00	0.00	0.00

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 #	EIQ Reference #	Description of Emission Unit
EU0010		Metal Coil Prime Coat Operation-Line #1
EU0020		Metal Coil Finish Coat Operation-Line #1
EU0040		Metal Coil Prime Coat Operation-Line #2
EU0050		Metal Coil Finish Coat Operation-Line #2
EU0060		Boiler
EU0070		Waste Heat Boiler – Line #1
EU0080		Bulk Unloading into Tote Tanks
EU0090		Maintenance Parts Washer
EU0100		Maintenance Parts Washer

EMISSION UNITS WITHOUT LIMITATIONS

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

Description of Emission Source

0.82 MMBtu/hr Radiant Heaters
1.88 MMBtu/hr Space Heaters
0.316 & 0.561 MMBTU/hr natural gas burning Emergency Generators
6-560 gallon solvent storage tanks-no longer used
3-Natural gas burners for thermal oxidizers (2 for Line 2, 1 for Line 1)
Line 1 Printer Water Cooler
Line 1 Finish Water Cooler
Line 2 Prime Water Cooler
Line 2 Finish Water Cooler
Multiple open top tanks for alkaline cleaning of coil
Multiple open top tanks for water rinse of coil
Multiple open top tanks for inorganic chemical treatment of coil
Paint and solvent container storage vaults for Line 1
Paint and Solvent Storage vault with four (4) rooms
Roll grinder
Portable enclosed sand blaster
Solvent cleanup of coating applicators
Rub Test using Methyl Ethyl Ketone & Hexane
Printer Coat Operation with ultraviolet curing station (EU0030)

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 as of the date that this permit is issued.

Permit Condition PW001

10 CSR 10-6.060 Construction Permits Required
St. Louis City Air Pollution Control Program Construction Permit 95-04-047F

Emission Limitation:

1) The permittee shall not allow VOC emissions from Coating Line #1 and Coating Line #2 combined to exceed 164.4 tons per rolling twelve (12)-month period.
2) Usage of paint plus reduction solvent VOC's at the installation shall be limited to less than or equal to 10.1 million pounds per consecutive twelve (12)-month period.
3) Overall control efficiency for Coating Line #1 shall be 95.7 percent or greater as demonstrated during performance testing conducted in December of 1997.
4) Overall control efficiency for Coating Line #2 shall be 95.7 percent or greater as demonstrated during performance testing conducted in October of 1994.

Monitoring:

1) The permittee shall monitor the daily usage of coating and reduction solvent.
2) The permittee shall continuously monitor the combustion chamber temperatures of each thermal oxidizer when in operation.

Recordkeeping:

1) The permittee shall maintain a record of the daily usage of coating and reduction solvent for each coating operation.
2) The permittee shall maintain a record of the VOC emission calculations for Coating Line #1 and Coating Line #2.
3) The permittee shall maintain a record of the annual Hazardous Air Pollutant emissions.
4) The permittee shall maintain a continuous record of the combustion chamber temperatures for each thermal oxidizer when in operation.

Reporting:

The permittee shall submit to the St. Louis City Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103, a quarterly report detailing the monthly paint and reduction solvent usage and the monthly VOC emissions. Overall control efficiency as determined by stack testing shall be used to calculate emissions.

Permit Condition PW002

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitation:

1) No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any source in the St. Louis metropolitan area any visible emissions with an opacity greater than 20 percent.

2) Exceptions:
   a) Existing sources in the St. Louis metropolitan area that are not incinerators and emit less than twenty-five (25) pounds per hour (lbs/hr) of particulate matter shall be limited to 40 percent opacity.
   b) A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 40 percent.

Monitoring:

1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
2) The following monitoring schedule must be maintained:
   a) Observations must be made once per month. If a violation is noted, then
   b) Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks. Should no violation of this regulation be observed during this period then monitoring reverts to monthly monitoring.

Recordkeeping:

1) The permittee shall maintain records of all observation results (see Attachment A), noting:
   a) Whether any air emissions (except for water vapor) were visible from the emission units,
   b) All emission units from which visible emissions occurred, and
   c) Whether the visible emissions were normal for the process.
2) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (See Attachment B)

Reporting:

1) The permittee shall report to the City of St. Louis Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103, and the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as 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 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 as of the date that this permit is issued.

EU0010 through EU0020 – Coating Line 1 Equipped with thermal oxidizers to control VOCs &HAPs			
Emission Unit	Description	Manufacturer/ Model #	2009 EIQ Reference #
EU0010	Line #1 Prime Coater and Curing Oven	Waldron-coater/ Precoat-oven	EP-01/EP-02
EU0020	Line #1 Finish Coater and Curing Oven	Waldron-coater/ Ross-oven	EP-04/EP-05

Permit Condition EU0010-001 through EU0020-001

10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60 Subpart TT Standards of Performance for Metal Coil Surface Coating

Emission Limitation:
On and after the date on which §60.8 requires a performance test to be completed, each owner or operator subject to 40 CFR Part 60 Subpart TT shall not cause to be discharged into the atmosphere more than: [40 CFR 60.462(a)]

1) 0.14 kilogram VOC per liter (kg VOC/l) of coating solids applied for each calendar month for each affected facility that continuously uses an emission control device(s) operated at the most recently demonstrated overall efficiency; or [40 CFR 60.462(a)(2)]
2) Ten percent of the VOC's applied for each calendar month (90 percent emission reduction) for each affected facility that continuously uses an emission control device(s) operated at the most recently demonstrated overall efficiency; or [40 CFR 60.462(a)(3)]
3) A value between 0.14 (or a 90 percent emission reduction) and 0.28 kg VOC/l of coating solids applied for each calendar month for each affected facility that intermittently uses an emission control device operated at the most recently demonstrated overall efficiency. [40 CFR 60.462(a)(4)]

Performance Test:
The owner or operator shall conduct an initial performance test as required under 40 CFR 60.8(a) and thereafter a performance test for each calendar month for each affected facility according to the procedures in 40 CFR 60.463.

Monitoring:
1) Where compliance with the numerical limit specified in §60.462(a)(2) is achieved through the use of low VOC-content coatings without the use of emission control devices or through the use of higher VOC-content coatings in conjunction with emission control devices, the owner or operator shall compute and record the average VOC content of coatings applied during each calendar month for each affected facility, according to the equations provided in §60.463. [40 CFR 60.464(a)]

2) Where compliance with the limit specified in §60.462(a)(4) is achieved through the intermittent use of emission control devices, the owner or operator shall compute and record for each affected facility the average VOC content of coatings applied during each calendar month according to the equations provided in §60.463. [40 CFR 60.464(b)]
3) If thermal incineration is used, each owner or operator subject to the provisions of this subpart shall install, calibrate, operate, and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with §60.462(a)(2), (3), or (4). This device shall have an accuracy of ±2.5 °C. or ±0.75 percent of the temperature being measured expressed in degrees Celsius, whichever is greater. [40 CFR 60.464(c)]

Recordkeeping:

1) The permittee shall record all periods (during actual coating operations) in excess of three hours during which the average temperature in any thermal incinerator used to control emissions from an affected facility remains more than 28 °C (50 °F) below the temperature at which compliance with §60.462(a)(2), (3), or (4) was demonstrated during the most recent measurement of incinerator efficiency required by §60.8. The records required by §60.7 shall identify each such occurrence and its duration. [40 CFR 60.464(c)]
2) Each owner or operator subject to the provisions of this subpart shall maintain at the source, for a period of at least two years, records of all data and calculations used to determine monthly VOC emissions from each affected facility and to determine the monthly emission limit, where applicable. Where compliance is achieved through the use of thermal incineration, each owner or operator shall maintain, at the source, daily records of the incinerator combustion temperature. If catalytic incineration is used, the owner or operator shall maintain at the source daily records of the gas temperature, both upstream and downstream of the incinerator catalyst bed. [40 CFR 60.465(e)]

Reporting:

1) Following the initial performance test, the owner or operator of an affected facility shall identify, record, and submit a written report to the City of St. Louis Air Pollution Control Program, Missouri Department of Natural Resources Air Pollution Control Program and the Administrator every calendar quarter of each instance in which the volume-weighted average of the local mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under §60.462. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Administrator semi-annually. [40 CFR 60.465(c)]
2) The owner or operator of each affected facility shall also submit reports at the frequency specified in §60.7(c) when the incinerator temperature drops as defined under §60.464(c). If no such periods occur, the owner or operator shall state this in the report. [40 CFR 60.465(d)]

Permit Condition EU0010-002 through EU0020-002

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

Emission Limitation:

The permittee shall not emit or discharge to the atmosphere any VOC from the line I coating operation in excess of 2.6 lbs VOC/gallon (0.31 kilograms per liter) coating (minus water and non-VOC organic compounds), the amount allowed in Table B of §5.330(4)(B).

Monitoring:

1) Compliance with the limitations of this regulation shall be determined by the following methods, as applicable and appropriate.

2) Compliance with emission limits may be demonstrated using the method referenced in 10 CSR 10-6.030(14)(C) using the one-hour bake. Emission performance shall be on the basis of a daily volume-weighted average of all coatings used in each surface coating operation as delivered to the coating applicator(s) on a coating line. The daily volume-weighted average ($DAVG_{vw}$) is calculated by the following formula:

$$DAVG_{VW} = \frac{\sum_{i=1}^{n}(A_i \times B_i)}{C}$$

Where:

A = daily gallons of each coating used (minus water and exempt solvents) in a surface coating operation.

B = pounds of VOC per gallon of coating (minus water and exempt solvents).

C = total daily gallons coating used (minus water and exempt solvents) in a surface coating operation.

n = number of all coatings used in a surface coating operation

3) Compliance with the emission limits in Table B may also be demonstrated on pounds of VOC per gallon of coating solids basis. The determination is made by first converting the emission limit in Table B to pounds of VOC per gallon of coating solids as shown in the following three (3) steps:

(1) $$\frac{lbs\ VOC / gal\ coating\ (from\ Table\ B)}{7.36\ lbs / gal\ (\text{average density of solvents used to originally establish the emission limit})} = Volume\ \ fraction\ of\ VOC$$

(2) $$1 - Volume\ \ fraction\ of\ VOC = Volume\ \ fraction\ solids$$

(3) $$\frac{lbs\ VOC / gal\ coating\ (from\ Table\ B)}{Volume\ \ fraction\ of\ \ solids} = \frac{lbs\ VOC}{gal\ coatings\ solids}$$

This value (from step 3) is the new emission limit. It is equivalent to the emission limit in Table B on a coating solids basis. The VOC per gallon of coating solids for each coating solids used is then determined using the method referenced in 10 CSR 10-6.030(14)(C) using the one-hour bake. The composite daily weighted average of pounds of VOC per gallon of coating solids as tested for in the actual coatings used is compared to the new emission limit. Source operations on a coating line using coatings with a composite actual daily weighted average value less than or equal to the new emission limit, are in compliance with this rule; or

4) Compliance with the emission limits in §5.330(4)(B), Table B may be determined on a pounds of VOC per gallon of coating solids applied basis. An owner or operator may request his/her emission limit be modified to be equivalent to the emission limit in §5.330(4)(B), but in emission units of pounds of VOC emitted per gallon of coating solids applied. This new emission limit is derived by dividing the emission limit from §5.330(5)(B)2. by an appropriate value for transfer efficiency (TE) as determined by the Director. Prior to this determination, the owner or operator shall demonstrate to the satisfaction of the Director that an adequate, fully replicable TE test method exists for the

source operation. Upon approval of the TE demonstration, the Director will develop an emission limit equivalent to the applicable emission limit in §5.330(4)(B).

