REGULATION 6.43 Volatile Organic Compound Emission Reduction Requirements

Air Pollution Control District of Jefferson County Jefferson County, Kentucky

Relates to: KRS Chapter 77 Air Pollution Control

Pursuant to: KRS Chapter 77 Air Pollution Control

Necessity and Function: KRS 77.180 authorizes the Air Pollution Control Board to adopt and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. Pursuant to the Act section 182(b)(1) requiring a 15% reduction in volatile organic compound (VOC) emissions from the 1990 baseline emissions level to be achieved by November 15, 1996, this regulation establishes emissions, equipment, and operational requirements for the listed stationary sources, each of which voluntarily agreed to these requirements.

SECTION 1 Applicability

This regulation applies to each stationary source identified in this regulation.

SECTION 2 Emission Requirements

Each stationary source identified in this regulation shall comply with the emission, equipment, and operational requirements shown for that stationary source.

SECTION 3 Compliance with Emissions Requirements

- 3.1 All stationary sources identified in this regulation shall maintain records and demonstrate compliance with the requirements according to the provisions of this regulation and Regulation 1.05 *Compliance with Emission Standards and Maintenance Requirements* regardless of the stationary source size categories in Regulation 1.05.
- 3.2 Specific requirements in this regulation do not invalidated the applicability of the requirements of Regulation 1.05 except those that are redundant and clearly addressed in Regulation 6.43, in which case the requirements of Regulation 6.45 shall take precedence.

SECTION 4 Self-Monitoring and Reporting

- 4.1 All stationary sources identified in this regulation shall monitor the operational parameters specified in this regulation, determine emissions, and report those emissions according to the provisions of this regulation and of Regulation 1.06 *Source Self-Monitoring and Reporting*.
- 4.2 All stationary sources identified in this regulation shall record emissions or the operational parameters specified in this regulation. This record shall be made readily available to the District upon request. Emissions or operational parameters not in compliance with the requirements of this regulation shall be clearly identified.
- 4.3 Specific requirements in this regulation do no invalidate the applicability of the requirements of Regulation 1.06 except those that are redundant and clearly addressed in Regulation 6.43, in which case the requirements of Regulation 6.43 shall take precedence.

SECTION 5 Akzo Nobel Resins (EIS# 185)

- 5.1 On and after January 1, 1996, the combined VOC emissions from the coating manufacturing process at Akzo PD II Building shall not exceed 9.10 tons per month.
- 5.2 The records and compliance demonstration required by Section 3 and the monitoring required by Section 4 shall include the following:
- 5.2.1 Product name or number for each product manufactured during each day,
- 5.2.2 Density for each product, in pounds per gallon.
- 5.2.3 Daily production rate for each product, in gallons, and
- 5.2.4 Total daily VOC emissions.
- 5.3 The emissions calculations required by section 5.2.4 shall be made using the following emission factors:
- 5.3.1 30 pounds VOC per ton of product for solvent-based products unless a different emission factor is approved by the District, and
- 5.3.2 0.00191 pound per gallon of product for water-based products, unless a different emission factor is approved by the District.

SECTION 6 Alcan Rolled Products Company, Louisville Plant (EIS# 14)

- 6.1 On and after April 1, 1995, Alcan Rolled Products shall use a saturated hydrocarbonbased rolling coolant, meeting the following specifications, in all rolling processes:
- 6.1.1 Maximum aromatic content of 2% and
- 6.1.2 Minimum carbon chain length of C_{12} .
- 6.2 The use of alternate rolling coolants not meeting the specifications in section 6.1 must receive prior, written approval by the District. Approval shall be conditioned upon a demonstration that the use of an alternate rolling coolant will result in VOC emissions no greater than a rolling coolant meeting these specifications.
- 6.3 The records and compliance demonstration required by Section 3 and the monitoring required by Section 4 shall include the following:
- 6.3.1 Number of working days per month,
- 6.3.2 Pounds of rolling coolant used per month,
- 6.3.3 Pounds of rolling coolant purchased per month,
- 6.3.4 Pounds of rolling coolant reclaimed each month,
- 6.3.5 Total monthly VOC emissions,
- 6.3.6 Calculated daily average VOC emissions, and
- 6.3.7 For each rolling coolant used, the aromatic content and the minimum saturated hydrocarbon compound carbon chain length.

SECTION 7 American Synthetic Rubber Corporation (EIS# 11)

- 7.1 On and after January 1, 1993, the exhaust gases from the finishing building at American Synthetic Rubber Company LLC shall be ducted to one or both of the two operating coal-fired boilers or to the regenerative thermal oxidizer (RTO-1).
- 7.2 The overall control efficiency (capture and control) of the VOCs from the finishing building processes shall be at least 80%.
- 7.3 On and after June 1, 2003, the records required by Section 3 shall include, for all periods of operation of the finishing building, the following:
- 7.3.1 An identification of the control device, i.e., the specific coal-fired boiler or RTO-1, to which the exhaust gases from the finishing building were ducted, and

7.3.2 An indicator, approved in writing by the District, of proper operation of the control device.

SECTION 8 Marathon Ashland Petroleum LLC, Aetna Terminal (EIS# 741)

- 8.1 On and after April 1, 1995, all gasoline storage tanks greater than 39,000 gallons at Marathon Ashland Petroleum LLC, Aetna Terminal shall be equipped with internal floating roofs.
- 8.2 All gasoline storage tanks at Marathon Ashland Petroleum LLC, Aetna Terminal shall meet the floating roof seal requirements of 40 CFR Part 60 Subpart Kb.

