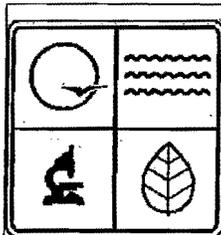


**St. Louis 8-Hour Ozone Nonattainment
Area
Reasonably Available Control
Technology
(RACT)
Demonstration**

**Adoption Hearing
December 7, 2006**



**Missouri
Department of
Natural Resources**

**Missouri Department of Natural Resources
Division of Environmental Quality
Air Pollution Control Program**

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I. PURPOSE

The purpose of this submittal is to document that the Missouri Department of Natural Resources has reviewed Missouri's obligation to implement Reasonably Available Control Technologies (RACT) on major air pollution sources in the Missouri portion of the St. Louis ozone nonattainment area and to certify that RACT controls previously instituted under the old 1-hour ozone standard represent RACT for the 8-hour ozone standard. According to the EPA's final rule to implement the 8-Hour Ozone National Ambient Air Quality Standards (NAAQS) (70 FR 71612, November 29, 2005), areas such as St. Louis which are classified as moderate ozone nonattainment areas must submit a demonstration that their current rules fulfill 8-hour ozone RACT for all Control Techniques Guidelines (CTG) categories and all major, non-CTG sources as a revision to their State Implementation Plans (SIPs). This document is intended to serve as the necessary SIP revision.

II. RACT HISTORY / BACKGROUND

The federal Clean Air Act Amendments (CAAA) of 1990 give the states primary responsibility for achieving the NAAQS. The NAAQS are set by the U.S. Environmental Protection Agency (EPA) as the maximum concentrations in the atmosphere for specific air contaminants to protect public health and welfare. The principal mechanism at the state level for complying with the CAAA is the SIP. A SIP outlines the programs, actions, and commitments a state will carry out to implement its responsibilities under the CAAA. SIPs are submitted to EPA for approval, and upon approval they become legally binding documents under both state and federal law. Both the state and the federal government can then enforce the SIP.

The department has prepared numerous air quality planning documents to meet state and federal clean air mandates to address ozone pollution in the St. Louis area. In 1997 the ozone NAAQS was reviewed, and EPA recommended that the ozone standard be changed from 0.12 parts per million of ozone measured over one hour to a standard of 0.08 parts per million measured over eight hours, with the average fourth highest concentration over a three-year period determining whether an area is in compliance.

The St. Louis area is currently designated as a moderate 8-hour ozone nonattainment area. The nonattainment area is located on both sides of the Mississippi River, the dividing line between Missouri and Illinois. The Illinois portion consists of Madison, Monroe, St. Clair and Jersey Counties. The Missouri portion of the nonattainment area consists of Franklin, Jefferson, St. Charles and St. Louis Counties and St. Louis City.

One of the central elements of a SIP is the air pollution emission control measures, including controls on both stationary sources and mobile sources. Control measures for ozone are techniques, practices, and equipment for reducing emissions of ozone precursors, Volatile Organic Compounds (VOCs), and Nitrogen Oxides (NOx). The three primary categories of ozone precursor emissions that can be controlled are stationary, area, and mobile sources. Stationary sources are defined as larger industry sources. Examples of stationary source control measures include industrial surface

coating regulations, printing regulations, regulations on the manufacture of paints, and emission limitations at electric utilities. Area sources are defined as sources that are individually small, but have significant emissions as a group because of a large number of sources. Examples of area source controls include gasoline station vapor recovery systems, regulations on solvent metal cleaning, and asphalt paving restrictions. Mobile sources include on road vehicles, and off-road vehicles and equipment. The St. Louis SIP also includes mobile source controls such as reformulated gasoline, and the inspection and maintenance program for automobiles. There are many other regulations that are currently in place for the control of ozone that apply to many activities in St. Louis including open burning, incineration, gasoline storage, dry cleaning, screen printing, asphalt paving, and chrome plating, and fuel burning.

SIPs are not one-time documents, but instead are periodically updated and revised. Moreover, each successive SIP builds on its predecessor. Section 182(b)(1)(A) of the CAAA required that each state in which all or part of a moderate ozone nonattainment area was located submit a SIP revision providing for a 15 percent (net of growth) reduction in emissions of VOCs by November 15, 1996. The 15 percent reduction was measured from calendar year 1990 baseline emissions and is "net" of any growth that occurred in the nonattainment area after November 15, 1990.

