# INTERMEDIATE STATE PERMIT TO OPERATE

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

Intermediate Operating Permit Number: OP2012-043

Expiration Date: OCT 2 2 2017

Installation ID: 183-0027

Project Number: 2010-12-026

#### Installation Name and Address

MEMC Electronic Materials, Inc. 501 Pearl Drive O'Fallon, MO 63366 St. Charles County

#### Parent Company's Name and Address

MEMC Electronic Materials, Inc. P.O. Box 8 MZ65 Saint Peters, MO 63376

#### Installation Description:

MEMC Electronic Materials, Inc. (MEMC) operates a silicon wafering installation in O'Fallon, Missouri, which is in St. Charles County, part of the St. Louis ozone non-attainment area for ozone (O<sub>3</sub>). The plant uses batch processing and other manufacturing equipment to produce a variety of silicon crystal products for use in the electronic industry. MEMC has the potential to be a major source for both criteria pollutants and Hazardous Air Pollutants (HAPs). However, MEMC has accepted voluntary, federally enforceable emission limitations to below the Title V threshold levels not be subject to the Title V program. The operating permit limits the plant wide emissions to less than 100 tons per year for each criteria pollutant, less than ten tons per year each HAP, and less than 25 tons per year total HAPs, on a 12 month rolling average.

OCT 23 2012

Effective Date

Director or Designee

Department of Natural Resources

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### I. Installation Description and Equipment Listing

#### INSTALLATION DESCRIPTION

MEMC Electronic Materials, Inc. (MEMC) operates a silicon wafering installation in O'Fallon, Missouri, which is in St. Charles County, part of the St. Louis ozone non-attainment area for ozone (O<sub>3</sub>). The plant uses batch processing and other manufacturing equipment to produce a variety of silicon crystal products for use in the electronic industry. MEMC has the potential to be a major source for both criteria pollutants and HAPs. However, MEMC has accepted voluntary, federally enforceable emission limitations to below the Title V threshold levels not be subject to the Title V program. The operating permit limits the plant wide emissions to less than 100 tons per year for each criteria pollutant, less than ten tons per year each HAP, and less than 25 tons per year total HAPs, on a 12 month rolling average.

The installation has stated in their operating permit application if the ozone non attainment area is bumped up to serious status they may elect to change status to a Part 70 Operating permit.

The reported actual emissions for the past five years for the installation are listed below:

Reported Air Pollutant Emissions, tons per year					
Pollutants	2011	2010	2009	2008	2007
Particulate Matter $\leq$ Ten Microns (PM <sub>10</sub> )	7.81	7.78	7.68	8.47	6.95
Particulate Matter ≤ 2.5 Microns (PM <sub>2.5</sub> )	4.40	4.36	4.38	4.46	3.54
Sulfur Oxides (SO <sub>x</sub> )	0.09	0.10	0.10	0.13	0.00
Nitrogen Oxides (NO <sub>x</sub> )	11.83	18.78	17.87	23.58	29.14
Volatile Organic Compounds (VOC)	6.51	13.59	8.99	15.07	16.78
Carbon Monoxide (CO)	9.48	8.97	9.25	10.07	5.65
Hazardous Air Pollutants (HAPs)	1.21	1.30	1.89	2.25	3.26
Ammonia (NH <sub>3</sub> )	2.61	2.78	4.07	5.10	4.29

#### **EMISSION UNITS WITH LIMITATIONS**

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

Emission	
Unit #	Description of Emission Unit
12	N-43 SPD EPI
12L	I-25, I-35 APD EPI
11B4	Heating Boiler 1
11B5	Heating Boiler 2
11B2	Heating Boiler 3
11B1	Heating Boiler 5
11B6	Heating Boiler 6
12D-L	Two Diesel Engines/Emergency Backup
12D-S	Four Diesel Engines/Emergency Backup
EU0150	Two Maintenance Shop Naphtha Cleaners

#### **EMISSION UNITS WITHOUT LIMITATIONS**

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

Emission		
Unit #	Description of Emission Unit	
01	Small Diameter Crystal Pulling L100	
02	Rod Lab L100	
03	Rod Grinding L100	
01L	Large Diameter Crystal Pulling P120	
02L	Rod Lab R120	
03L	Rod Grinding R120	
04L	Slicing Wire Saws K45	
05L	Lapping K45	
09L	Clean & Heat Treat	
10L	SOI/Polishing K70	
11L	SOI/Final Clean K45	
12L	SOI/EPI 125/135	
11B3	Heating Boiler 4 (6.277 MMBtu/hr, Natural Gas-Fired, Constructed November	
	22,1991)	
30	Crystal Research L120	
12B	Air Stripper – Ground Water Treatment	
12W-U	Waste Treatment – Lime Transfer Unload (fugitive)	
20	Cooling Tower	
05AL	Applications Laboratory/Worldwide Lab.	
BF-IPA	Building Fugitives IPA Wipes	
	12,000 Gallon Above Ground Horizontal Tank for No. 2 Distillate	
	300 Gallon Fire Water Diesel Fuel Tank #1	
	300 Gallon Fire Water Diesel Fuel Tank #2	
	185 Gallon Diesel Tank for 350 kW Emergency Diesel Generator	

Emission Unit #	Description of Emission Unit
Omt ii	1,360 Gallon Diesel Tank for 750 kW Emergency Diesel Generator
	2,000 Gallon Diesel Tank for 1250 kW Emergency Diesel Generator
	450 Gallon Diesel Tank for 250 kW Emergency Diesel Generator
	100 Gallon Diesel Tank for R&S Services

100 Gallon Gasoline Tank for R&S Services

#### II. Plant Wide Emission Limitations

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

#### **Permit Condition PW001**

10 CSR 10-6.060 Construction Permits Required Construction Permit 0694-004C, Issued August 15, 2006 10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

#### **Emission Limitation:**

MEMC shall emit into the atmosphere less than 100 tons of Volatile Organic Compounds (VOCs) from the entire installation in any 12 - month rolling average period.

[Construction Permit 0694-004C: Special Condition 3.A.]