SECTION 9 Carbide Industries LLC (EIS# 1)

- 9.1 The combined VOC emissions from Carbide industries LLC (Carbide) shall not exceed the following:
- 9.1.1 From September 15, 2004, to May 31, 2006, 6701 pounds per day,
- 9.1.2 From June 1, 2006, to May 31, 2007, 6550 pounds per day, and
- 9.1.3 On and after June 1, 2007, 6400 pounds per day.
- 9.2 Carbide shall perform the records and compliance demonstration required by Section 3 and the monitoring required by Section 4 on a daily basis, using process throughputs and established emission factors.

SECTION 10 PPG Architectural Finishes (EIS# 175)

- 10.1 On and after November 1, 1996, the combined VOC emissions from PPG Architectural Finishes shall not exceed 9.80 tons per month.
- 10.2 The records and compliance demonstration required by Section 3 and the monitoring required by Section 4 shall include the following:
- 10.2.1 Product name and type for each product manufactured during the month,
- 10.2.2 Daily production rate for each product or product line, in gallons,
- 10.2.3 VOC content for each product or product line, in pounds per gallon, and
- 10.2.4 Total monthly VOC emissions.

SECTION 11 DuPont Dow Elastomers L.L.C. (EIS# 1259)

- 11.1 On and after August 1, 1996, DuPont Dow Elastomers L.L.C. (DuPont Dow) shall meet the following requirements for the six large polymerization kettles, identified as numbers 3, 4, 5, 6, 9, and 10, located on the fourth floor of the East Neoprene Manufacturing Building:
- 11.1.1 The emissions from each large polymerization kettle shall be controlled by a brine-cooled vent condenser,
- 11.1.2 DuPont Dow shall not begin charging a large polymerization kettle with the unpolymerized emulsion if the inlet brine temperature to the kettle's vent condenser is above 2°C, and
- 11.1.3 The total VOC emitted from a large polymerization kettle shall not exceed 15.8 pounds per batch.
- 11.2 On and after October 1, 1996, DuPont Dow shall implement a fugitive leak detection and repair (LDAR) program, meeting the equipment leak provisions of 40 CFR Part 63
 Subpart H National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, for all production facilities.

- 11.3 The records and compliance demonstration required by Section 3 and the monitoring required by Section 4 shall include the following:
- 11.3.1 The following parameters shall be monitored on a continuous basis during periods when exhaust gases from a large polymerization kettle go to the vent condenser:
- 11.3.1.1 The vent condenser brine inlet temperature at the discharge of the cold brine pump, and
- 11.3.1.2 The vent condenser brine outlet temperature at a point on each vent condenser's outlet brine connection to the return brine header,
- 11.3.2 The operating data showing compliance with the DuPont Dow standard operating procedures and standard operating conditions for each batch processed in a large polymerization kettle shall be recorded and maintained on site at DuPont Dow. These data shall include vent condenser brine inlet temperature, vent condenser brine outlet temperature, and times of vent condenser operation for each batch,
- 11.3.3 Report quarterly any instance when a large polymerization kettle was charged with unpolymerized emulsion when the vent condenser inlet brine temperature was greater than 2°C at the time that the charging began, and
- 11.3.4 The monitoring, Recordkeeping, and reporting requirements under 40 CFR Part 63 Subpart H.
- 11.4 An initial stack test shall be performed by no later than October 1, 1996, on one of the brine-cooled vent condensers on polymerization kettles numbered 3.4.5.6.9. or 10 to determine VOC emissions in pounds per batch. The stack tests shall be performed immediately preceding cleaning of the vent condenser and immediately following cleaning of the vent condenser.
- 11.5 Within 60 days of the initial stack test, DuPont Dow shall submit a maintenance plan and schedule for the vent condensers.

SECTION 12 [Reserved]

SECTION 13 Ford Motor Company – Louisville Assembly Plant (EIS# 72)

- 13.1 On and after April 1, 1995, the combined VOC emissions from Ford Motor Company Louisville Assembly Plant shall no exceed 19,001.8 pounds per day.
- 13.2 The records and compliance demonstration required by Section 3 and the monitoring required by Section 4 shall be done on a daily basis consistent with the requirements specified in Regulation 6.17 *Standard of Performance for Existing Automobile and Truck Surface Coating Operations*.