For St. Louis, SIP controls were implemented to meet the 15 percent reduction requirement. Certain controls were also implemented in St. Louis that were not creditable toward the 15 percent requirement. These included reductions achieved by the Federal Motor Vehicle Control Program promulgated prior to 1990; reductions from requirements to lower the Reid Vapor Pressure (RVP) of gasoline promulgated prior to 1990 or required under section 211(h) of the Act which restricts gasoline RVP; reductions from corrections to an existing Vehicle Inspection and Maintenance Program; and reductions from corrections to certain RACT rules.

This 15 percent demonstration is commonly known as the Rate-Of-Progress Plan (ROPP). On March 18, 1996, EPA proposed a limited approval and limited disapproval of Missouri's January 13 and July 11, 1995, ROPP submittals (61 FR 10968). In the same notice, EPA also proposed to conditionally approve the state's municipal solid waste landfill and clean-up solvent rules, two components of the ROPP. On July 2, 1997, EPA issued a subsequent proposal to approve Missouri's landfill and gasoline RVP rules. On November 12, 1999, EPA received a revised ROPP and a request to amend the Missouri SIP. The revised plan was significantly different from the previous version. EPA proposed approval of the revised ROPP on February 17, 2000 (65 FR 8083) and approved it on May 18, 2000 (65 FR 31485).

The ROPP addressed Missouri's obligation to document that RACT controls were implemented for all major VOC sources in the St. Louis ozone nonattainment area. As part of this review, the department corrected several RACT deficiencies. On October 28, 1999 the Missouri Air Conservation Commission adopted several VOC RACT rules to address these deficiencies. The list of rules adopted includes:

- 10 CSR 10-5.295 *Control of Emissions From Aerospace Manufacture and Rework Facilities*
- 10 CSR 10-5.500 *Control of Emissions From Volatile Organic Liquid Storage*
- 10 CSR 10-5.530 *Control of Volatile Organic Compound Emissions From Wood Furniture Manufacturing Operations*
- 10 CSR 10-5.540 *Control of Emissions From Batch Process Operations, and*
- 10 CSR 10-5.550 *Control of Volatile Organic Compound Emissions From Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry.*

III. 8-HOUR OZONE RACT

As a moderate ozone nonattainment area, St. Louis is required by federal regulations promulgated under the CAAA to attain the 8-hour ozone standard by June 15, 2010. A 2007 St. Louis Attainment Demonstration SIP is being developed to meet this new federal clean air mandate. Sections 182(b)(2) and 182(f) of the federal Clean Air Act require ozone nonattainment areas to implement RACT for sources that are subject to CTGs issued by EPA and for “major sources” of VOC and NOx, which are ozone precursors. RACT is defined as the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (44 FR 53762; September 17, 1979). RACT requirements were included in the Clean Air Act to assure that significant source categories at major sources of ozone precursor emissions are controlled to a “reasonable” extent, but not necessarily to Lowest Achievable Emission Rate (LAER) expected of new sources or Maximum Achievable Control Technology (MACT) levels.

Under phase II of the 8-hour ozone implementation rule areas may rely on previous analyses prepared for the one-hour ozone plans and EPA guidance documents when considering RACT requirements for ozone nonattainment areas. A RACT SIP submittal is required by this rule in addition to the area’s 8-hour ozone attainment demonstration plan, which is also a SIP submittal.

IV. RACT SIP EVALUATION

EPA has not provided unique guidance for preparing RACT SIPs for the 8-hour ozone standard and has asked states to rely on previously published guidance. There are two separate obligations for both ozone precursors, VOC and NOx. To fulfill the RACT review requirement this document is organized according to a basic framework as presented below:

By categories:

- Identification of all source categories within St. Louis requiring RACT, including CTG sources (i.e., covered by an EPA Control Techniques Guideline document) and major non-CTG sources, and
- Submittal of negative declarations where there are no facilities (major or minor) within the ozone nonattainment area subject to a CTG.