#### Monitoring/Recordkeeping:

MEMC shall maintain the monthly and the sum of the most recent consecutive 12-month records of the VOC emissions from the entire installation. MEMC shall use Attachment B (Plant-wide Emissions Tracking Record) or an Air Pollution Control Program approved equivalent form to demonstrate compliance with Special Condition 3.A. These records shall be maintained on-site for five (5) years and shall be made available to Missouri Department of Natural Resources' personnel upon request. [Construction Permit 0694-004C: Special Condition 3.B.]

#### Reporting:

MEMC shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which Monthly VOC Tracking Records (Special Condition 3.B.) indicate that MEMC exceeded the limitation of Special Condition 3.A. [Construction Permit 0694-004C: Special Condition 3.C.]

#### **Permit Condition PW002**

10 CSR 10-6.060 Construction Permits Required Construction Permit 0694-004C, Issued August 15, 2006 10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

#### Emission Limitation:

- 1) MEMC shall emit less than ten (10) tons individually of Hazardous Air Pollutants (HAPs) from the entire installation in any consecutive 12-month rolling average period.
- 2) MEMC shall emit less than twenty-five (25) tons combined of Hazardous Air Pollutants (HAPs) from the entire installation in any consecutive 12-month rolling average period. [Construction Permit 0694-004C: Special Condition 4.A.]

#### Monitoring/Recordkeeping:

Attachment A-1 and Attachment A-2 or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 4.A. The records must include each individual HAP identified on a Material Safety Data Sheets (MSDS) for the HAP containing products in use in the entire installation. The total of the individual HAPs must add up to the

total combined HAPs. MEMC shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used. [Construction Permit 0694-004C: Special Condition 4.B.]

#### Reporting:

MEMC shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition 4.B. indicate that the source exceeds the limitation of Special Conditions Number 4.A. [Construction Permit 0694-004C: Special Condition 4.C.]

#### **Permit Condition PW003**

10 CSR 10-6.065 Operating Permits 10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

#### Emission Limitation:

The permittee shall discharge into the atmosphere from the entire installation less than 100 tons of particulate matter with an aerodynamic diameter of less than or equal to 10 microns ( $PM_{10}$ ) in any consecutive 12-month period.

#### Monitoring/Recordkeeping:

The permittee shall maintain an accurate record of emissions of  $PM_{10}$  emitted into the atmosphere from this installation. The permittee shall record the monthly and running 12-month totals of the  $PM_{10}$  emissions from this installation. Example form is attached as Attachment B (Plant-wide Emissions Tracking Record). The permittee may use this form, or forms of its own, so long as the forms used will accurately demonstrate compliance with the  $PM_{10}$  emission limitation (less than 100 tons per consecutive 12-month period of  $PM_{10}$ ).

#### Reporting:

The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any deviation from or exceedance of any of the terms imposed by this permit condition, or any malfunction which causes a deviation from or exceedance of this permit condition.

#### **Permit Condition PW004**

10 CSR 10-6.065 Operating Permits 10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

#### Emission Limitation:

The permittee shall discharge into the atmosphere from the entire installation less than 100 tons of Sulfur Oxides  $(SO_x)$  in any consecutive 12-month period.

#### Monitoring/Recordkeeping:

The permittee shall maintain an accurate record of emissions of  $SO_x$  emitted into the atmosphere from this installation. The permittee shall record the monthly and running 12-month totals of the  $SO_x$  emissions from this installation. Example form is attached as Attachment B (Plant-wide Emissions Tracking Record). The permittee may use this form, or forms of its own, so long as the forms used will accurately demonstrate compliance with the  $SO_x$  emission limitation (less than 100 tons per consecutive 12-month period of  $SO_x$ ).

#### Reporting:

The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any deviation from or exceedance of any of the terms imposed by this permit condition, or any malfunction which causes a deviation from or exceedance of this permit condition.

#### **Permit Condition PW005**

10 CSR 10-6.065 Operating Permits 10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

#### Emission Limitation:

The permittee shall discharge into the atmosphere from the entire installation less than 100 tons of Nitrogen Oxides  $(NO_x)$  in any consecutive 12-month period.

#### Monitoring/Recordkeeping:

The permittee shall maintain an accurate record of emissions of  $NO_x$  emitted into the atmosphere from this installation. The permittee shall record the monthly and running 12-month totals of the  $NO_x$  emissions from this installation. Example form is attached as Attachment B (Plant-wide Emissions Tracking Record). The permittee may use this form, or forms of its own, so long as the forms used will accurately demonstrate compliance with the  $NO_x$  emission limitation (less than 100 tons per consecutive 12-month period of  $SO_x$ ).

#### Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any deviation from or exceedance of any of the terms imposed by this permit condition, or any malfunction which causes a deviation from or exceedance of this permit condition.

#### **Permit Condition PW006**

10 CSR 10-6.065 Operating Permits 10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

#### **Emission Limitation:**

The permittee shall discharge into the atmosphere from the entire installation less than 100 tons of Carbon Monoxide (CO) in any consecutive 12-month period.

#### Monitoring/Recordkeeping:

The permittee shall maintain an accurate record of emissions of CO emitted into the atmosphere from this installation. The permittee shall record the monthly and running 12-month totals of the CO emissions from this installation. Example form is attached as Attachment B (Plant-wide Emissions Tracking Record). The permittee may use this form, or forms of its own, so long as the forms used will accurately demonstrate compliance with the CO emission limitation (less than 100 tons per consecutive 12-month period of CO).

#### Reporting:

The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any deviation from or exceedance of any of the terms imposed by this permit condition, or any malfunction which causes a deviation from or exceedance of this permit condition.

#### **Permit Condition PW007**

#### 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 new source any visible emissions with an opacity greater than 20 percent.
- 2) Exception: 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 60 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) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

#### Recordkeeping:

- 1) The permittee shall maintain records of all observation results (see Attachments C-1), 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 equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C-2)
- 4) Attachments C-1 and C-2 contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

#### Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the 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 annually in the annual compliance certification and monitoring report, 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 on the date of permit issuance.