Recordkeeping:

1) The permittee shall keep records detailing specific VOC sources as necessary for the Director to determine daily compliance (see Attachments C and D). These may include:
   a) Daily records of the type and the quantity of coatings used daily;
   b) The coating manufacturer's formulation data for each coating on forms provided or approved by the Director;
   c) Daily records of the type and quantity of solvents for coating, thinning, purging and equipment cleaning used;
   d) All test results to determine capture and control efficiencies, TEs and coating makeup;
   e) Daily records of the type and quantity of waste solvents reclaimed or discarded daily;
   f) Daily records of the quantity of pieces or materials coated daily; and
   g) Any additional information pertinent to determining compliance.
2) Records such as daily production rates may be substituted for actual daily coating use measurements provided the owner submits a demonstration approved by the Director that these records are adequate for the purposes of this rule.

Reporting:

The permittee shall provide a written report to the City of St. Louis Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103, and to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than twenty (20) days after the permittee determined that the emission unit exceeded the emission limitation.

Permit Condition EU0010-003 through EU0020-003

10 CSR 10-6.065 Maximum Achievable Control Technology Regulations
40 CFR Part 63 Subpart SSSS National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil

Emission Limitation:

1) The permittee must limit organic HAP emissions to the level specified in §63.5120(a)(2): [§63.5120(a)]
   a) No more than 0.046 kilogram (kg) of organic HAP per liter of solids applied during each 12-month compliance period. [§63.5120(a)(2)]

Operating Limitations:

For any coil coating line for which you use an add-on control device, unless you use a solvent recovery system and conduct a liquid-liquid material balance according to §63.5170(e)(1), you must meet the applicable operating limits specified below (from Table 1 to 40 CFR 63 Subpart SSSS). You must establish the operating limits during the performance test according to the requirements in §63.5160(d)(3). You must meet the operating limits at all times after you establish them. [§63.5121(a)]

For the following device …	You must meet the following operating limit …	And you must demonstrate continuous compliance with the operating limit by …
Thermal oxidizer	The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to §63.5160(d)(3)(i)	i. Collecting the combustion temperature data according to §63.5150(a)(3); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average combustion temperature at or above the temperature limit.
Emission capture system	Develop a monitoring plan that identifies operating parameter to be monitored and specifies operating limits according to §63.5150(a)(4)	Conducting monitoring according to the plan §63.5150(a)(4).

Monitoring/Compliance Demonstration:

1) Control Device Monitoring Requirements [§63.5150]:
   a) To demonstrate continuing compliance with the standards, you must monitor and inspect each capture system and each control device required to comply with §63.5120 following the date on which the initial performance test of the capture system and control device is completed. You must install and operate the monitoring equipment as specified §63.5150(a)(3) and (4). [§63.5150(a)]
      i) *Temperature monitoring of oxidizers*. If you are complying with the requirements of the standards in §63.5120 through the use of an oxidizer and demonstrating continuous compliance through monitoring of an oxidizer operating parameter, you must comply with §63.5150(a)(3)(i) through (iii). [§63.5150(a)(3)]
         (1) Install, calibrate, maintain, and operate temperature monitoring equipment according to manufacturer's specifications. The calibration of the chart recorder, data logger, or temperature indicator must be verified every three months; or the chart recorder, data logger, or temperature indicator must be replaced. You must replace the equipment either if you choose not to perform the calibration, or if the equipment cannot be calibrated properly. Each temperature monitoring device must be equipped with a continuous recorder. The device must have an accuracy of ±1 percent of the temperature being monitored in degrees Celsius, or ±1 °Celsius, whichever is greater. [§63.5150(a)(3)(i)]
         (2) For an oxidizer other than a catalytic oxidizer, to demonstrate continuous compliance with the operating limit established according to §63.5160(d)(3)(i), you must install the thermocouple or temperature sensor in the combustion chamber at a location in the combustion zone. [§63.5150(a)(3)(ii)]
      ii) *Capture system monitoring*. If you are complying with the requirements of the standards in §63.5120 through the use of a capture system and control device, you must develop a capture system monitoring plan containing the information specified in §63.5150(a)(4)(i) and (ii). You must monitor the capture system in accordance with §63.5150(a)(4)(iii). You must make the monitoring plan available for inspection by the permitting authority upon request. [§63.5150(a)(4)]

(1) The monitoring plan must identify the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained, explain why this parameter is appropriate for demonstrating ongoing compliance, and identify the specific monitoring procedures. [§63.5150(a)(4)(i)]
(2) The plan also must specify operating limits at the capture system operating parameter value, or range of values, that demonstrates compliance with the standards in §63.5120. The operating limits must represent the conditions indicative of proper operation and maintenance of the capture system. [§63.5150(a)(4)(ii)]
(3) You must conduct monitoring in accordance with the plan. [§63.5150(a)(4)(iii)]

b) Any deviation from the required operating parameters which are monitored in accordance with §63.5150(a)(3) and (4), unless otherwise excused, will be considered a deviation from the operating limit. [§63.5150(b)]

2) Compliance Demonstration [§63.5170]:
You must include all coating materials (as defined in §63.5110) used in the affected source when determining compliance with the applicable emission limit in §63.5120. To make this determination, you must use at least one of the four compliance options listed in Table 1 of §63.5170. You may apply any of the compliance options to an individual coil coating line, or to multiple lines as a group, or to the entire affected source. You may use different compliance options for different coil coating lines, or at different times on the same line. However, you may not use different compliance options at the same time on the same coil coating line. If you switch between compliance options for any coil coating line or group of lines, you must document this switch as required by §63.5190(a), and you must report it in the next semi-annual compliance report required in §63.5180.

Table 1 to §63.5170—Compliance Demonstration Requirements Index

If you choose to demonstrate compliance by:	Then you must demonstrate that:
1. Use of "as purchased" compliant coatings	a) Each coating material used during the 12-month compliance period does not exceed 0.046 kg HAP per liter solids, as purchased. [§63.5170(a)].
2. Use of "as applied" compliant coatings	a) Each coating material used does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly. [§63.5170(b)(1)] or
	b) Average of all coating materials used does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly. [§63.5170(b)(2)].
3. Use of a capture system and control device	Overall organic HAP control efficiency is at least 98 percent on a monthly basis for individual or groups of coil coating lines; or overall organic HAP control efficiency is at least 98 percent during initial performance test and operating limits are achieved continuously for individual coil coating lines; or oxidizer outlet HAP concentration is no greater than 20 ppmv and there is 100 percent capture efficiency during initial performance test and operating limits are achieved continuously for individual coil coating lines. [§63.5170(c)].
4. Use of a combination of compliant coatings and control devices and maintaining an acceptable equivalent emission rate	Average equivalent emission rate does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly. [§63.5170(d)].

a) *As-purchased compliant coatings*. If you elect to use coatings that individually meet the organic HAP emission limit in §63.5120(a)(2) as-purchased, to which you will not add HAP during distribution or application, you must demonstrate that each coating material applied during the 12-month compliance period contains no more than 0.046 kg HAP per liter of solids on an as-purchased basis. [§63.5170(a)]
   i) Determine the organic HAP content for each coating material in accordance with §63.5160(b) and the volume solids content in accordance with §63.5160(c). [§63.5170(a)(1)]
   ii) Combine these results using Equation 1 of this section and compare the result to the organic HAP emission limit in §63.5120(a)(2) to demonstrate that each coating material contains no more organic HAP than the limit. [§63.5170(a)(2)]

$$H_{siap} = \frac{C_{hi} D_i}{V_{si}} \qquad (Eq.1)$$

Where:

H_{siap} = as-purchased, organic HAP to solids ratio of coating material, i, kg organic HAP/liter solids applied.
C_{hi} = organic HAP content of coating material, i, expressed as a weight-fraction, kg/kg.
D_i = density of coating material, i, kg/l.
V_{si} = volume fraction of solids in coating, i, l/l.

b) *As-applied compliant coatings*. If you choose to use "as-applied" compliant coatings, you must demonstrate that the average of each coating material applied during the 12-month compliance period contains no more than 0.046 kg of organic HAP per liter of solids applied in accordance with §63.5170(b)(1), or demonstrate that the average of all coating materials applied during the 12-month compliance period contain no more than 0.046 kg of organic HAP per liter of solids applied in accordance with §63.5170(b)(2). [§63.5170(b)]

i) To demonstrate that the average organic HAP content on the basis of solids applied for each coating material applied, HSi yr, is less than 0.046 kg HAP per liter solids applied for the 12-month compliance period, use Equation 2 of §63.5170: [§63.5170(b)(1)]

$$H_{Si\,yr} = \frac{\sum_{y=1}^{12}\left[V_i\ D_i\, C_{ahi} + \sum_{i=1}^{q} V_j\, D_j\, C_{hij}\right]}{\sum_{y=1}^{12} V_i\, V_{si}} \qquad (Eq.\ 2)$$

Where:

$H_{si\,yr}$ = average for the 12-month compliance period, as-applied, organic HAP to solids ratio of material, i, kg organic HAP/liter solids applied.
V_i = volume of coating material, i, l.
D_i = density of coating material, i, kg/l.
C_{ahi} = monthly average, as-applied, organic HAP content of solids-containing coating material, i, expressed as a weight fraction, kilogram (kg)/kg.
V_j = volume of solvent, j, l.
D_j = density of solvent, j, kg/l.
C_{hij} = organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg.
V_{si}= volume fraction of solids in coating, i, l/l.
y = identifier for months.
q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

ii) To demonstrate that the average organic HAP content on the basis of solids applied, $H_{S\,yr}$, of all coating materials applied is less than 0.046 kg HAP per liter solids applied for the 12-month compliance period, use Equation 3 of §63.5170: [§63.5170(b)(2)]

$$H_{S\,yr} = \frac{\sum_{y=1}^{12}\left[\sum_{i=1}^{p} V_i\ D_i\, C_{ahi} + \sum_{j=1}^{q} V_j\, D_j\, C_{hij}\right]}{\sum_{y=1}^{12}\left[\sum_{i=1}^{q} V_i\, V_{si}\right]} \qquad (Eq.\,3)$$

Where:

$H_{S\,yr}$ = average for the 12-month compliance period, as-applied, organic HAP to solids ratio of all materials applied, kg organic HAP/liter solids applied.

V_i = volume of coating material, i, l.

D_i = density of coating material, i, kg/l.

C_{ahi} = monthly average, as-applied, organic HAP content of solids-containing coating material, i, expressed as a weight fraction, kilogram (kg)/kg.

V_j = volume of solvent, j, l.

D_j = density of solvent, j, kg/l.

C_{hij} = organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg.