SECTION 14 Gateway Press, Inc. (EIS# 617)

On and after July 1, 1995, Gateway Press, Inc. shall meet all of the following requirements:

14.1 The following presses shall be equipped and maintained with automated blanket washers:

- 14.1.1 Harris Graphics M300 heatset web offset press for lithographic printing,
- 14.1.2 Hantscho March 16 six-color heatset web offset process for lithographic printing, and
- 14.1.3 Harris Cottrell M200 heatset web offset press for lithographic printing.
- 14.2 The blanket wash solvent used on the presses identified in section 14.1 shall contain no more than 2.2 pounds of VOC per gallon less water, as applied.

- 14.3 The records and compliance demonstration required by Section 3 and the monitoring required by Section 4 shall include the following:
- 14.3.1 Material name of each blanket wash solvent used on the presses identified in section 14.1,
- 14.3.2 Pounds or Gallons of each blanket wash material used on these presses per month,
- 14.3.3 VOC content, less water, as applied, for each blanket wash material used on these presses (in weight percent or pounds per gallon consistent with the units in section 14.3.2), and
- 14.3.4 Total monthly VOC emissions from the use of blanket wash from these presses.

SECTION 15 Marathon Ashland Petroleum LLC, Kramers (EIS# 143)

- 15.1 On and after January 1, 1995, all loading racks at Marathon Ashland Petroleum LLC, Kramers Lane shall comply with 40 CFR Part 60 Subpart XX – *Standards of Performance for Bulk Gasoline Terminals*.
- 15.2 The records and compliance demonstration required by Section 3 and the monitoring required by Section 4 shall include the following:
- 15.2.1 Daily loading rack throughput and
- 15.2.1 Total daily VOC emissions from the loading racks.

SECTION 16 [Reserved]

SECTION 17 Reynolds Metals Company, Plant #1 (EIS# 186)

- 17.1 On and after January 1, 1996, Reynolds Metals Company, Plant #1 shall use a saturated hydrocarbon-based rolling coolant meeting the following specifications in all rolling processes:
- 17.1.1 Maximum aromatic content of 2% and
- 17.1.2 Minimum of 88% comprised of C_{12} or higher carbon chains.
- 17.2 The use of alternate rolling coolants not meeting the specification in section 17.1 must receive prior, written approval by the District. Approval shall be conditioned upon a demonstration that the use of an alternate rolling coolant will result in VOC emissions no greater than a rolling coolant meeting these specifications.
- 17.3 The records and compliance demonstration required by Section 3 and the monitoring required by Section 4 shall include the following:
- 17.3.1 The number of working days per month,
- 17.3.2 Pounds of rolling coolant used per month,
- 17.3.3 Pounds of rolling coolant purchased per month,
- 17.3.4 Pounds of rolling coolant reclaimed quarterly, prorated to a monthly basis,
- 17.3.5 Calculated total monthly VOC emissions,
- 17.3.6 Calculated daily average VOC emissions, and
- 17.3.7 For each rolling coolant used the aromatic content and the purchase of C_{12} or higher saturated hydrocarbon compounds.

SECTION 18 Rohm & Haas Kentucky Inc. (EIS# 189)

18.1 On and after September 1, 1996, storage tanks 58109 and 58140 containing crude methyl methacrylate and storage tank 58108 containing distilled methyl methacrylate at Rohm & Haas Kentucky Inc. shall be equipped with internal floating roofs.

- 18.2 Tanks 58109, 58140, and 58108 shall comply with the requirements of 40 CFR §60.112b(a)(1).
- 18.3 The records and compliance demonstration required by Section 3 and the monitoring required by Section 4 shall include the total pounds filled per tank each month.
- 18.4 On and after September 15, 1996, the plant chemical sewer oil/water separator weir overflow at coordinates W-3600 and S-600 shall be a "gutter and downspout" type of overflow.

SECTION 19 United Defense Louisville Plant (EIS# 1216)

- 19.1 On and after November 14, 1996, the combined VOC emissions from the United Defense Louisville Plant shall not exceed 255 pounds per day.
- 19.2 Compliance with this section shall be during the established ozone season of April 1 through October 31.
- 19.3 The records and compliance demonstration required by Section 3 and the monitoring required by Section 4 shall include the following:
- 19.3.1 Product name for each coating, solvent, and cleaner used during the day,
- 19.3.2 Total daily gallons of each product used,
- 19.3.3 VOC content of each product, in pounds per gallon, and
- 19.3.4 Total daily VOC emissions.

SECTION 20 Zeon Chemicals KY, Inc. (EIS 238)

- 20.1 On and after April 1, 1995, the combined VOC emissions from Zeon Chemicals, Inc. shall not exceed 4,133 pounds per day.
- 20.2 The records and compliance demonstration required by Section 3 and the monitoring required by Section 4 shall be done on a daily basis.

Adopted v1/3-16-94; effective 3-16-94; amended v2/9-21-94, v3/5-21-97, v4/16-03, v5/2-15-06.

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