Emission Units 04, 07, 10, 12 and 12L			
Emission Unit No.	Description	Manufacturer/Model #	
12	N-85, N-43 SPD EPI	Not Available	
12L	I-25, I-35 APD EPI	Not Available	

#### Permit Condition 12-001 and 12L-001

10 CSR 10-6.060 Construction Permits Required Construction Permit 0694-004C, Issued August 15, 2006

#### **Operational Limitation/Equipment Specifications:**

MEMC Electronic Materials, Inc. shall implement packed water scrubbers on the following Emission Units 04, 07 and 10 to control the volatile organic compounds, toxics, and particulate matter emanating from these process steps; and also on Emission Units 12 and 12L (Epitaxial Furnaces) to control hydrogen chloride (HCl) and  $PM_{10}$ . The destruction efficiency shall be maintained at 99 percent for HCl and  $PM_{10}$ . The control device(s) shall be in use at all times the installation is producing wafers, and shall be operated and maintained using the principles Good Engineering Practice. [Construction Permit 0694-004C: Special Condition 2.]

Emission Units 11B4, 11B5 and 11B2 – Boilers 1, 2 and 3				
Emission Unit	Description	Manufacturer/Model #		
11B4	Heating Boiler 1 - 10.043 MMBtu/hr, Natural	Kewanee/ Model L3W-300-G02-LE		
	Gas Fired, Constructed March 3, 1997			
11B5	Heating Boiler 2 - 10.043 MMBtu/hr, Natural	Kewanee/ Model L3W-300-G02-LE		
	Gas Fired, Constructed March 3, 1997			
11B2	Heating Boiler 3 - 10.461 MMBtu/hr, Natural	Cleaver Brooks/ Model CBW200-250		
	Gas Fired, Constructed October 8, 1991			

### Permit Condition 11B4-001, 11B5-001 and 11B2-001

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

#### Recordkeeping:

The owner or operator of an affected facility that combusts only natural gas shall record and maintain records of the amount of fuel combusted during each calendar month. [40 CFR 60.48c(g)(2)]

Emission Unit 11B1 – Boilers 5			
Emission Unit	Description	Manufacturer/Model #	
11B1	Heating Boiler 5 - 20.922 MMBtu/hr, Natural Gas/Fuel Oil Fired, Constructed 1974	Cleaver Brooks/Model CB600-500	

# Permit Condition 11B1-001 10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds <sup>1</sup>

#### **Emission Limitation:**

No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(3)(B) &10 CSR 10-6.010 Ambient Air Quality Standards]

#### **Operational Limitation:**

- 1) When burning natural gas, only pipeline grade natural gas shall be burned in the boiler.
- 2) When burning fuel oil the sulfur content of the fuel shall be limited to no more than 0.5 percent by weight sulfur.

#### Monitoring/Recordkeeping:

The permit shall maintain documentation supporting the fuel used is pipeline grade natural gas and records on the premises of the fuel suppliers analysis of distillate oil fired in Boiler 5 which shows weight percentage of sulfur in the fuel.

#### Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the annual compliance certification to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

Emission Unit 11B6 – Boiler 6			
Emission Unit	Description	Manufacturer/Model #	
11B6	Heating Boiler 6 – 14.288 MMBtu/hr, Natural	Cleaver Brooks/	
	Gas/Distillate Oil Fired, Constructed December 23, 1997	Model CBI1200 350 125	

#### **Permit Condition 11B6-001**

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

#### **Emission Limitation:**

1) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts

<sup>&</sup>lt;sup>1</sup> 10 CSR 10-6.260(3)(B) is a state-only requirement

- oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain  $SO_2$  in excess of 215 ng/J (0.50 lb/MMBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. [ $\S60.42c$  (d)]
- 2) For distillate oil-fired boilers, compliance with the emission limits or fuel oil sulfur limits may be determined based on a certification from the fuel supplier, as described under §60.48c(f)(1). [§60.42c (h) & (h)(1)]
- 3) The SO<sub>2</sub> emission limits and fuel oil sulfur limits apply at all times, including periods of startup, shutdown, and malfunction. [§60.42c (i)]

#### Monitoring/Recordkeeping:

- 1) For distillate oil: Records of fuel supplier certification.
  - The Fuel Supplier Certification shall include the name of the oil supplier; and a statement from the oil supplier that the oil complies with the specifications for distillate oil (Distillate oil means fuel oil that complies with the specifications for fuel oil number 1 or 2, as defined by the American society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98 "Standard Specification of Fuel Oils"). [§60.48c(f)(1) & §60.41c Definition]
- 2) The permittee shall record and maintain records of the amounts of each fuel combusted during each calendar month. [\$60.48c(g)(2)]

#### Reporting:

The permittee shall submit records of fuel supplier certification with a certified statement signed by the owner or operator of the affected facility that the records of fuel suppler certification submitted represented all of the fuel combusted during the reporting period. The reporting period for the reports required is each six-month Period. All reports including calendar dates covered in the reporting period shall be submitted to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All reports shall be postmarked by the 30th day following the end of the reporting period. [§60.48c(d), (e)(1), (e)(11) & (j)]

#### **Permit Condition 11B6-002**

10 CSR 10-6.060 Construction Permits Required Construction Permit 0997-044, Issued September 9, 1997

#### **Emission Limitation:**

MEMC shall not discharge into the atmosphere from Boiler 6 sulfur dioxide (SO<sub>2</sub>) in excess of 40 tons in any consecutive 12-month period.

#### Monitoring/Recordkeeping:

MEMC shall maintain an accurate record of emissions of SO<sub>2</sub> from this emission unit. MEMC shall record the monthly and running 12-month totals of SO<sub>2</sub> emissions from this emission unit. MEMC shall use Attachment D.

#### Reporting:

MEMC shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month, if the 12-month cumulative total records show that the source exceeded the emission limitations 40 tons of SO<sub>2</sub>.