V_{si} = volume fraction of solids in coating, i, l/l.

p = number of different coating materials applied in a month.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

y = identifier for months.

c) *Capture and control to achieve the emission rate limit*. If you use one or more capture systems and one or more control devices and limit the organic HAP emission rate to no more than 0.046 kg organic HAP emitted per liter of solids applied on a 12-month average as-applied basis, then you must demonstrate compliance with the provisions in §63.5170(f). [§63.5170(d) and (d)(1)]

d) *Use of oxidation to demonstrate compliance*. If you use one or more oxidizers to control emissions from always controlled work stations, you must follow the procedures in §63.5170(f)(1): [§63.5170(f)]

i) *Continuous monitoring of capture system and control device operating parameters*. Demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters as specified in §63.5170(f)(1)(1)(i) through (xi): [§63.5170(f)(1)]

(1) For each oxidizer used to comply with §63.5120(a), determine the oxidizer destruction or removal efficiency, DRE, using the procedure in §63.5160(d). [§63.5170(f)(1)(i)]

(2) Whenever a work station is operated, continuously monitor the operating parameter established in accordance with §63.5150(a)(3). [§63.5170(f)(1)(ii)]

(3) Determine the capture system capture efficiency, CE, for each work station in accordance with §63.5160(e). [§63.5170(f)(1)(iii)]

(4) Whenever a work station is operated, continuously monitor the operating parameter established in accordance with §63.5150(a)(4). [§63.5170(f)(1)(iv)]

(5) Calculate the overall organic HAP control efficiency, R, achieved using Equation 7 of §63.5170. [§63.5170(f)(1)(v)]

$$R = 100 \frac{\sum_{A=1}^{w} \left[\left(DRE_K \, CE_A \right) \left(\sum_{i=1}^{p} M_{Ai} \, C_{vi} + \sum_{j=1}^{q} M_{Aj} \right) \right]}{\sum_{i=1}^{p} M_i \, C_{vi} + \sum_{j=1}^{q} M_j} \qquad (EQ. 7)$$

Where:

R = overall organic HAP control efficiency, percent.

DRE_k = organic volatile matter destruction or removal efficiency of control device, k, percent.

CE_A = organic volatile matter capture efficiency of the capture system for work station, A, percent.

M_{Ai} = mass of coating material, i, applied on work station, A, in a month, kg.

C_{vi} = volatile matter content of coating material, i, expressed as a weight fraction, kg/kg.

M_{Aj} = mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material (including H2O), j, applied on work station, A, in a month, kg.

M_i = mass of coating material, i, applied in a month, kg.

M_j = mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material (excluding H_2O), j, applied in a month, kg.

w = number of always-controlled work stations in the facility.

p = number of different coating materials applied in a month.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

(6) If demonstrating compliance with the organic HAP emission rate based on solids applied, measure the mass of each coating material applied on each work station during the month. [§63.5170(f)(1)(vi)]

(7) If demonstrating compliance with the organic HAP emission rate based on solids applied, determine the organic HAP content of each coating material applied during the month following the procedure in §63.5160(b). [§63.5170(f)(1)(vii)]

(8) If demonstrating compliance with the organic HAP emission rate based on solids applied, determine the solids content of each coating material applied during the month following the procedure in §63.5160(c). [§63.5170(f)(1)(viii)]

(9) Calculate the organic HAP emitted during the month, He, for each month: [§63.5170(f)(1)(ix)]

(a) For each work station and its associated oxidizer, use Equation 8 of this section. [§63.5170(f)(1)(ix)(A)]

$$H_e = \sum_{A=1}^{w} \left[\left(1 - \left(DRE_K \, CE_A \right) \right) \left(\sum_{i=1}^{p} C_{hi} \, M_{Ai} + \sum_{j=1}^{q} C_{hij} \, M_{Aij} \right) \right] \qquad (Eq. 8)$$

Where:

H_e = total monthly organic HAP emitted, kg.

DRE_k = organic volatile matter destruction or removal efficiency of control device, k, percent.
CE_A = organic volatile matter capture efficiency of the capture system for work station, A, percent.
C_{hi} = organic HAP content of coating material, i, expressed as a weight-fraction, kg/kg.
M_{Ai} = mass of coating material, i, applied on work station, A, in a month, kg.
C_{hij} = organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg.
M_{Aij} = mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j, added to solids-containing coating material, i, applied on work station, A, in a month, kg.
w = number of always-controlled work stations in the facility.
p = number of different coating materials applied in a month.
q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

(b) For periods when the oxidizer has not operated within its established operating limit, the control device efficiency is determined to be zero. [§63.5170(f)(1)(ix)(B)]

(10) *Organic HAP emission rate based on solids applied for the 12-month compliance period, L_{ANNUAL}.* If demonstrating compliance with the organic HAP emission rate based on solids applied for the 12-month compliance period, calculate the organic HAP emission rate based on solids applied, L_{ANNUAL}, for the 12-month compliance period using Equation 6 of §63.5170. [§63.5170(f)(1)(x)]

$$L_{ANNUAL} = \frac{\sum_{y=1}^{12} H_e}{\sum_{y=1}^{12}\left[\sum_{i=1}^{p} C_{si} M_i\right]} \qquad (Eq.\ 6)$$

Where:

L_{ANNUAL} = mass organic HAP emitted per volume of solids applied for the 12-month compliance period, kg/liter.
H_e = total monthly organic HAP emitted, kg.
C_{si} = solids content of coating material, i, expressed as liter of solids/kg of material.
M_i = mass of coating material, i, applied in a month, kg.
y = identifier for months.
p = number of different coating materials applied in a month.

(11) Compare actual performance to performance required by compliance option. The affected source is in compliance with §63.5120(a) if each oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in §63.5150(a)(3) for each three-hour period, and each capture system operating parameter average value is greater than or less than (as appropriate) the operating parameter value established in §63.5150(a)(4) for each three-hour period; and the requirement in either paragraph (f)(1)(xi)(A) or (B) of §63.5170 is met. [§63.5170(f)(1)(xi)]

(a) The overall organic HAP control efficiency, R, is 98 percent or greater for each; or[§63.5170(f)(1)(xi)(A)]
(b) The organic HAP emission rate based on solids applied, L_{ANNUAL}, is 0.046 kg organic HAP per liter solids applied or less for the 12-month compliance period. [§63.5170(f)(1)(xi)(B)]

Recordkeeping:

You must maintain the records specified in §63.5190(a) and (b) in accordance with §63.10(b)(1): [§63.5190(a)]

1) Records of the coating lines on which you used each compliance option and the time periods (beginning and ending dates and times) you used each option. [§63.5190(a)(1)]
2) Records specified in §63.10(b)(2) of all measurements needed to demonstrate compliance with this subpart, including: [§63.5190(a)(2)]
   a) Control device and capture system operating parameter data in accordance with §63.5150(a)(1), (3), and (4); [§63.5190(a)(2)(ii)]
   b) Organic HAP content data for the purpose of demonstrating compliance in accordance with §63.5160(b); [§63.5190(a)(2)(iii)]
   c) Volatile matter and solids content data for the purpose of demonstrating compliance in accordance with §63.5160(c); [§63.5190(a)(2)(iv)]
   d) Overall control efficiency determination or alternative outlet HAP concentration using capture efficiency tests and control device destruction or removal efficiency tests in accordance with §63.5160(d), (e), and (f); and [§63.5190(a)(2)(v)]
   e) Material usage, HAP usage, volatile matter usage, and solids usage and compliance demonstrations using these data in accordance with §63.5170(a), (b), and (d); [§63.5190(a)(2)(vi)]
3) Records specified in §63.10(b)(3); and [§63.5190(a)(3)]

Reporting:

Submit the reports specified below to EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, as well as the City of St. Louis Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103, and the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102: [§63.5180(a)]

1) You must submit performance test reports as specified in §63.10(d)(2) if you are using a control device to comply with the emission standards and you have not obtained a waiver from the performance test requirement. [§63.5180(e)]
2) You must submit start-up, shutdown, and malfunction reports as specified in §63.10(d)(5) if you use a control device to comply with this subpart. [§63.5180(f)]
   a) If your actions during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in §63.6(e)(3), you must state such information in the report. The start-up, shutdown, or malfunction report will consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that will be submitted to the Administrator. [§63.5180(f)(1)]
   b) Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in §63.5180(g). [§63.5180(f)(2)]
3) You must submit semi-annual compliance reports containing the information specified in §63.5180 (g)(1) and (2). [§63.5180(g)]

a) Compliance report dates. For each affected source that is subject to permitting regulations pursuant to 40 CFR Part 70 or Part 71, and the permitting authority has established dates for submitting semi-annual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in §63.5180(g)(1)(i) through (iv). [§63.5180(g)(1)(iv)]
b) The semi-annual compliance report must contain the following information: [§63.5180(g)(2)]
   i) Company name and address. [§63.5180(g)(2)(i)]
   ii) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.5180(g)(2)(ii)]
   iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the six-month period ending on June 30 or December 31. Note that the information reported for each of the six months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. [§63.5180(g)(2)](iii)]
   iv) Identification of the compliance option or options specified in Table 1 to §63.5170 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning dates you used each option. [§63.5180(g)(2)(iv)]
   v) A statement that there were no deviations from the standards during the reporting period. [§63.5180(g)(2)(v)]

4) You must submit, for each deviation occurring at an affected source where you are not using CEMS to comply with the standards in this subpart, the semi-annual compliance report containing the information in §63.5180(g)(2)(i) through (iv) and the information in §63.5180(h)(1) through (3): [§63.5180(h)]
   a) The total operating time of each affected source during the reporting period. [§63.5180(h)(1)]
   b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable, and the corrective action taken. [§63.5180(h)(2)]
   c) Information on the number, duration, and cause for monitor downtime incidents (including unknown cause other than downtime associated with zero and span and other daily calibration checks, if applicable). [§63.5180(h)(3)]

Permit Condition EU0010-004 through EU0020-004

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63 Subpart SSSS National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil
— §63.5140 General Requirements
40 CFR Part 63 Subpart A, General Provisions

General Requirements

1) You must be in compliance with the standards in this subpart at all times, except during periods of start-up, shutdown, and malfunction of any capture system and control device used to comply with this subpart. If you are complying with the emission standards of this subpart without the use of a capture system and control device, you must be in compliance with the standards at all times, including periods of start-up, shutdown, and malfunction. [§63.5140(a)]
2) Table 2 to 40 CFR Part 63 Subpart SSSS provides cross references to Subpart A of 40 CFR Part 63, indicating the applicability of the General Provisions requirements to Subpart SSSS. [§63.5140(b)]

EU0040 through EU0050 – Coating Line 2 Equipped with thermal oxidizers to control VOCs &HAPs			
Emission Unit	Description	Manufacturer/ Model #	2009 EIQ Reference #
EU0040	Line #2 Prime Coater and Curing Oven	Faustel-coater/ Mahon – oven	EP-07/EP-08
EU0050	Line #2 Finish Coater and Curing Oven	Faustel-coater/ Mahon – oven	EP-10/EP-11

Permit Condition EU0040-001 through EU0050-001

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

Emission Limitation:
The permittee shall not emit or discharge to the atmosphere any VOC from the line 2 coating operation in excess of 2.6 lbs VOC/gallon (0.31 kilograms per liter) coating (minus water and non-VOC organic compounds), the amount allowed in Table B of §5.330(4)(B).

Monitoring:
Compliance with the limitations of this regulation shall be determined by the following methods, as applicable and appropriate.