By Individual Sources:

- Identification of all individual industrial sources located in the St. Louis Nonattainment area that are documented in the Missouri Emission Inventory System (MOEIS),
- Confirmation of these sources against the 2002 base year inventory, and
- A review of the operating permits of each of the sources to identify the applicable RACT rules.

A. DETERMINATION OF RACT SIP CATEGORIES

1. CTG Sources

The EPA has issued CTGs defining RACT for existing facilities that emit large amounts of air pollutants. Emissions sources covered by CTGs are referred to as CTG sources. Table A presents the CTG source categories, CTG reference documents, and the applicable Missouri rules for the VOC categories. Table B presents this same information for the NO_x CTGs.

For each of the categories, Tables A and B provide a description of the process that are applicable and a reference to the individual CTG documents, a list of the Missouri RACT rules that specifically apply to these sources, the dates that the rules were initially effective and most recently amended, and a summary of the determination of whether the Missouri rules satisfy the requirements of RACT. These determinations were based on a perfunctory review of each CTG in comparison to the existing RACT rules. The review was conducted with an eye on assuring that assumptions had not changed, and that the general requirements remain currently reasonable.

Table C presents the CTG source categories for VOC without corresponding Missouri rules. Table D provides the same information for the NO_x CTG source categories that have no corresponding Missouri rules. In all such cases in Tables C and D, there are no corresponding Missouri rules because the state has identified no sources located in the ozone nonattainment area within that category. See the section below for cases in which the generic RACT rules apply.

The purpose of Missouri's RACT rules in the St. Louis area was to establish reasonable controls on the emissions of ozone precursors. In many cases the rules establish emission limitations directly from EPA's published CTGs. As part of Missouri's rulemaking process EPA has typically been directly involved, either as a stakeholder or to provide guidance and comments on specific technical issues. EPA's involvement has helped guide Missouri in developing emissions limitations in these rules that fulfill the RACT requirements. Many of the RACT rules were approved some time ago (as early as the late 1970's) and EPA's involvement in those rulemakings is unknown. In addition, many of the RACT rules have been amended over the years, and the amendments often have been for purposes other than adjusting the limits. In these cases, EPA has not provided specific comments or guidance about whether the amendments were in keeping with

RACT. This was not the basis or purpose of these amendments. All of the Missouri rules included in Tables A and B were submitted for EPA review for inclusion in the Statewide State Implementation Plan.

2. Non-CTG Sources

Major sources not subject to CTGs, but for which RACT is required, are referred to as non-CTG sources. To address these sources, Missouri promulgated two rules, 10 CSR 10-5.510 *Control of Emissions of Nitrogen Oxides* and 10 CSR 10-5.520 *Control of Volatile Organic Compound Emissions From Existing Major Sources*. All major sources of ozone precursors located in the ozone nonattainment area that are not subject to individual RACT rules are subject to one of these generic RACT rules. These rules apply to non-CTG sources that have the potential to emit 100 tons or more per year of either NO_x or VOC. The St. Louis ozone nonattainment area's current definition of "Major Source" which is 100 tons per year which is the same threshold as under the previous 1-hour ozone standard.

Anheuser-Busch, Inc. is the only source that has been identified as subject to the RACT study submittal requirements of 10 CSR 10-5.510 *Control of Emissions of Nitrogen Oxides*. Anheuser-Busch has provided an acceptable demonstration of compliance with this rule.

10 CSR 10-5.510 *Control of Emissions of Nitrogen Oxides* applies to a series of source categories including cement plants, industrial boilers, and internal combustion engines, among others and establishes emission rate limits for these activities. Missouri has reviewed the limitations in this rule and believes that these limitations represent RACT in St. Louis.

No sources have been identified that are subject to the RACT proposal requirements of 10 CSR 10-5.530 *Control of Volatile Organic Emissions From Existing Major Sources*.

3. Sources Subject to MACT, NSPS, NESHAPS, & LAER

There are other regulatory mechanisms that affect sources in the St. Louis ozone nonattainment area. These include Maximum Achievable Control Technology (MACT), federal New Source Performance Standards (NSPS), the National Emission Standards for Hazardous Air Pollutants (NESHAPS), and Lowest Achievable Emission Rate (LAER). Some elements of these programs satisfy the RACT requirements for specific source. The applicable NESHAPS, MACT and NSPS are identified in Table F for individual sources in an effort to provide a complete listing of each facility's regulatory obligations.