Emission Units 12DL and 12DS – Backup Diesel System			
Emission Unit	Description	Manufacturer/Model #	
12DL	Two Diesel Engines/Emergency Backup	Cummins/1135HP & 1850HP	
	Constructed 1996,		
12DS	Four Diesel Engines/Emergency Backup	Cummins/102HP, 310HP, 380HP & 535 HP	
	Constructed 1988, 1978, 1998 & 1991		

#### Permit Condition 12DL-001 and 12DS-001

10 CSR 10-6.060 Construction Permits Required Construction Permit 0498-012, Issued March 30, 1998

#### **Operational Limitation:**

- 1) MEMC shall not operate Emission Unit 12DL in excess of 500 hours in any consecutive 12-month period.
- 2) MEMC shall not operate Emission Unit 12DS in excess of 500 hours in any consecutive 12-month period.

#### Monitoring/Recordkeeping:

MEMC shall keep monthly records that are adequate to determine the operational schedule of the emergency backup diesel system at this installation. Attachments E, Diesel System Compliance Worksheet, or equivalent forms of the company's own design are suitable for this purpose.

#### Reporting:

MEMC shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month, if the 12-month cumulative total records show that the source exceeded the operating hours limitations.

#### Permit Condition 12DL-002 and 12DS-002

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds <sup>2</sup>

#### **Emission Limitation:**

- 1) Emissions from this source operation shall not contain more than 500 parts per million by volume (ppmv) of sulfur dioxide or more that 35 milligrams per cubic meter (mg/m3) of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(3)(B) & 10 CSR 10-6.010 Ambient Air Quality Standards]

#### **Operational Limitation:**

The emission units shall be limited to burning fuel oil with a sulfur content of no more than 0.5 percent sulfur by weight. The fuel oils known to be less than 0.5 percent by weight sulfur per Chapter 414 RSMo, section 414.032, ASTM D396-Table 1 and ASTM D975-Table 1, are fuel oil No. 1 and No. 2 and diesel fuel oil Grade Low Sulfur No. 1-D, Grade Low Sulfur No. 2-D. However, these units are not

<sup>&</sup>lt;sup>2</sup> 10 CSR 10-6.260(3)(B) is a state-only requirement

limited to the known fuel oils listed above, but are limited to fuel oils based solely on having a percent sulfur by weight content of 0.5 percent or less.

#### Monitoring/Recordkeeping;

The permittee shall maintain records of the fuel type used verifying a sulfur content less than 0.5 percent by weight. Purchase receipts, analyzed samples or certifications that verify the fuel type as a grade level with a sulfur content less than 0.5 percent by weight will be acceptable.

#### Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

#### Permit Condition 12DL-003 and 12DS-003

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants
for Stationary Reciprocating Internal Combustion Engines

The permittee must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. [ $\S63.6595(a)$ ]

#### **Emission Limitation:**

Owners or operators of an existing stationary CI RICE located at an area source of HAP emissions must comply with the requirements in Table 2d to Subpart ZZZZ of Part 63 which apply to you. [§63.6603(a)]

For each	You must meet the following requirement, except during periods	During periods of startup you must
	of startup	
Emergency CI <sup>2</sup>	<ul> <li>a. Change oil and filter every 500 hours of operation or annually, whichever comes first;<sup>1</sup></li> <li>b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and</li> <li>c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary</li> </ul>	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ.

Pursuant to §63.6625(i), the oil analysis must be performed at the same frequency specified for changing the oil in Table 2d (see table above) to Subpart ZZZZ of Part 63. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5.

If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil before continuing to use the engine. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

#### Monitoring, Operation and Maintenance Requirements:

- 1) If you own or operate an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d to Subpart ZZZZ of Part 63, you must operate and maintain the stationary RICE and aftertreatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [§63.6625(e)]
- 2) If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed. [§63.6625(f)]
- 3) If you operate a new or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to Subpart ZZZZ of Part 63 apply. [§63.6625(h)]
- 4) If you own or operate a stationary engine that is subject to the work, operation or management practices in items 1, 2, or 4 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil before continuing to use the engine. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

#### Compliance Requirements:

1) You must be in compliance with the emission limitations and operating limitations in Subpart ZZZZ of 40 CFR Part 63 that apply to you at all times. [§63.6605(a)]

2) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 2b and 2d to Subpart ZZZZ of 40 CFR Part 63 that apply to you according to methods specified below (from Table 6 to Subpart ZZZZ of 40 CFR Part 63). [§63.6640(a)]

For Each	Complying with the requirements to	You must demonstrate continuous compliance by
Existing stationary CI RICE not subject to any numerical emission limitations	Work or Management practices	i Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

#### Recordkeeping:

- 1) If you must comply with the emission and operating limitations, you must keep the records described in Paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of §63.6655. [§63.6655(a)]
  - a) A copy of each notification and report that you submitted to comply with Subpart ZZZZ of 40 CFR Part 63, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv). [§63.6655(a)(1)]
  - b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.6655(a)(2)]
  - c) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b). [§63.6655(a)(5)]
- 2) You must keep the records required in Table 6 of Subpart ZZZZ of 40 CFR Part 63 to show continuous compliance with each emission or operating limitation that applies to you. [§63.6655(d)]
- 3) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). [§63.6660(a)]
- 4) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.6660(b)]
- 5) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [§63.6660(c)]

#### Reporting:

- 1) You must report each instance in which you did not meet each emission limitation or operating limitation in Table 2d to Subpart ZZZZ of 40 CFR Part 63 that apply to you. These instances are deviations from the emission and operating limitations in Subpart ZZZZ of 40 CFR Part 63. These deviations must be reported according to the requirements in §63.6650. [§63.6640(b)]
- 2) You must also report each instance in which you did not meet the requirements in Table 8 to Subpart ZZZZ of 40 CFR Part 63 Applicability of General Provisions to Subpart ZZZZ that apply to you. [§63.6640(e)]
- 3) Reporting requirements [§63.6650]