1) Compliance with emission limits may be demonstrated using the method referenced in 10 CSR 10-6.030(14)(C) using the one-hour bake. Emission performance shall be on the basis of a daily volume-weighted average of all coatings used in each surface coating operation as delivered to the coating applicator(s) on a coating line. The daily volume-weighted average ($DAVG_{vw}$) is calculated by the following formula:

$$DAVG_{VW} = \frac{\sum_{i=1}^{n}(A_i \times B_i)}{C}$$

Where:
A = daily gallons of each coating used (minus water and exempt solvents) in a surface coating operation.
B = pounds of VOC per gallon of coating (minus water and exempt solvents).
C = total daily gallons coating used (minus water and exempt solvents) in a surface coating operation.
n = number of all coatings used in a surface coating operation

2) Compliance with the emission limits in Table B may also be demonstrated on pounds of VOC per gallon of coating solids basis. The determination is made by first converting the emission limit in Table B to pounds of VOC per gallon of coating solids as shown in the following three (3) steps:

(1) $$\frac{lbs\ VOC / gal\ coating\ (from\ Table\ B)}{7.36\ lbs / gal\ (\text{average density of solvents used to originally establish the emission limit})} = Volume\ fraction\ of\ VOC$$

(2) $$1 - Volume\ fraction\ of\ VOC = Volume\ fraction\ solids$$

(3) $$\frac{lbs\ VOC / gal\ coating\ (from\ Table\ B)}{Volume\ fraction\ of\ solids} = \frac{lbs\ VOC}{gal\ coatings\ solids}$$

This value (from step 3) is the new emission limit. It is equivalent to the emission limit in Table B on a coating solids basis. The VOC per gallon of coating solids for each coating solids used is then determined using the method referenced in 10 CSR 10-6.030(14)(C) using the one-hour bake. The composite daily weighted average of pounds of VOC per gallon of coating solids as tested for in the actual coatings used is compared to the new emission limit. Source operations on a coating line using coatings with a composite actual daily weighted average value less than or equal to the new emission limit, are in compliance with this rule; or

3) Compliance with the emission limits in §5.330(4)(B), Table B may be determined on a pounds of VOC per gallon of coating solids applied basis. An owner or operator may request his/her emission limit be modified to be equivalent to the emission limit in §5.330(4)(B), but in emission units of pounds of VOC emitted per gallon of coating solids applied. This new emission limit is derived by dividing the emission limit from §5.330(5)(B)2. by an appropriate value for transfer efficiency (TE) as determined by the Director. Prior to this determination, the owner or operator shall demonstrate to the satisfaction of the Director that an adequate, fully replicable TE test method exists for the source operation. Upon approval of the TE demonstration, the Director will develop an emission limit equivalent to the applicable emission limit in §5.330(4)(B).

Recordkeeping:

1) The permittee shall keep records detailing specific VOC sources as necessary for the Director to determine daily compliance (see Attachments C and D). These may include:
   a) Daily records of the type and the quantity of coatings used daily;
   b) The coating manufacturer's formulation data for each coating on forms provided or approved by the Director;
   c) Daily records of the type and quantity of solvents for coating, thinning, purging and equipment cleaning used;
   d) All test results to determine capture and control efficiencies, TEs and coating makeup;
   e) Daily records of the type and quantity of waste solvents reclaimed or discarded daily;
   f) Daily records of the quantity of pieces or materials coated daily; and
   g) Any additional information pertinent to determining compliance.
2) Records such as daily production rates may be substituted for actual daily coating use measurements provided the owner submits a demonstration approved by the Director that these records are adequate for the purposes of this rule.

Reporting:

The permittee shall provide a written report to the City of St. Louis Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103, and to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than twenty (20) days after the permittee determined that the emission unit exceeded the emission limitation.

Permit Condition EU0040-002 through EU0050-002

10 CSR 10-6.065 Maximum Achievable Control Technology Regulations
40 CFR Part 63 Subpart SSSS National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil

Emission Limitation:

The permittee must limit organic HAP emissions to the level specified in §63.5120(a)(1) or (a)(2): [§63.5120(a)]

1) No more than two percent of the organic HAP applied for each month during each 12-month compliance period (98 percent reduction); [§63.5120(a)(1)] or
2) No more than 0.046 kilogram (kg) of organic HAP per liter of solids applied during each 12-month compliance period. [§63.5120(a)(2)]

Operating Limitations:

For any coil coating line for which you use an add-on control device, unless you use a solvent recovery system and conduct a liquid-liquid material balance according to §63.5170(e)(1), you must meet the applicable operating limits specified below (from Table 1 to 40 CFR 63 Subpart SSSS). You must establish the operating limits during the performance test according to the requirements in §63.5160(d)(3). You must meet the operating limits at all times after you establish them. [§63.5121(a)]

For the following device …	You must meet the following operating limit …	And you must demonstrate continuous compliance with the operating limit by …
Thermal oxidizer	The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to §63.5160(d)(3)(i)	i. Collecting the combustion temperature data according to §63.5150(a)(3); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average combustion temperature at or above the temperature limit.
Emission capture system	Develop a monitoring plan that identifies operating parameter to be monitored and specifies operating limits according to §63.5150(a)(4)	Conducting monitoring according to the plan §63.5150(a)(4).

Monitoring/Compliance Demonstration:

1) Control Device Monitoring Requirements [§63.5150]:
   a) To demonstrate continuing compliance with the standards, you must monitor and inspect each capture system and each control device required to comply with §63.5120 following the date on which the initial performance test of the capture system and control device is completed. You must install and operate the monitoring equipment as specified §63.5150(a)(3) and (4). [§63.5150(a)]
      i) *Temperature monitoring of oxidizers*. If you are complying with the requirements of the standards in §63.5120 through the use of an oxidizer and demonstrating continuous compliance through monitoring of an oxidizer operating parameter, you must comply with §63.5150(a)(3)(i) through (iii). [§63.5150(a)(3)]
         (1) Install, calibrate, maintain, and operate temperature monitoring equipment according to manufacturer's specifications. The calibration of the chart recorder, data logger, or

temperature indicator must be verified every 3 months; or the chart recorder, data logger, or temperature indicator must be replaced. You must replace the equipment either if you choose not to perform the calibration, or if the equipment cannot be calibrated properly. Each temperature monitoring device must be equipped with a continuous recorder. The device must have an accuracy of ±1 percent of the temperature being monitored in degrees Celsius, or ±1 °Celsius, whichever is greater. [§63.5150(a)(3)(i)]

(2) For an oxidizer other than a catalytic oxidizer, to demonstrate continuous compliance with the operating limit established according to §63.5160(d)(3)(i), you must install the thermocouple or temperature sensor in the combustion chamber at a location in the combustion zone. [§63.5150(a)(3)(ii)]

ii) *Capture system monitoring*. If you are complying with the requirements of the standards in §63.5120 through the use of a capture system and control device, you must develop a capture system monitoring plan containing the information specified in §63.5150(a)(4)(i) and (ii). You must monitor the capture system in accordance with §63.5150(a)(4)(iii). You must make the monitoring plan available for inspection by the permitting authority upon request. [§63.5150(a)(4)]

(1) The monitoring plan must identify the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained, explain why this parameter is appropriate for demonstrating ongoing compliance, and identify the specific monitoring procedures. [§63.5150(a)(4)(i)]

(2) The plan also must specify operating limits at the capture system operating parameter value, or range of values, that demonstrates compliance with the standards in §63.5120. The operating limits must represent the conditions indicative of proper operation and maintenance of the capture system. [§63.5150(a)(4)(ii)]

(3) You must conduct monitoring in accordance with the plan. [§63.5150(a)(4)(iii)]

b) Any deviation from the required operating parameters which are monitored in accordance with §63.5150(a)(3) and (4), unless otherwise excused, will be considered a deviation from the operating limit. [§63.5150(b)]

2) Compliance Demonstration [§63.5170]:
You must include all coating materials (as defined in §63.5110) used in the affected source when determining compliance with the applicable emission limit in §63.5120. To make this determination, you must use at least one of the four compliance options listed in Table 1 of §63.5170. You may apply any of the compliance options to an individual coil coating line, or to multiple lines as a group, or to the entire affected source. You may use different compliance options for different coil coating lines, or at different times on the same line. However, you may not use different compliance options at the same time on the same coil coating line. If you switch between compliance options for any coil coating line or group of lines, you must document this switch as required by §63.5190(a), and you must report it in the next semi-annual compliance report required in §63.5180.

Table 1 to §63.5170—Compliance Demonstration Requirements Index

If you choose to demonstrate compliance by:	Then you must demonstrate that:
1. Use of "as purchased" compliant coatings	a) Each coating material used during the 12-month compliance period does not exceed 0.046 kg HAP per liter solids, as purchased. [§63.5170(a)].
2. Use of "as applied" compliant coatings	a) Each coating material used does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly. [§63.5170(b)(1)] or
	b) Average of all coating materials used does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly. [§63.5170(b)(2)].
3. Use of a capture system and control device	Overall organic HAP control efficiency is at least 98 percent on a monthly basis for individual or groups of coil coating lines; or overall organic HAP control efficiency is at least 98 percent during initial performance test and operating limits are achieved continuously for individual coil coating lines; or oxidizer outlet HAP concentration is no greater than 20 ppmv and there is 100 percent capture efficiency during initial performance test and operating limits are achieved continuously for individual coil coating lines. [§63.5170(c)].
4. Use of a combination of compliant coatings and control devices and maintaining an acceptable equivalent emission rate	Average equivalent emission rate does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly. [§63.5170(d)].

a) *As-purchased compliant coatings*. If you elect to use coatings that individually meet the organic HAP emission limit in §63.5120(a)(2) as-purchased, to which you will not add HAP during distribution or application, you must demonstrate that each coating material applied during the 12-month compliance period contains no more than 0.046 kg HAP per liter of solids on an as-purchased basis. [§63.5170(a)]
   i) Determine the organic HAP content for each coating material in accordance with §63.5160(b) and the volume solids content in accordance with §63.5160(c). [§63.5170(a)(1)]
   ii) Combine these results using Equation 1 of this section and compare the result to the organic HAP emission limit in §63.5120(a)(2) to demonstrate that each coating material contains no more organic HAP than the limit. [§63.5170(a)(2)]

$$H_{siap} = \frac{C_{hi} D_i}{V_{si}} \qquad (Eq.1)$$

Where:

H_{siap} = as-purchased, organic HAP to solids ratio of coating material, i, kg organic HAP/liter solids applied.

C_{hi} = organic HAP content of coating material, i, expressed as a weight-fraction, kg/kg.

D_i = density of coating material, i, kg/l.

V_{si} = volume fraction of solids in coating, i, l/l.

b) *As-applied compliant coatings*. If you choose to use "as-applied" compliant coatings, you must demonstrate that the average of each coating material applied during the 12-month compliance period contains no more than 0.046 kg of organic HAP per liter of solids applied in accordance with §63.5170(b)(1), or demonstrate that the average of all coating materials applied during the 12-month compliance period contain no more than 0.046 kg of organic HAP per liter of solids applied in accordance with §63.5170(b)(2). [§63.5170(b)]

i) To demonstrate that the average organic HAP content on the basis of solids applied for each coating material applied, HSi yr, is less than 0.046 kg HAP per liter solids applied for the 12-month compliance period, use Equation 2 of §63.5170: [§63.5170(b)(1)]

$$H_{Si\,yr} = \frac{\sum_{y=1}^{12}\left[V_i\ D_i\, C_{ahi} + \sum_{i=1}^{q} V_j\, D_j\, C_{hij}\right]}{\sum_{y=1}^{12} V_i\, V_{si}} \qquad (Eq.\ 2)$$

Where:

$H_{si\ yr}$ = average for the 12-month compliance period, as-applied, organic HAP to solids ratio of material, i, kg organic HAP/liter solids applied.

V_i = volume of coating material, i, l.

D_i = density of coating material, i, kg/l.