10 CSR 10-6.060 Section (7) *Construction Permits Required* specifies requirements for new, replacement, or modified major emissions units in Missouri's nonattainment areas (like the St. Louis 8-hour ozone nonattainment area). The rule requires that such units be constructed using LAER if they may emit increased amounts of VOC or NO_x. LAER is an emission limitation based on the maximum degree of emission reduction achievable

through application of production processes and available methods, systems, and techniques. LAER does not permit emissions in excess of those allowed under any applicable federal Clean Air Act provision. There have been no sources permitted in the nonattainment area that were subject to major review since the previous one-hour ozone RACT demonstration.

4. Evaluation of Individual Sources

A review of operating permits in St. Louis indicates that there are 75 sources located in the nonattainment area that are classified as Part 70 major sources. Part 70 Sources are those sources that have the potential to emit more than the major source levels (100 tons per year of VOC or NOx). A list of these sources is provided in Table F. Nine additional intermediate sources and one source of unknown operating permit classification were included in Table F as part of the analysis because they had relatively high emission rates associated with them. Sources with intermediate operating permits are those that by permit condition limit their annual emissions to less than the major source level.

a. Methods

The primary management system of electronic emission data in Missouri is the Missouri Emission Inventory System. The databases in this system were queried for all active sources located in the St. Louis nonattainment area that were classified as Part 70 sources. The query was limited to those sources that were active in 2003. 2003 is the most current year that staff was confident that the data was correct and had been quality assured.

This list was compared against the list of sources included in the 2002 base year ozone inventory that was formally submitted to EPA in July of 2006. Several sources were found in the 2002 inventory that were not originally captured in the MOEIS query. In addition several intermediate sources were included because of their relatively high emission rates of ozone precursors.

b. Tables E & F

For each of the 85 sources identified through this process, the most current operating permit was reviewed. The operating permit lists all of the applicable regulations, including those regulations in Section 5 of the Missouri rules that are RACT rules. Table E lists all of the St. Louis RACT rules.

In addition to listing the RACT rules that were applicable to each major source, the NESHAP, MACT, and NSPS rules that were applicable to that facility were also listed in Table F.

For some individual sources the operating permit was pending review. This is noted in Table F.

c. Sources Subject to the NOx SIP call

Several major sources in the nonattainment area are subject to the NOx SIP call. The NOx SIP call rules were all promulgated after January 1, 2000, and because they are so current they are presumed to be RACT. These rules are located in Section 6 of Missouri's regulations because they apply to sources outside the nonattainment area but within the "Eastern Third" of Missouri. These rules include:

- 10 CSR 10-6.350 *Emission Limitations and Emissions Trading of Oxides of Nitrogen,*
- 10 CSR 10-6.360 *Control of NOx Emissions From Electric Generating Units and Non-Electric Generating Boilers,*
- 10 CSR 10-6.380 *Control of NOx Emissions From Portland Cement Kilns, and*
- 10 CSR 10-6.390 *Control of NOx Emissions From Large Stationary Internal Combustion Engines.*

d. No New Major Sources

The major sources of ozone precursors in the nonattainment area has been constant since the last RACT review was conducted under the 1-hour ozone obligation. The department's Air Pollution Control Program has not issued any major construction permits in the nonattainment area since before 1995, which was prior to the previous 1-hour RACT review. Companies that are planning to construct new major sources have chosen to locate outside the nonattainment area to avoid LAER. As an example, the Holcim cement plant was permitted in 2004 just outside the St. Louis nonattainment area. A major factor in the decision to locate this plant there was because it was to avoid LAER controls.

e. Major Source Threshold Unchanged from 1-hour to 8-hour.

The 8-hour major source threshold for moderate areas like St. Louis has not changed from the major source limits under the old 1-hour standard. Major sources subject to RACT rules will continue to be subject to those same rules because the applicability does not change. These rules continue to serve as reasonable controls for these sources.

f. RACT SIP Evaluation Findings

Tables A and B present a list of the CTG categories. For each category, the corresponding rule name, original adoption date, and date of last amendment are provided. In many cases various federally referenced rules are applicable including NSPSs, MACT Regulations, and NESHAPs. Included in these tables is a determination of whether the Missouri rules satisfy the requirements of RACT based on a perfunctory comparison of each CTG and existing RACT rules. The review was conducted with an eye on assuring that assumptions had not changed, and that the general requirements remain currently reasonable.