- a) You must submit each report in Table 7 of Subpart ZZZZ of 40 CFR Part 63 that applies to you. [§63.6650(a)]
- b) Unless the Administrator has approved a different schedule for submission of reports under \$63.10(a), you must submit each report by the date in Table 7 of Subpart ZZZZ of 40 CFR Part 63 and according to the requirements in Paragraphs (b)(1) through (b)(9) of \$63.6650. [\$63.6650(b)]
  - i) For semi-annual Compliance Reports, the first Compliance Report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595. [§63.6650(b)(1)]
  - ii) For semi-annual Compliance Reports, the first Compliance Report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595. [§63.6650(b)(2)]
  - iii) For semi-annual Compliance Reports, each subsequent Compliance Report must cover the semi-annual reporting period from January 1 through June 30 or the semi-annual reporting period from July 1 through December 31. [§63.6650(b)(3)]
  - iv) For semi-annual Compliance Reports, each subsequent Compliance Report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semi-annual reporting period. [§63.6650(b)(4)]
  - v) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR Part 70 or 71, and if 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 Paragraphs (b)(1) through (b)(4) of §63.6650. [§63.6650(b)(5)]
  - vi) For annual Compliance Reports, the first Compliance Report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31. [§63.6650(b)(6)]
  - vii) For annual Compliance Reports, the first Compliance Report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595. [§63.6650(b)(7)]
  - viii) For annual Compliance Reports, each subsequent Compliance Report must cover the annual reporting period from January 1 through December 31. [§63.6650(b)(8)]
  - ix) For annual Compliance Reports, each subsequent Compliance Report must be postmarked or delivered no later than January 31. [§63.6650(b)(9)]
- c) The Compliance Report must contain the information in Paragraphs (c)(1) through (6) of §63.6650. [§63.6650(c)]
  - i) Company name and address. [ $\S63.6650(c)(1)$ ]
  - ii) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.6650(c)2)]
  - iii) Date of report and beginning and ending dates of the reporting period. [§63.6650(c)(3)]
  - iv) If you had a malfunction during the reporting period, the Compliance Report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an

- owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction. [§63.6650(c)(4)]
- v) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period. [§63.6650(c)(5)]
- d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in Subpart ZZZZ of 40 CFR Part 63, the Compliance Report must contain the information in Paragraphs (c)(1) through (4) of §63.6650 and the information in Paragraphs (d)(1) and (2) of §63.6650. [§63.6650(d)]
  - i) The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [§63.6650(d)(1)]
  - ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.6650(c)(2)]
- e) Each affected source that has obtained a title V operating permit pursuant to 40 CFR Part 70 or 71 must report all deviations as defined in Subpart ZZZZ of 40 CFR Part 63 in the semi-annual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance Report pursuant to Table 7 of Subpart ZZZZ of 40 CFR Part 63 along with, or as part of, the semi-annual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance Report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ of 40 CFR Part 63, submission of the Compliance Report shall be deemed to satisfy any obligation to report the same deviations in the semi-annual monitoring report. However, submission of a Compliance Report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [§63.6650(f)]

#### Permit Condition 12DL-004 and 12DS-004

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

— §63.6665 General Provisions

40 CFR Part 63 Subpart A, General Provisions

Table 8 to 40 CFR Part 63 Subpart ZZZZ shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

EU0150 -Maintenance Shop Naphtha Cleaners									
Emission Unit	Description	Manufacturer/Model #	2011 EIQ Reference #						
EU0150	20 Gallons (each) Maintenance Shop Naphtha Cleaners #95310 – #95314 & #102804	Leased from Heritage Crystal Clean	Not Available						

#### **Permit Condition EU0150-001**

10 CSR 10-5.300 Control of Emissions From Solvent Metal 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 Specifications:**

- 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 design of the cover shall be such that it can be easily operated with one hand 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)), such as in mineral spirits;
  - b) The solvent is agitated; or
  - c) The solvent is heated.
- 3) Each cold cleaner shall have a drainage facility which will be internal 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.
- 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 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.
  - c) Whenever a cold cleaner fails to perform within the operating parameters established for it by this regulation, the unit shall be shut down immediately and shall remain shut down until trained service personnel are able to restore operation within the established operating parameters.
  - d) Solvent leaks shall be repaired immediately or the cleaner shall be shut down and leaks secured until the leaks are repaired.

- e) Any waste material removed from a cold cleaner shall be disposed of by one of the following methods in accordance with the Missouri Hazardous Waste Management Commission Rules codified as 10 CSR 25, as applicable:
  - 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.
  - iii) 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 to operate this equipment;
  - b) The supervisor of any person who operates a solvent metal cleaning process shall receive equivalent or greater operational training than the operators; and
  - c) Refresher training shall be given to all solvent metal cleaning equipment operators at least once every 12 month period.

#### Monitoring:

The permittee shall monitor the throughputs of the solvents monthly and maintain material safety data sheets of the cleanup solvents used at the installation.

#### Recordkeeping:

- 1) The permittee shall maintain the following records for each purchase of cold cleaner solvent (Attachment F-3):
  - 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 monthly inventory records of solvent types and amounts purchased and solvent consumed. The records shall include all types and amounts of solvent containing waste material transferred to either a contract reclamation service or to a disposal installation and all amounts distilled on the premises (see Attachment F-1). The record also shall include maintenance and repair logs that occurred on the cold cleaner (Attachments F-2).
- 3) The permittee shall keep training records of solvent metal cleaning for each employee on an annual basis (Attachment F-4).
- 4) All records shall be maintained for five years.