C_{ahi} = monthly average, as-applied, organic HAP content of solids-containing coating material, i, expressed as a weight fraction, kilogram (kg)/kg.

V_j = volume of solvent, j, l.

D_j = density of solvent, j, kg/l.

C_{hij} = organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg.

V_{si}= volume fraction of solids in coating, i, l/l.

y = identifier for months.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

ii) To demonstrate that the average organic HAP content on the basis of solids applied, $H_{S\ yr}$, of all coating materials applied is less than 0.046 kg HAP per liter solids applied for the 12-month compliance period, use Equation 3 of §63.5170: [§63.5170(b)(2)]

$$H_{S\,yr} = \frac{\sum_{y=1}^{12}\left[\sum_{i=1}^{p} V_i\ D_i\, C_{ahi} + \sum_{j=1}^{q} V_j\, D_j\, C_{hij}\right]}{\sum_{y=1}^{12}\left[\sum_{i=1}^{q} V_i\, V_{si}\right]} \qquad (Eq.\,3)$$

Where:

$H_{S\,yr}$ = average for the 12-month compliance period, as-applied, organic HAP to solids ratio of all materials applied, kg organic HAP/liter solids applied.

V_i = volume of coating material, i, l.

D_i = density of coating material, i, kg/l.

C_{ahi} = monthly average, as-applied, organic HAP content of solids-containing coating material, i, expressed as a weight fraction, kilogram (kg)/kg.

V_j = volume of solvent, j, l.

D_j = density of solvent, j, kg/l.

C_{hij} = organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg.

V_{si} = volume fraction of solids in coating, i, l/l.

p = number of different coating materials applied in a month.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

y = identifier for months.

c) *Capture and control to reduce emissions to no more than the allowable limit*. If you use one or more capture systems and one or more control devices and demonstrate an average overall organic HAP control efficiency of at least 98 percent for each month to comply with §63.5120(a)(1), you must follow one of the procedures in §63.5170(c)(2). Alternatively, you may demonstrate compliance for an individual coil coating line by operating its capture system and control device and continuous parameter monitoring system according to the procedures in §63.5170(i). [§63.5170(c)]

   i) If the affected source uses one compliance procedure to limit organic HAP emissions to the level specified in §63.5120(a)(1) or (2) and has only always-controlled work stations, then you must demonstrate compliance with the provisions of Paragraph (f) of this section when emissions are controlled by one or more oxidizers. [§63.5170(c)(2)]

d) *Capture and control to achieve the emission rate limit*. If you use one or more capture systems and one or more control devices and limit the organic HAP emission rate to no more than 0.046 kg organic HAP emitted per liter of solids applied on a 12-month average as-applied basis, then you must demonstrate compliance with the provisions in §63.5170(f). [§63.5170(d) and (d)(1)]

e) *Use of oxidation to demonstrate compliance*. If you use one or more oxidizers to control emissions from always controlled work stations, you must follow the procedures in §63.5170(f)(1): [§63.5170(f)]

   i) *Continuous monitoring of capture system and control device operating parameters*. Demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters as specified in §63.5170(f)(1)(1)(i) through (xi): [§63.5170(f)(1)]

(1) For each oxidizer used to comply with §63.5120(a), determine the oxidizer destruction or removal efficiency, DRE, using the procedure in §63.5160(d). [§63.5170(f)(1)(i)]
(2) Whenever a work station is operated, continuously monitor the operating parameter established in accordance with §63.5150(a)(3). [§63.5170(f)(1)(ii)]
(3) Determine the capture system capture efficiency, CE, for each work station in accordance with §63.5160(e). [§63.5170(f)(1)(iii)]
(4) Whenever a work station is operated, continuously monitor the operating parameter established in accordance with §63.5150(a)(4). [§63.5170(f)(1)(iv)]
(5) Calculate the overall organic HAP control efficiency, R, achieved using Equation 7 of §63.5170. [§63.5170(f)(1)(v)]

$$R = 100\frac{\sum_{A=1}^{w}\left[\left(DRE_K\, CE_A\right)\left(\sum_{i=1}^{p} M_{Ai}\, C_{vi} + \sum_{j=1}^{q} M_{Aj}\right)\right]}{\sum_{i=1}^{p} M_i\, C_{vi} + \sum_{j=1}^{q} M_j} \qquad (EQ.\,7)$$

Where:

R = overall organic HAP control efficiency, percent.
DRE_k = organic volatile matter destruction or removal efficiency of control device, k, percent.
CE_A = organic volatile matter capture efficiency of the capture system for work station, A, percent.
M_{ai} = mass of coating material, i, applied on work station, A, in a month, kg.
C_{vi} = volatile matter content of coating material, i, expressed as a weight fraction, kg/kg.
M_{Aj} = mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material (including H2O), j, applied on work station, A, in a month, kg.
M_i = mass of coating material, i, applied in a month, kg.
M_j = mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material (excluding H2O), j, applied in a month, kg.
w = number of always-controlled work stations in the facility.
p = number of different coating materials applied in a month.
q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

(6) If demonstrating compliance with the organic HAP emission rate based on solids applied, measure the mass of each coating material applied on each work station during the month. [§63.5170(f)(1)(vi)]
(7) If demonstrating compliance with the organic HAP emission rate based on solids applied, determine the organic HAP content of each coating material applied during the month following the procedure in §63.5160(b). [§63.5170(f)(1)(vii)]
(8) If demonstrating compliance with the organic HAP emission rate based on solids applied, determine the solids content of each coating material applied during the month following the procedure in §63.5160(c). [§63.5170(f)(1)(viii)]

(9) Calculate the organic HAP emitted during the month, He, for each month: [§63.5170(f)(1)(ix)]

(a) For each work station and its associated oxidizer, use Equation 8 of this section. [§63.5170(f)(1)(ix)(A)]

$$H_e = \sum_{A=1}^{w} \left[\left(1 - \left(DRE_K \, CE_A\right)\right) \left(\sum_{i=1}^{p} C_{hi} \, M_{Ai} \; + \sum_{j=1}^{q} C_{hij} \; M_{Aij} \right) \right] \qquad (Eq. 8)$$

Where:

H_e = total monthly organic HAP emitted, kg.

DRE_k = organic volatile matter destruction or removal efficiency of control device, k, percent.

CE_A = organic volatile matter capture efficiency of the capture system for work station, A, percent.

C_{hi} = organic HAP content of coating material, i, expressed as a weight-fraction, kg/kg.

M_{Ai} = mass of coating material, i, applied on work station, A, in a month, kg.

C_{hij} = organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg.

M_{Aij} = mass of solvent, thinner, reducer, diluent, or other non-solids-containing coating material, j, added to solids-containing coating material, i, applied on work station, A, in a month, kg.

w = number of always-controlled work stations in the facility.

p = number of different coating materials applied in a month.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.

(b) For periods when the oxidizer has not operated within its established operating limit, the control device efficiency is determined to be zero. [§63.5170(f)(1)(ix)(B)]

(10) *Organic HAP emission rate based on solids applied for the 12-month compliance period, L_{ANNUAL}.* If demonstrating compliance with the organic HAP emission rate based on solids applied for the 12-month compliance period, calculate the organic HAP emission rate based on solids applied, L_{ANNUAL}, for the 12-month compliance period using Equation 6 of §63.5170. [§63.5170(f)(1)(x)]

$$L_{ANNUAL} = \frac{\sum_{y=1}^{12} H_e}{\sum_{y=1}^{12} \left[\sum_{i=1}^{p} C_{si} \, M_i \right]} \qquad (Eq. 6)$$

Where:

L_{ANNUAL} = mass organic HAP emitted per volume of solids applied for the 12-month compliance period, kg/liter.

H_e = total monthly organic HAP emitted, kg.

C_{si} = solids content of coating material, i, expressed as liter of solids/kg of material.

M_i = mass of coating material, i, applied in a month, kg.
y = identifier for months.
p = number of different coating materials applied in a month.

(a) Compare actual performance to performance required by compliance option. The affected source is in compliance with §63.5120(a) if each oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in §63.5150(a)(3) for each 3-hour period, and each capture system operating parameter average value is greater than or less than (as appropriate) the operating parameter value established in §63.5150(a)(4) for each 3-hour period; and the requirement in either Paragraph (f)(1)(xi)(A) or (B) of §63.5170 is met. [§63.5170(f)(1)(xi)]
   i. The overall organic HAP control efficiency, R, is 98 percent or greater for each; or[§63.5170(f)(1)(xi)(A)]
   ii. The organic HAP emission rate based on solids applied, L_{ANNUAL}, is 0.046 kg organic HAP per liter solids applied or less for the 12-month compliance period. [§63.5170(f)(1)(xi)(B)]

(b) *Capture and control system compliance demonstration procedures using a CPMS for a coil coating line*. If you use an add-on control device, to demonstrate initial compliance for each capture system and each control device through performance tests and continuing compliance through continuous monitoring of capture system and control device operating parameters, you must meet the requirements in §63.5170(i)(1) through (3). [§63.5170(i)]
   i. Conduct an initial performance test to determine the control device destruction or removal efficiency, DRE, using the applicable test methods and procedures in §63.5160(d). [§63.5170(i)(1)]
   ii. Determine the emission capture efficiency, CE, in accordance with §63.5160(e). [§63.5170(i)(2)]
   iii. Whenever a coil coating line is operated, continuously monitor the operating parameters established according to §63.5150(a)(3) and (4) to ensure capture and control efficiency. [§63.5170(i)(3)]

Recordkeeping:

You must maintain the records specified in §63.5190(a) and (b) in accordance with §63.10(b)(1): [§63.5190(a)]

1) Records of the coating lines on which you used each compliance option and the time periods (beginning and ending dates and times) you used each option. [§63.5190(a)(1)]
2) Records specified in §63.10(b)(2) of all measurements needed to demonstrate compliance with this subpart, including: [§63.5190(a)(2)]
   a) Control device and capture system operating parameter data in accordance with §63.5150(a)(1), (3), and (4); [§63.5190(a)(2)(ii)]
   b) Organic HAP content data for the purpose of demonstrating compliance in accordance with §63.5160(b); [§63.5190(a)(2)(iii)]
   c) Volatile matter and solids content data for the purpose of demonstrating compliance in accordance with §63.5160(c); [§63.5190(a)(2)(iv)]
   d) Overall control efficiency determination or alternative outlet HAP concentration using capture efficiency tests and control device destruction or removal efficiency tests in accordance with §63.5160(d), (e), and (f); and [§63.5190(a)(2)(v)]

e) Material usage, HAP usage, volatile matter usage, and solids usage and compliance demonstrations using these data in accordance with §63.5170(a), (b), and (d); [§63.5190(a)(2)(vi)]

3) Records specified in §63.10(b)(3); and [§63.5190(a)(3)]

Reporting:

1) Submit the reports specified below to EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102: [§63.5180(a)]
   a) You must submit a Notification of Compliance Status as specified in §63.9(h). You must submit the Notification of Compliance Status no later than 30 calendar days following the end of the initial 12-month compliance period described in §63.5130. [§63.5180(d)]
   b) You must submit performance test reports as specified in §63.10(d)(2) if you are using a control device to comply with the emission standards and you have not obtained a waiver from the performance test requirement. [§63.5180(e)]
   c) You must submit start-up, shutdown, and malfunction reports as specified in §63.10(d)(5) if you use a control device to comply with this subpart. [§63.5180(f)]
      i) If your actions during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in §63.6(e)(3), you must state such information in the report. The start-up, shutdown, or malfunction report will consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that will be submitted to the Administrator. [§63.5180(f)(1)]
      ii) Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in §63.5180(g). [§63.5180(f)(2)]
   d) You must submit semi-annual compliance reports containing the information specified in §63.5180 (g)(1) and (2). [§63.5180(g)]
      i) Compliance report dates. For each affected source that is subject to permitting regulations pursuant to 40 CFR Part 70 or part 71, and the permitting authority has established dates for submitting semi-annual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in §63.5180(g)(1)(i) through (iv). [§63.5180(g)(1)(iv)]
      ii) The semi-annual compliance report must contain the following information: [§63.5180(g)(2)]
         (1) Company name and address. [§63.5180(g)(2)(i)]
         (2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.5180(g)(2)(ii)]
         (3) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. [§63.5180(g)(2)](iii)]
         (4) Identification of the compliance option or options specified in Table 1 to §63.5170 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning dates you used each option. [§63.5180(g)(2)(iv)]
         (5) A statement that there were no deviations from the standards during the reporting period. [§63.5180(g)(2)(v)]

e) You must submit, for each deviation occurring at an affected source where you are not using CEMS to comply with the standards in this subpart, the semi-annual compliance report containing the information in §63.5180(g)(2)(i) through (iv) and the information in §63.5180(h)(1) through (3): [§63.5180(h)]
   i) The total operating time of each affected source during the reporting period. [§63.5180(h)(1)]
   ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable, and the corrective action taken. [§63.5180(h)(2)]
   iii) Information on the number, duration, and cause for monitor downtime incidents (including unknown cause other than downtime associated with zero and span and other daily calibration checks, if applicable). [§63.5180(h)(3)]

Permit Condition EU0040-003 through EU0050-003

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63 Subpart SSSS National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil
— §63.5140 General Requirements
40 CFR Part 63 Subpart A, General Provisions

General Requirements

1) You must be in compliance with the standards in this subpart at all times, except during periods of start-up, shutdown, and malfunction of any capture system and control device used to comply with this subpart. If you are complying with the emission standards of this subpart without the use of a capture system and control device, you must be in compliance with the standards at all times, including periods of start-up, shutdown, and malfunction. [§63.5140(a)]
2) Table 2 to 40 CFR Part 63 Subpart SSSS provides cross references to Subpart A of 40 CFR Part 63, indicating the applicability of the General Provisions requirements to Subpart SSSS. [§63.5140(b)]

EU0060 – Boiler		
Emission Unit	Description	2009 EIQ Reference #
EU0060	Natural gas-fired boiler used for generating steam– 13.39 MMBtu/hr. Installed in 1970	EP-19

Permit Condition EU0060-001

10 CSR 10-5.030 Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

Emission Limitation:

The permittee shall not emit particulate matter in excess of 0.56 pounds per million Btu (MMBtu)of heat input from this boiler (EU0060).

Operational Limitation:

The boiler (EU0060) shall be limited to burning pipeline grade natural gas.

Monitoring/Recordkeeping:
Documentation supporting the fuel used is pipeline grade natural gas. Compliance with 10 CSR 10-5.030 is demonstrated by adherence to pipeline grade natural gas usage limitation.

Reporting:
The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to City of St. Louis Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103, and the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit.

EU0070 – Line #1 Waste Heat Boiler		
Emission Unit	Description	2009 EIQ Reference #
EU0070	Line # 1 Waste Heat Boiler – Dual fired waste heat boiler used for generating steam for process and plant heating – 21 MMBTU/hr Installed in 1998	EP-29

Permit Condition EU0070-001

10 CSR 10-6.060 Construction Permits Required
St. Louis City APCP Construction Permit No. 98-08-050
10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60 Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units[1]

Operational Limitation:
The maximum throughput of natural gas in this emission unit shall not exceed 82 million cubic feet per consecutive twelve-month period.

Monitoring:
The permittee shall install and operate a meter through which natural gas is introduced to this emission unit. The daily usage of natural gas shall be monitored. [Construction Permit 98-08-050]

Recordkeeping:
1) The permittee shall maintain a record of the daily usage of natural gas.
2) Records of daily boiler operation shall be kept to calculate apportioned fuel usage.

Reporting:
The permittee shall provide a written report to the City of St. Louis Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103, and to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than twenty (20) days after the permittee determined that the emission limitation.

[1] Since EU0070 (Line #1 Waste Heat Boiler) only fires natural gas, compliance with Subpart Dc only requires monthly fuel consumption records, which must be maintained for a minimum of two years. Complying with the more stringent, daily fuel consumption record retention requirement of Construction Permit No. 98-08-050 would also be in compliance with the record retention requirements of Subpart Dc [60.48c(g)(2)].

EU0080 – Bulk Unloading into Tote Tanks		
Emission Unit	Description	2009 EIQ Reference #
EU0080	Bulk Unloading into Tote Tanks - Filling of storage totes from bulk transport	EP-26

Permit Condition EU0080-001

10 CSR 10-6.060 Construction Permits Required
St. Louis City APCP Construction Permit No. 95-06-072

Operational Limitation:

The permittee shall limit the amount of material loaded into totes at the installation to less than 520,000 gallons during any twelve (12)-month period.

Monitoring:

1) The permittee shall develop written procedures for filling totes that include good emission control practices to minimize the loss of evaporative emissions.
2) The permittee shall observe the unloading practices once per month to verify that procedures to minimize evaporative losses are being followed.

Recordkeeping:

1) The permittee shall maintain a monthly record of the loading of totes.
2) The permittee shall record the observation of unloading practices once per month.

Reporting:

The permittee shall provide a written report to the City of St. Louis Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103, and to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than twenty (20) days after any exceedance of any of the conditions of the Construction Permit No. 95-06-072.

EU0090 through EU0100 -Maintenance Parts Cleaners			
Emission Unit	Description	Manufacturer/ Model #	2009 EIQ Reference #
EU0090	Cold Cleaner – 30 Gallon	Safety Kleen	Not Available
EU0100	Cold Cleaner – 40 Gallon		

Permit Condition EU0090-001 through EU0100-001

10 CSR 10-5.300
Control of Emissions from Solvent Cleaning

Emission Limitation:

1) The permittee shall not use cold cleaning solvent with a vapor pressure greater than 1.0 millimeters of Mercury (mmHg) (0.019 psi) at 20 degrees Celsius (20°C) (68 degrees Fahrenheit (68°F)).
2) Exception: The permittee may use an alternative method for reducing cold cleaning emissions if the level of emission control is equivalent to or greater than the requirements listed above. The Director and the U.S. Environmental Protection Agency (EPA) must approve the alternative method.

Operational Limitation/Equipment Specification:

1) Each cold cleaner shall have a cover which will prevent 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 ten square feet, 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 degrees Celsius (37.8°C) (100 degrees Fahrenheit (100°F));
   b) The solvent is agitated; or
   c) The solvent is heated.
3) Each cold cleaner shall have a 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 is heated above 48.9°C (120°F), must use one of the following control devices:
   a) A freeboard ratio of at least 0.75;
   b) Water cover (solvent must 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 must receive approval from the Director and EPA prior to their use.
8) Each cold cleaner shall be operated as follows:
   a) Cold cleaner covers shall be closed whenever parts are not being handled in the cleaners or the solvent must drain into an enclosed reservoir except when performing maintenance or collecting solvent samples.
   b) 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, the parts shall be positioned so that the solvent drains directly back to the cold cleaner.
   c) 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.
   d) Solvent leaks shall be repaired immediately or the cleaner shall be shut down until the leaks are repaired.
   e) 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:
      i) Reduction of the waste material to less than 20 percent VOC solvent by distillation and proper disposal of the still bottom waste; or

ii) Stored in closed containers for transfer to a contract reclamation service or disposal facility approved by the Director and EPA.

f) Waste solvent shall be stored in covered containers only.

9) Operators must be trained as follows:
   a) Only persons trained in at least the operation and equipment requirements specified in this rule for their particular solvent metal cleaning process shall operate this equipment;
   b) The person who supervises any person who operates solvent cleaning equipment regulated by this rule shall receive equal or greater operational training than the operators; and
   c) A procedural review shall be given to all solvent metal cleaning equipment operators at least once each 12 months.

Monitoring/Recordkeeping:

1) The permittee shall maintain the following records for each purchase of cold cleaner solvent (Attachment G):
   a) Name and address of the solvent supplier.
   b) Date of purchase.
   c) Type of solvent purchased.
   d) Vapor pressure of solvent in mm Hg at 20°C or 68°F.
2) 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. (see Attachment E). The record also shall include maintenance and repair logs that occurred on the degreaser (Attachments F). 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.
3) The permittee shall keep training records of solvent metal cleaning for each employee on an annual basis (Attachment H).
4) All records shall be retained for five years and be available to the Director upon request.

Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the City of St. Louis Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103, and the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit.

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances 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. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

City of St. Louis Ordinance 68657, §16 Open Burning Restrictions

1) No person shall cause, suffer, allow or permit the open burning of refuse.
2) No person shall conduct, cause or permit the conduct of a salvage operation by open burning.
3) No person shall conduct, cause or permit the disposal of trade waste by open burning.
4) No person shall cause or permit the open burning of leaves, trees or the byproducts therefrom, grass, or other vegetation.
5) It shall be prima-facie evidence that the person who owns or controls property on which open burning occurs, has caused or permitted said open burning.

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 City of St. Louis Air Pollution Control Program 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 City of St. Louis Air Pollution Control Program 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 City of St. Louis Air Pollution Control Program 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 Section 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 Section 643.080 or 643.151, RSMo.

4) Nothing in this rule shall be construed to limit the authority of the City of St. Louis Air Pollution Control Program, the Director or commission to take appropriate action, under Sections 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 eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources, St. Louis Air Pollution Control Program and U.S. EPA personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants 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 pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the an emissions report.
6) 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.
7) 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 twelve (12)-month period immediately preceding the end of the reporting period.
8) 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 Particulate Matter 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 particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter 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 particulate matter 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.

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)

No person shall 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.

No person may 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

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:

1) Areas in which there are one or more existing sources and/or proposed new sources of particulate matter in any circular area with a diameter of two miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from theses sources by regulations of general application are or would be greater than 2000 tons per year or 500 pounds per hour.
2) Areas in which there are one or more existing sources and/or proposed new sources of sulfur dioxide in any circular area with a diameter of two miles from which the sum of sulfur dioxide 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 Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources 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 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 motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in 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 (SNAP) 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 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 as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B 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(6)(C)1.C 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 City of St. Louis Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103, and 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) October 1st for monitoring which covers the January through June time period, and
      ii) April 1st for monitoring which covers the July through December time period.
      iii) Exception. Monitoring requirements which require reporting more frequently than semi-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, this includes deviations or Part 64 exceedances.
   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 Paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) 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 semi-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(6)(C)1.D Risk Management Plan Under Section 112(r)

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 40 CFR Section 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:

1) June 21, 1999;
2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G 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 permitting authority, upon receipt of a written request and within a reasonable time, any information that the permitting authority 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 permitting authority copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions
No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios
None.

10 CSR 10-6.065(6)(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 EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 and the City of St. Louis Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103. All deviations and Part 64 exceedances and excursions 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(6)(C)6 Permit Shield

1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
   a) The application requirements are included and specifically identified in this permit, or
   b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
   a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
   b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
   c) The applicable requirements of the acid rain program,
   d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
   e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A 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(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.
   a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
   b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. 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 subject to any requirements under Title IV of the Act or is a Title I modification;
   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, 901 North 5th Street, Kansas City, KS 66101 and the City of St. Louis Air Pollution Control Program, 1520 Market Street, Room 4058, St. Louis, MO 63103, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. 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.