#### Reporting:

Reports of any deviations from or exceedance of any of the terms imposed by this regulation, or any malfunction which causes a deviation from or exceedance of this regulation shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

### IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), 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 on the date of permit issuance. The following is only an excerpt from the regulation or code, and is provided for summary purposes only

#### 10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
  - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
    - i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
    - ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
    - iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
    - iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;
  - b) Yard waste, with the following exceptions:
    - i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
    - ii) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
    - iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
      - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
      - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
      - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
      - (4) In each instance, the twenty-one (21)-day burning period shall be determined by the director of Public Health and Welfare of the City of St. Joseph for the region in which the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the department director; and

- iv) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;
- 3) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 4) MEMC Electronic Materials, Inc. may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if MEMC Electronic Materials, Inc. fails to comply with the provisions or any condition of the open burning permit.
  - a) In a nonattainment area, as defined in 10 CSR 10-6.020, Paragraph (2)(N)5., the director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- 5) Reporting and Recordkeeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.
- 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

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

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;
  - f) Cause of the excess emissions;
  - g) Air pollutants involved;
  - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;

- i) Measures taken to mitigate the extent and duration of the excess emissions; and
- j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the Paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under 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 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(5)(B)1.A(III)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065,  $\S(5)(C)(1)$  and  $\S(6)(C)1.C(II)$ ] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065,  $\S(5)(C)(1)$  and  $\S(6)(C)3.B$ ]

# 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 submit a full EIQ for the 2011, 2014, 2017, and 2020 reporting years. In the interim years the installation may submit a Reduced Reporting Form; however, if the installation's emissions increase or decrease by more than five tons when compared to their last submitted full EIQ, the installation shall submit a full EIQ rather than a Reduced Reporting Form.
- 5) In addition to the EIQ submittal schedule outlined above, any permit issued under 10 CSR 10-6.060 Section (5) or (6) triggers a requirement that a full EIQ be submitted in the first full calendar year after the permitted equipment initially operates.
- 6) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
- 7) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
- 8) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 9) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

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

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

#### 10 CSR 10-6.150 Circumvention

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

# 10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

- 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 these 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, §(5)(E)2 and §(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, §(5)(C)1 and §(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 Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) April 1st for monitoring which covers the January through December time period.
    - ii) Exception. Monitoring requirements which require reporting more frequently than annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit.
  - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
    - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in Paragraph (6)(C)7 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 annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

#### 10 CSR 10-6.065 §(5)(C)1 and §(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(5)(C)1.A General Requirements**

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

# **10 CSR 10-6.065(5)(C)1.**C Reasonably Anticipated Operating Scenarios None

# 10 CSR 10-6.065, $\S(5)(B)4$ ; $\S(5)(C)1$ , $\S(6)(C)3.B$ ; and $\S(6)(C)3.D$ ; and $\S(5)(C)3$ and $\S(6)(C)3.E.(I) - (III)$ and (V) - (VI) 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 semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification;
  - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
  - c) Whether compliance was continuous or intermittent;
  - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
  - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

#### 10 CSR 10-6.065, §(5)(C)1 and §(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(5)(C)5 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
  - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, no later than the next annual emissions report. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and
  - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes.

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

The application utilized in the preparation of this permit was signed by Frank M. McLaughlin, Plant Manager. 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 §(5)(E)4 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) 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,
- 2) 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,
- 3) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

#### 10 CSR 10-6.065 §(5)(E)1.A and §(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-1 Highest Individual HAP Emission Tracking Sheet

This form is an example of a form which may be used to record data required by this permit. In order for MEMC to demonstrate compliance with the voluntary individual HAP limit(s), it must demonstrate that the annual emissions of any one individual hazardous air pollutant will not exceed 10 tons in any consecutive 12-month period.

12 Month Rolling Average Recordkeeping Report Highest Individual HAP Emission by Emission Unit (tons)

Emission Unit	Month									12 Month			
	1	2	3	4	5	6	7	8	9	10	11	12	Rolling Average
Total													

#### Attachment A-2 Total HAPS Emission

This form is an example of a form which may be used t record data required by this permit. In order for MEMC to demonstrate compliance with the voluntary aggregate HAP limit(s), it must demonstrate that the emissions of all hazardous air pollutants combined will not exceed 25 tons in any consecutive 12-month period.

12 Month Rolling Average Recordkeeping Report Total HAPs Emission by Emission Unit (tons)

Emission						Mo	nth						12 Month
Unit	1	2	3	4	5	6	7	8	9	10	11	12	Rolling Average
Total													

### Attachment B Plant-Wide Emissions Tracking Record

This is an example of a form that may be used to record data required by Permit Conditions PW001, PW003, PW004, PW005, and PW006.

- In order to demonstrate compliance with the Permit Condition PW001, MEMC must demonstrate the installation emits less than 100 tons of VOC in any consecutive 12-month period.
- In order to demonstrate compliance with the Permit Condition PW003, MEMC must demonstrate the installation emits less than 100 tons of PM-10 in any consecutive 12-month period.
- In order to demonstrate compliance with the Permit Condition PW004, MEMC must demonstrate the installation emits less than 100 tons of  $SO_X$  in any consecutive 12-month period.
- In order to demonstrate compliance with the Permit Condition PW005, MEMC must demonstrate the installation emits less than 100 tons of NO<sub>X</sub> in any consecutive 12-month period.

• In order to demonstrate compliance with the Permit Condition PW006, MEMC must demonstrate the installation emits less than 100 tons of CO in any consecutive 12-month period.

Emission						Mo	nth						12 Month
Unit	1	2	3	4	5	6	7	8	9	10	11	12	Rolling Average
Total													

## Attachment C-1 10 CSR 10-6.220 Compliance Demonstration Opacity Emission Observations

This attachment or an equivalent may be used to help meet the recordkeeping requirements of Permit Condition PW007

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

#### **Attachment C-2**

## 10 CSR 10-6.220 Compliance Demonstration Method 9 Visual Determination of Opacity

This attachment or an equivalent may be used to help meet the recordkeeping requirements of Permit Condition PW007.

		N	Tethod 9	9 Opaci	ty Emissi	ons Obs	servations		
						Observer			
						Observer Certification Date			
						Emission Unit			
						Contro	l Device		
ıta	•	Seconds S			Steam I	m Plume (check if applicable)  Comments			
ite	0	15	30	45	Attac	ched Detached		Comments	
	ute	ute 0	ute Seco	ute Seconds	Seconds	seconds Steam I	Observ Observ Emissi Contro  Seconds Steam Plume (c	Observer Certification Date  Emission Unit  Control Device  Seconds Steam Plume (check if applicable)	

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

	SUMMA	ARY OF AVERAGE OF	PACITY	
Cat Numban	Ti	me	Opa	acity
Set Number	Start	End	Sum	Average

Readings ranged from	to	% opaci	ty.		
Was the emission unit in comp	liance at the time	of evaluation?			
•			YES	NO	Signature of Observer

## $\label{eq:construction} Attachment \ D \\ Construction \ Permit \ 0997-044 \ SO_X \ Compliance \ Demonstration$

This attachment or an	equivalent ma	v be used to hel	p meet the rec	cordkeeping re	equirements o	of Permit C	Condition 1	1B6-002.
		J						

This worksheet covers the period from to (month/Year) (month/Year)

			(month) rear)		(month) I			
Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I
		Distillate Oil			Natural Gas			12-Month Cumulative
			SO <sub>x</sub>			SO <sub>x</sub>	Total SO <sub>x</sub>	$SO_x$
Date	Usage	SO <sub>x</sub> Emission	Emissions	Usage	SO <sub>x</sub> Emission	Emissions	Emissions	Emissions
(Month/Year)	(Mgal)	Factor	(tons)	(MMft <sup>3</sup> )	Factor	(tons)	(tons)	(tons)

## Note:

Column D = Column B x Column C  $\div$  2000

Column G = Column E x Column F  $\div$  2000

A rolling 12-month SO<sub>x</sub> emission level less than 40 tons indicates compliance

Column H = Column D + Column G

Column I = sum of the present month plus the previous 11 months

#### Attachment E Construction Permit 0498-012 Diesel System Compliance Worksheet

This attachment	t or an equivalent may	be used to help	meet the reco	rdkeeping requ	irements of F	'ermit
Condition 12DL	L-001 and 12DS-001.					

This worksheet covers the period from		to	
	(month/Year)		(month/Year)

EU0130 (Emissi	on Point 12DL)
Date (Month/year)	Hours of Operation (Note 1)
otal Operating Time (Note 2)	

EU0140 (Emission Point 12DS)		
Date (Month/year)	Hours of Operation (Note 1)	
Total Operating Time (Note 2)		

- Note 1: Total Hours the Diesel System was in operation for this month.
- Note 2: Most recent consecutive 12-month operating time. Note to exceed 500 hours for each system in any consecutive 12-month period

### **Attachment F-1**

## 10 CSR 10-5.300 Compliance Demonstration Solvent Containing Waste Transfer Log

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)
				1

## **Attachment F-2**

# 10 CSR 10-5.300 Compliance Demonstration Inspection/Maintenance/Repair/Malfunction Log

Date	Equipment/Emission Unit	Activities Performed

## **Attachment F-3**

## 10 CSR 10-5.300 Compliance Demonstration Purchase Records for Cold Cleaning Solvent

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

### **Attachment F-4**

## 10 CSR 10-5.300 Compliance Demonstration Employee Solvent Metal Cleaning Training Log

Date	Title of Solvent Metal Cleaning Training Course	Instructor

## STATEMENT OF BASIS

#### **Voluntary Limitations**

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

#### **Permit Reference Documents**

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

- 1) Intermediate Operating Permit Application, received December 13, 2010;
- 2) 2011 Emissions Inventory Questionnaire, received April 26, 2012; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.
- 4) Air Pollution Control Program Construction Permits:

<b>Permit Number</b>	Description
0879-007	Polysilicon and Silicon Wafer Production
0694-004	Modification to increase silicon wafering capacity
1195-016	Increase in silicon wafering capacity
1195-016A	Amendment to Permit Number 1195-016 for clarification change
0997-044	Addition of 500 HP blower
0694-004A	Amendment to Permit Number 0694-004 for clarification change
0498-012	Increase in installation production.
092001-018	Wafer Etching
072005-047	Installation of three (3) etching work stations

## 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.

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

The installation operates emergency diesel generator whose operations are limited to emergency situations. Since, MEMC is an affected area source of hazardous air pollutants,

the emergency generator are subject to 40 CFR Part 63, Subpart ZZZZ. Therefore MEMC will be required to comply with the requirements of 40 CFR Part 63, Subpart ZZZZ.

#### Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

1) 10 CSR 10-6.405, Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating.

According to 10 CSR 10-6.405(1)(C), an installation is exempt from this rule if all of the installation's applicable units arc fueled only by landfill gas, propane, natural gas. fuel oils #2 through #6 (with less than one and two-tenths percent (1.2 %) sulfur), or other gases (with hydrogen sulfide levels less than or equal to four (4) parts per million volume as measured using ASTM D4084, or equivalent and mercury concentrations less than forty (40) micrograms per cubic meter as measured using ASTM D5954, or ASTM D6350, or equivalent or any combination of these fuels.

All the indirect heating sources operated at this installation exclusively combust natural gas and fuel oil #2, therefore the installation is not subject to this rule.

2) Consent Agreement - Part of the NOX SIP Call, Effective June 2, 2009 The nitric acid etching stations Unit 7 and 7L equipped with small scrubbers are no longer in service, i.e., dismantled. These units were subject to the consent agreement. This agreement states that if the nitric acid etching stations are shut down, the scrubbers are not required to be operated. Therefore, the dismantling of these units has rendered the consent decree effectively obsolete.

#### **Construction Permit Revisions**

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

- Construction Permit 1195-016 and Construction Permit 1195-016A.
   Construction Permit 1195-016 was issued to MEMC for the construction of emergency generators and to increase boiler capacity of boilers permitted in Construction Permit 0694-004. In Construction Permit 1195-016, a 40 ton per year NO<sub>x</sub> limit was issued due to the emissions of the emergency generators. Construction Permit 1195-016A was issued as an amendment to 1195-016, superseding the NO<sub>x</sub> limit in 1195-016. Construction Permit 1195-016 is not incorporated by reference into this permit.
- 2) Construction Permit 1195-016A does not include any special conditions; therefore, it is not incorporated by reference into this permit.
- 3) Construction Permit 0694-004: All conditions of this permit superseded by Construction Permit 0694-004C.