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; and
d) The permit shield shall not apply to these changes.

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

The application utilized in the preparation of this permit was signed by Robert L. Mead, Director Environmental Affairs. On March 26, 2009, the Air Pollution Control Program was informed that Damon Cartmell, Plant Manager is now the responsible official. 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 owner or operator of this air contaminant source 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 source owner or operator 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(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
2) 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,
3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
   a) The permit has a remaining term of less than three years;
   b) The effective date of the requirement is later than the date on which the permit is due to expire; or
   c) 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,
4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
5) 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(6)(E)1.C 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 - Opacity Emission Observations

10 CSR 10-6.220 Compliance Demonstration

Method 22 Opacity Emission Observations			
Date	Method 22 Test Observer	Visible Emissions (yes/no)	If Visible emissions, was a method 9 done? (yes/no)

Attachment B - Method 9 Opacity Emissions Observation

10 CSR 10-6.220 Compliance Demonstration

Method 9 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 C – Surface Coating Operations Compliance Demonstration

10 CSR 10-5.330*, Control of Emissions From Industrial Surface Coating Operations*
Compliance Demonstration - Sample Record Form

Daily Record of Substances Used for Coating, Thinning, Purging, and Equipment Cleaning Record

Date	Substance	CAS	Gallons Used Daily	Lbs VOC/gal (less water & non-VOC organic compounds)	Purpose (used for)

Attachment D - Surface Coating Operations Compliance Demonstration

10 CSR 10-5.330, *Control of Emissions From Industrial Surface Coating Operations* - Compliance Demonstration - Sample Record Form

Date	Coating Ingredient	Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H
		Enter These Values from Coating Formulation Data				Coating Volume Friction (minus water & non-VOC organic compounds)	Daily Coating Gallons Used (minus water & non-voc organic compounds)	lbs VOC per Gallon (minus water & non-voc organic compounds)	Volume-Weighted Daily lbs of VOC
		Daily Coating Gallons Used	lbs VOC per Gallon of Coating	Water Volume Fraction of Coating	Non-VOC Organic Compounds Volume Fraction of Coating				
						Sum of Column F (gallons):			
									Sum of Column H (lbs)
[1]Daily Volume-Weighted Average ($DAVG_{vw}$) = _____ lbs of VOC/gal coating (less water & non-VOC organic Compounds)									

Note 1: Daily Volume-Weighted Average ($DAVG_{vw}$) = [Sum of Column H ÷ Sum of Column F]

Instructions:

1. Enter values for Columns A, B, C and D from coating formulation data.
2. Calculate volume fraction of coating (minus water & non-VOC organic compounds): [Column E = 1 – (Column C + Column D)]
3. Calculate the daily coating used (minus water & non-voc organic compounds) in gallons in Column F by multiplying daily coating used in gallons [Column A] by volume fraction of coating (minus water & non-VOC organic compounds) (Column E): Column F = [Column A x Column E]
4. Calculate lbs VOC per gallon (minus water & non-voc organic compounds) per coating ingredient in Column G by dividing lbs of VOC per gallon of coating (Column A) by volume fraction of coating (minus water & non-VOC organic compounds) (Column E): Column G = [Column B ÷ Column E]
5. Calculate the volume weighted daily lbs of VOC in Column H per coating ingredient by multiplying the daily coating gallons used (minus water & non-VOC organic compounds (Column F) by lbs VOC per gallon (minus water & non-voc organic compounds) per coating ingredient (Column G): Column H = [Column F x Column G]

Calculate Daily Volume-Weighted Average (lbs of VOC per gal coating (less water & non-VOC organic compounds)) by dividing the daily sum of Column H by daily sum of Column F.

Attachment E - Solvent Containing Waste Transfer Log

10 CSR 10-5.300 Compliance Demonstration

Date	Amount of Total Solvent Transferred (gallons)	Amount of Solvent Transferred to a Contract Reclamation Service (gallons)	Amount of Solvent Transferred to a Disposal Facility (gallons)	Amount of Solvent Distilled on the Premises (gallons)

Attachment F - Inspection/Maintenance/Repair/Malfunction Log

10 CSR 10-5.300 Compliance Demonstration

Date	Equipment/Emission Unit	Activities Performed

Attachment G - Purchase Records for Cold Cleaning Solvent

10 CSR 10-5.300 Compliance Demonstration

Date	Solvent Supplier Name	Solvent Supplier Address	Type of Solvent	Solvent Volatility in mmHg at 20°C (68°F)

Attachment H - Employee Solvent Metal Cleaning Training Log

10 CSR 10-5.300 Compliance Demonstration

Date	Title of Solvent Metal Cleaning Training Course	Instructor

STATEMENT OF BASIS

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) Part 70 Operating Permit Application, received September 14, 2006; revised date;
2) 2009 Emissions Inventory Questionnaire, received May 5, 2010;
3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
4) St. Louis City Construction Permit #95-04-047F. Line One Coating Modifications;
5) St. Louis City Construction Permit #95-06-072. Bulk Loading of Tote Tanks; and
6) St. Louis City Construction Permit #98-08-050. Waste Heat Boiler

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits
In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None

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

1) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*
10 CSR 10-6.220, *Restriction of Visible Air Contaminants*
10 CSR 10-5.030, *Maximum allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*

   These rules do not apply to the EU0070 – Line #1 Waste Heat Boiler. The boiler is subject to 40 CFR Part 60, Subpart Dc (NSPS). Per 10 CSR 10-6.260(1)(A)1., 10 CSR 10-6.220(1)(E) and 10 CSR 10-3.060(3)(E), these rules do not apply to sources subject to the provisions of NSPS.

2) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*
   This rule exempts combustion equipment that uses exclusively pipeline grade natural gas as defined in 40 CFR 72.2 or liquefied petroleum gas as defined by American Society for Testing and Materials (ASTM), or any combination of these fuels.

   All combustion equipment at the installation uses pipeline grade natural gas and is exempt from the requirements of this rule.

3) St. Louis City Ordinances Nos. 64749, 65108, 65488, 65442 and 65645
   These ordinances were reviewed and considered at the time the application for this permit was submitted. Since that time, these ordinances have been repealed and replaced with St. Louis City

Ordinance No. 68657. The only section of Ordinance 65645 that corresponds to a rescinded ordinance included in the State SIP and therefore federally enforceable is Section 16 - Open Burning Restrictions. This section of the new ordinance is the only section included in the operating permit at this time.

Construction Permit Revisions

The following revisions were made to construction permits for this installation:

1) Construction Permit #95-04-047F

Section II(A): The limitations described in the permit for different overall control efficiencies have been narrowed down to the situation that has been demonstrated during a performance test. The performance test for Line #1 was conducted in December, 1997. The overall control efficiency demonstrated was 96 percent. Since this is only slightly higher than 95.7 percent, the limit of 10.1 million pounds on paint and reduction solvent usage is applicable. The lower limit for overall control efficiency is 95.7 percent for Coating Line #1 as per this construction permit.

Section III(A)(i)-(vi): A performance test has been conducted for Coating Line #1 that satisfies all of these conditions. These conditions, therefore, are not included in the operating permit.

Section IV(G): The length of time records are required to be kept has been modified to five (5) years from three (3) years.

A requirement for monitoring of combustion chamber temperature of the thermal oxidizers was included in permit condition PW002. The installation relies upon these control devices to demonstrate compliance with the conditions of the permit, as well as other applicable requirements. It is appropriate to monitor the operation of the control devices to ensure that the ongoing control is equivalent or better than that demonstrated during performance tests.

2) 10 CSR 10-6.060, *Construction Permits Required*

When a Construction Permit is incorporated into the Operating Permit, all aspects of the Construction Permit relating to emissions are to be maintained for an installation to be in compliance. According to 10 CSR 10-6.060, *Construction Permits Required* the Construction Permit consists of both the issued permit and Construction Permit application.

> 10 CSR 10-6.060 (6)(E)3. – "Any owner or operator who constructs, modifies or operates an installation not in accordance with the application submitted and the permit issued, including any terms and conditions made a part of the permit, or any owner or operator of an installation who commences construction or modification after May 13, 1982, without meeting the requirements of this rule, is in violation of this rule;"

Any installation that does not comply with the issued permit and Construction Permit application as it relates to emissions would be considered to be in violation of 10 CSR 10-6.060.

The Construction Permit application consists of numerous parameters that are not included in either the Construction Permit or the Operating Permit. Some examples of the criteria necessary for the application are site information; descriptions; plans; control efficiencies; flow parameters; design specifications; and drawings showing the design of the installation, the nature and amount of emission of each pollutant, and the manner in which emission units will be operated and controlled.

These values submitted in the Construction Permit application define the criteria the regulatory agencies use to evaluate potential emissions and determine the ambient air quality of the surrounding area. It is essential the installation operate and construct the emission units according to the criteria related to emissions in the Construction Permit application, since the criteria are the basis behind the limitations established in the Construction Permit. If any of the parameters relating to emissions should change, the installation would be required to request and obtain a modification to their Construction Permit.

While an installation must adhere to their Construction Permit application, it is not necessary for the installation to certify and monitor each application parameter to show compliance. The installation is only required to monitor those parameters defined in specific State or Federal requirements or identified as Special Conditions in the Construction Permit. When construction permits are placed in Plant-wide and Emission Unit permit conditions in the Operating Permit, the installation is required to certify compliance with the parameters (monitoring, performance testing, recordkeeping and reporting) identified in the Plant-wide and Emission Unit permit conditions of the Operating Permit. However, the various parameters detailed in the Construction Permit application are still applicable to the installation, even though the criteria are not specifically listed in the Operating Permit.

New Source Performance Standards (NSPS) Applicability

10 CSR 10-6.070, *New Source Performance Regulations*

1) 40 CFR Part 60 Subpart TT - *Standards of Performance for Metal Coil Surface Coating*
Coating Line #1 was modified in 1996/1997 in accordance with St. Louis City Construction Permit #95-04-047F. 40 CFR 60 Subpart TT Standards of Performance for Metal Coil Surface Coating applies to the prime and finish coating operations of this line. The installation is required to conduct a performance test within sixty (60) days of reaching normal production levels. A performance test was conducted in December of 1997. The NSPS contains a control requirement of 90 percent as a compliance option while using the thermal oxidizer at all times. During the test, an overall control efficiency of 96 percent was demonstrated. Currently, the oxidizer is used at all times during operation of the coating line and ovens. Therefore, this coating line meets this performance standard within the conditions of the performance test.

2) 40 CFR 60 Subpart Dc - *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*
This subpart applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989, and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu/hr) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

Under Subparts Db and Dc, a steam generating unit is defined as any device which combusts any fuel to produce steam, heat water, or heat any heat transfer medium. Part 60.41b and Part 60.41c define a heat transfer medium as any material used for transferring heat from one point to another point.

Therefore, Line #1 Waste Heat Boiler (EU0070) rated at greater than 10 MMBtu/hr but less than 100 MMBtu/hr and constructed after the applicability date of this subpart, is subject to this subpart.

Under this subpart, there are no opacity requirements for boilers with heat inputs less than 30 million Btu and there are no particulate or sulfur dioxide standards for these units. The only substantive requirement is that the permittee keep records of the amounts of fuel combusted monthly in these units.