- 4) Construction Permit 092001-018: The manufacturing equipment referenced in the construction permit was not installed. The permit and its associated language were allowed to lapse after two years, on September 21, 2003.
- 5) Construction Permit 072005-047: The three (3) etching work stations consisting of ten (10) baths for nitric, acetic and hydrofluoric acids for testing of silicon crystal samples that would make up a proposed "Emission Unit 31" referenced in the construction permit were not installed. The permit and its associated language were allowed to lapse after two years from the effective date of this permit.
- 6) 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

40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

Subpart Dc 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).

Boilers #1, #2, #3 and #6 have heat input capacities of less than 100 MMBtu/hr but greater than 10 MMBtu/hr and constructed after June 9, 1989, therefore these boilers are subject to the provisions of this subpart.

Heating Boiler #5 rated at 20.922 MMBtu/hr was constructed in 1974, therefore is not subject to this subpart.

Heating Boiler #4 rated at 6.277 MMBtu/hr is not subject to this subpart.

10 CSR 10-6.070, New Source Performance Regulations

40 CFR Part 60, Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.

40 CFR Part 60, Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification commenced After May 18, 1978, and Prior to July 23, 1984.

40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

The following storage tanks are below the level of reporting significance (Subpart K - 40,000 Gallons, Subpart Ka - 40,000 Gallons and Subpart Kb - 19,812.9 Gallons and therefore are not subject to 40 CFR Part 60 Subpart K, Ka or Kb):

Description	Capacity
Above Ground Horizontal Tank for No. 2 Distillate	12,000 gallons
Fire Water Diesel Fuel Tank #1	300 gallons
Fire Water Diesel Fuel Tank #2	300 gallons
Diesel Tank for 350 kW Emergency Diesel Generator	185 gallons
Diesel Tank for 750 kW Emergency Diesel Generator	1,360 gallons
Diesel Tank for 1250 kW Emergency Diesel Generator	2,000 gallons
Diesel Tank for 250 kW Emergency Diesel Generator	450 gallons
Diesel Tank for R&S Services	100 gallons
Gasoline Tank for R&S Services	100 gallons
Maintenance Shop Aqueous Cleaner #107243	45 gallons

#### Maximum Achievable Control Technology (MACT) Applicability

10 CSR 10-6.075, Maximum Achievable Control Technology Regulations

1) 40 CFR Part 63, Subpart T, *National Emission Standards for Halogenated Solvent Cleaning*. The cleaning solvents covered by the MACT standard are solvents 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 5 percent by weight, as a cleaning and/or drying agent.

The installation operates two cold parts cleaners (EU0150) leased from Heritage Crystal clean that use petroleum naphtha as the cleaning solvent and one aqueous cleaner. Therefore, the installation is not subject to 40 CFR Part 63, Subpart T.

2) 40 CFR Part 63, Subpart BBBBB, National Emission Standards for Hazardous Air Pollutants: Semiconductor Manufacturing.

The provisions of Subpart BBBB apply to semiconductor crystal growing facilities, semiconductor wafer fabrication facilities, and semiconductor test and assembly facilities (NAICS 334413, SIC 3674) that are major sources of HAPs.

This permit imposes plantwide conditions for limiting the plantwide HAP emission to less than ten tons per year of individual HAPs and 25 tons per year of combined HAPs. Therefore, MEMC is not a major source of HAP emissions. Since MEMC voluntarily applied for a plantwide restriction on HAPs emissions to less than ten tons per year in the initial intermediate permit application, submitted on May 5, 1997 (received by the Air Pollution Control Program on May 15, 1997), and subsequently in the renewal application, submitted on July 15, 2002 (received by the Air Pollution Control Program on July 19, 2002), and has been operating according to all conditions, and requirements stated in their applications. Therefore, the provisions of 40 CFR Part 63, Subpart BBBBB will not be applicable to this installation.

- 3) 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

  The installation operates emergency diesel generator whose operations are limited to emergency situations. Since MEMC is an affected area source of hazardous air pollutants, the emergency generator are subject to 40 CFR Part 63, Subpart ZZZZ
- 4) 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.

MEMC is an area source HAPs and operates boilers. The provisions of 40 CFR Part 63, Subpart DDDDD do not apply to this installation.

5) 40 CFR Part 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers - Area Sources

This regulation applies to boilers at area source facilities that burn coal, oil, biomass, or non-waste materials. Boilers burning natural gas as definened in this regulation would not be affected by the rule.

This regulation does not apply to the boilers because these boilers are natural gas fired boilers with fuel oil No. 2 as back-up. The rule exempts natural gas fired boilers with fuel oil as back-up fuel. According to this rule, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

**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.

#### **Other Regulatory Determinations**

10 CSR 10-5.450, Control of VOC Emissions from Traffic Coatings

This rule applies to any person who supplies, sells, offers for sale, applies, solicits the application of, or manufactures for use any coating intended for use in traffic marking in the area defined in 10 CSR 10-5.450(2)(A). MEMC will use outside contractors to perform application of traffic coatings and technically will be subject to this rule. MEMC will be responsible hiring contractors who comply with this rule. Since the contractors will be responsible for compliance with this rule, the rule is not cited in the applicable requirements section of the operating permit.

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	
<b>Environmental Engineer</b>	

Installation ID: 183-0027

**SB - 8** 

Frank M. McLaughlin MEMC Electronic Materials, Inc. P.O. Box 8 MZ65 Saint Peters, MO 63376 CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: MEMC Electronic Materials, Inc., 183-0027

Permit Number:

#### Dear Sir/Madam:

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

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

If you have any questions or need additional information regarding this permit, please do not hesitate to contact 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: Robert Cheever, US EPA Region VII St. Louis Regional Office PAMS File: 2010-12-026

#### **MEMORANDUM**

DATE: September 25, 2012

TO: 2010-12-026, MEMC Electronic Materials

FROM: Berhanu A. Getahun, Environmental Engineer

SUBJECT: Response to Public Comments

The draft Intermediate Operating Permit for MEMC Electronic Materials was public noticed on the Department's web page at: http://www.dnr.mo.gov/env/apcp/PermitPublicNotices.htm on August 13, 2012 for a 30-day comment period. The Air Pollution Control Program did not receive any comments from either the public or the applicant during the 30-day comment period.

BAG/kjc