Maximum Achievable Control Technology (MACT) Applicability

10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*

1) 40 CFR Part 63, Subpart SSSS - *National Emission Standard for Hazardous Air Pollutants: Surface Coating of Metal Coil*

Precoat Metals is subject to this MACT. Line 1 will comply with §63.5120(a)(2) and Line 2 can comply with either §63.5120(a)(1) or (a)(2).

§63.5160 – Performance Testing:

Citation	Requirement	Results
§63.5160(b)(4)	Organic HAP Content	Verified via formulation data. Obtained MSDSs and specifications sheets from manufacturer coating applied at the plant
§63.5160(c)	Solids Content	Verified via formulation data. Obtained MSDSs and specifications sheets from manufacturer coating applied at the plant
§63.5160(d)	Capture & Control Efficiency	Coating Line 1: Test performed on 4/15/2005. Utilized temporary total enclosure (TTE) and followed USEPA Method 204. Three one-hour USEPA Method 25A tests performed simultaneously at the Prime Coater Fugitife Exhaust, Finish Coater Fugitive Exhaust, and Oxidizer Outlet. Capture efficiency for the prime coater system averaged 99.87%; 97.83% for the finish coater system; and, a weighted average overall control efficiency of 98.78%. With the average calculated destruction efficiency of 98.94%, the overall control efficiency for the prime and finish work station was 98.78% and 96.82 % respectively. The overall weighted average control efficiency was 97.73%. The average combustion temperature for the three, one hour runs was 1407°F.
		Coating Line 2: Test performed on 4/15/2005. Utilized temporary total enclosure (TTE) and followed USEPA Method 204. Three one-hour USEPA Method 25A tests performed simultaneously at the Prime Oxidizer Inlet, Finish Oxidizer Inlet, and Common Oxidizer Outlet for destruction efficiency. Two three-hour tests were conducted at the Prime Coater Enclosure exhaust and Finish Coater Enclosure exhaust and the Prime Coater Oxidizer Inlet for capture efficiency determination. Capture and destruction efficiency for the prime were 99.68% and 99.51% respectively, yielding a total control efficiency of 99.19%. Capture and destruction efficiency for the finish were 99.42% and 99.51% respectively, yielding a total control efficiency of 98.93%. The overall weighted average control efficiency was 99.05%, The average combustion chamber temperature for the three, one hour destruction efficiency tests for the prime and finish oxidizer respectively was 1388°F and 1387°F respectively.

2) 40 CFR Part 63, Subpart T - *National Emission Standards for Halogenated Solvent Cleaning*
The provisions of this subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than five percent by weight, as a cleaning and/or drying agent. Wipe cleaning activities, such as using a rag containing halogenated solvent are not covered under the provisions of this subpart.

The permittee has a total of two parts washers manufactured by Safety-Kleen in sizes ranging from 30 gallons to 40 gallons. These units do not use halogenated solvents as defined in 40 CFR 63.460, therefore the parts washers are not subject to the MACT standards for halogenated solvent cleaning.

3) 40 CFR Part 63, Subpart DDDDD - *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*
The subpart applies to a facility that owns or operates a industrial boilers, institutional boilers, commercial boilers, and process heaters that is a major source, or is located at a major source, or is part of a major source of HAP emissions. A process heater is defined as a unit in which the combustion gases do not directly come into contact with process material or gases in the combustion chamber (e.g., indirect fired). A boiler is defined as an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water.

Precoat Metals is a major source of HAPs and operates boilers and process heaters. The provisions of 40 CFR Part 63, Subpart DDDDD do apply to this installation. .

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability
40 CFR Part 61 Subpart M, *National Emission Standard for Asbestos*, §61.145(a), Standard for demolition and renovation, applies to the installation.

Compliance Assurance Monitoring (CAM) Applicability
40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*
The CAM rule applies to each pollutant specific emission unit that:
1) Is subject to an emission limitation or standard, and
2) Uses a control device to achieve compliance, and
3) Has pre-control emissions that exceed or are equivalent to the major source threshold.

Coating Line #1 and Coating Line #2 utilize control devices to limit VOC emissions and have potential to emit greater than the major source threshold (applicability item c). The two coating lines are the only emission units that have pre-control VOC emissions above the major source threshold. Since these units are subject to 40 CFR Part 63, Subpart SSSS standards; and units that are subject to 111 or 112 standards promulgated after November 15, 1990, are excluded from CAM, therefore the coating lines are not subject to CAM.

Greenhouse Gas Emissions
This installation is not a major source for greenhouse gases.

Other Regulatory Determinations

1) 10 CSR 10-6.400, *Restriction of Emission Of Particulate Matter From Industrial Processes* and 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants.*
The coating lines do not generate any appreciable particulate emissions due to the nature of the coating process. Paint is applied to the metal by a roller that applies the coating at a uniform thickness. There is no spraying or atomization involved. The prime and finish cure ovens burn natural gas only. This is the only source of particulate emissions. In accordance with Missouri Department of Natural Resources guidance, the process weight for each line includes only the maximum amount of coating material used in an hour.

The following table presents the data and calculations used to demonstrate compliance with 10 CSR 10-6.400. Where available, the maximum hourly design rate for each emission unit was taken from the 2009 EIQ.

Also, the following formula from 10 CSR 10-6.400 is used to calculate the PM allowable limit:
$E = 4.10P^{0.67}$ for process weight rates up to 30 tons (60,000 lbs) per hour, and
Where: E = rate of emission in lb/hr; and
P = process weight rate in tons/hr (maximum hourly design rate)

Process Weight for Coating Line #1 = 0.306 tons per hour
Process Weight for Printer Coater = 0.05 tons per hour
Process Weight for Coating Line #2 = 0.5721 tons per hour

Emission Unit	Maximum Hourly Design Rate (ton/hr)	Emission Rate (lb/hr)	Allowable Emission Rate (lb/hr)	In Compliance (yes/no)
EU0010 & EU0020	0.306	0.101	1.85	Yes
EU0030	0.05	0.03	0.55	Yes
EU0040 & EU0050	0.5721	0.11	2.82	Yes

The coating lines as shown above in the table potentially emit less than 0.5 lbs of PM per hour and are exempt from the requirements of this rule per 10 CSR 10-6.400(1)(B)11.

2) 10 CSR 10-5.030. *Maximum Allowable Emission of Particulate matter From Fuel Burning Equipment Used for Indirect Heating*
The boilers operated at this installation burn only pipeline grade natural gas. 10 CSR 10-5.030 applies to the older boiler, EU0060. It does not apply to the waste heat boiler, EU0070, in accordance with Section (1)(F) of 10 CSR 10-5.030, because the NSPS 40 CFR Part 60 Subpart Dc applies. The Air Pollution Control Program does not consider EU0060 to be capable of exceeding the particulate matter (PM) emission limitation (0.56 pounds of particulate matter per million BTU's of heat input) of this rule.

3) The emergency generator at the installation is a natural gas burning combustion unit that emits only combustion products and produces less than 150 pounds/day of any contaminant and which has a maximum heat input of less than or equal to 1 Million BTU/hour. As such, under Missouri regulation 10 CSR 6.065(1)(C)15., the operating permit requirements are not applicable to this source.

4) 10 CSR 10-5.455, *Control of Emission from Solvent Cleanup Operations*.
VOC containing solvent is used to cleanup the coil coating equipment in the prime coating rooms of both lines, the finish coating rooms of both lines and the printer coating room. VOC emissions from the cleanup operations are controlled by the thermal oxidizers. The combined cleanup and solvent wipe activities result in less than 500 pounds per day of VOC emissions. This rule, therefore, is not applicable to the installation.

5) 10 CSR 10-5.520, *Control of Volatile Organic Compound Emissions From Existing Major Sources*. This rule applies to any installation in the counties of St. Charles, St. Louis, Franklin, or Jefferson or the City of St. Louis that have the potential to emit greater than one hundred (100) tons per year of volatile organic compounds. This rule does not apply to any installation that meets one or more of the following:
   a) One or more rule under Title 10, Division 10, Chapter 5 of the *Code of State Regulations* (CSR) applies to volatile organic compound (VOC) emissions from a product process, or a raw material, intermediate or product tank;
   b) Is exempted from one or more rule under Title 10, Division 10, Chapter 5 of the CSR as it applies to VOC emissions from a product process, or a raw material, intermediate or product tank; or
   c) Is affected by any federal rulemaking promulgated under 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63 applies to VOC emissions from a product process, or a raw material, intermediate or product tank.

   Therefore, 10 CSR 10-5.520 is not applicable to this installation as 10 CSR 10-5.330, *Control of Emissions from Industrial Surface Coating Operations*, 40 CFR Part 63, Subpart SSSS and 40 CFR Part 60, Subpart TT are applicable and the installation is exempt from 10 CSR 10-5.520.

6) Precoat Metals does not manage any of the toxic or flammable chemicals listed at 40 CFR Part 68 Accidental Release Prevention Requirements in quantities greater than threshold levels. No Risk Management Plan was required for this installation.

7) 10 CSR 10-5.330, *Control of Emissions from Industrial Surface Coating Operations*.
   a) The installation relies on thermal oxidizers to demonstrate compliance with this regulation. Performance tests are used to establish the efficiency of the control devices. In order to ensure compliance, there must be monitoring of a parameter that is indicative of the performance of the oxidizers. Combustion chamber temperature serves this purpose as it is related to the amount of VOCs destroyed. The temperature demonstrated during the performance tests in which control efficiency was determined can be used as a basis for limiting combustion chamber temperature. The NSPS regulation allows a range of 28 degrees less than the exhibited temperature of the test and a three-hour averaging period. Using this as a guideline and for the reasons stated above, combustion chamber temperature limitations, monitoring and recordkeeping requirements are included for this condition for Line #1 and Line#2.
   b) 10 CSR 10-5.330, Control of Emissions from Industrial Surface Coating Operations does not apply to the Printer Coat Operation because the unit is performing roll printing (defined in 10 CSR 10-6.020(R)(16)), since it applies words, designs or pictures to the substrate with only partial coverage.

8) 10 CSR 10-5.442, *Control of Emissions from Lithographic Printing Operations* does not apply to the Printer Coat Operations because the rule shall not apply to printing on metal surfaces per 10 CSR 10-5.442(2)(C).

9) The units listed in the "Emission Units Without Limitations" section of this permit either have no applicable regulations associated with them or are considered insignificant activities by the operating permit application. Those units include, but are not limited to, all natural gas/LPG units with a maximum heat input of less than ten (10) MMBtu/hr and those that burn other fuels and have a heat input of less than one (1) MMBtu/hr that emits only products of combustion.

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:

Berhanu A. Getahun
Environmental Engineer

CERTIFIED MAIL: 70093410000190188117
RETURN RECEIPT REQUESTED

Mr. Damon Cartmell
Precoat Metals
6428 Joliet Road, Suite 203
Countryside, MO 60561

Re: Precoat Metals, 510-0027
Permit Number: **OP2011-037**

Dear Mr. Cartmell:

Enclosed with this letter is your Part 70 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 thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Berhanu Getahun at the St. Louis Regional Office, 7545 S. Lindbergh, Suite 210, St. Louis, MO 63125, or by telephone at (314) 416-2960. You may also contact me with the Department's 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:bgk

Enclosures

c: City of St. Louis Air Pollution Control Program
PAMS File: 2006-09-027