There are several CTGs and ACTs noted in Tables C and D for which there are no sources in the St. Louis ozone nonattainment area. Therefore, RACT determinations for those CTG and ACT categories are not necessary. Instead, Missouri will rely on the generic RACT rules to address these categories.

B. CONCLUSION

Based on the foregoing, Missouri certifies that the current complement of St. Louis RACT rules that apply to ozone precursor for sources located in the nonattainment area fulfill the RACT requirements for the 8-hour ozone NAAQS. This is done either by source category rules, by BACT requirement, or by the generic RACT rules 10 CSR 10-5.510 and 5.520.

The 2006 RACT SIP Revision was an evaluation of current air pollution rules that apply in the Missouri portion of the St. Louis ozone nonattainment area and will not result in new or revised regulations.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Coatings and Solvents						
Aerospace Manufacturing and Rework Operations & Coating Operations	Control of VOC Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (EPA-453/R-97-004, 12/97)	Applies to aerospace coatings and cleaning solvents used at aerospace manufacturing and rework operations including contractors and subcontractors.	10 CSR 10-5.295 Control of Emissions From Aerospace Manufacture and Rework Facilities	Feb. 29, 2000	Feb. 29, 2000	5.295 establishes VOC content limits for various coatings. Requirements satisfy RACT.
		Supersedes the applicable parts of the Miscellaneous Metal Part and Products CTG. Does not apply to manufacturing or rework operations involving space vehicles; rework operations performed on antique aerospace vehicles or components; or research and development, quality control, laboratory testing, and electronic parts and assemblies (except for cleaning and coating of completed assemblies.).	10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations	July 12, 1979	Jan. 30, 2001	Requirements satisfy RACT. See discussions concerning 5.330 in sections below.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Graphic Arts	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VIII: Graphic Arts - Rotogravure and Flexography (EPA-450/2-78-033, 12/78, NTIS PB 292-490).	Applies to graphic arts operations that use the flexographic and rotogravure printing processes as applied to both publication and packaging printing.	10 CSR 10-5.340 Control of Emissions From Rotogravure and Flexographic Printing Facilities	Sept. 12, 1980	Feb. 6, 1992	CTG provides estimates for a variety of controls; Rule satisfies RACT by establishing specific emission reduction requirements for various printing operations. No new cost data is available.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
	Offset Lithographic Printing (EPA 453 R-94-054).	Applies to graphic arts operations that use the offset lithographic printing process.	10 CSR 10-5.442 Control of Emissions from Lithographic Printing Operations	May 28, 1995	May 28, 1995	5.442 establishes fountain solution alcohol content for heatset and non-heatset web presses, VOC content limits on cleanup solvents, and establishes a 90 percent emission control requirement for 10 ton or greater sources. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
		For fabric coating applies to all types of coatings applied to fabric and any decorative or protective topcoat applied over vinyl-coated fabric or vinyl sheets. Does not apply to the application of vinyl plastisol to the fabric.	10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations	July 12, 1979	Jan. 30, 2001	5.330 sets a 2.9 #/gal VOC content limit for fabric printing inks. No new cost data is available. Requirements satisfy RACT.
Graphic Arts		For paper coatings, applies to all coatings put on paper, pressure sensitive tapes regardless of substrate (e.g. paper fabric or plastic film), and related web coating processes on plastic film such as typewriter ribbons, photographic film, or magnetic tape. Also includes decorative coatings on metal foil such as gift wrap and packaging.	10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations	July 12, 1979	Jan. 30, 2001	Sets a 2.9 #/gal, 3.8 #/gal, and 2.9 #/gal VOC content limit for paper, vinyl, and fabric respectively. Requirements satisfy RACT.
		For automobile & light truck coating, applies to all objects surface coated in automotive and light duty truck assembly plants.	10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations	July 12, 1979	Jan. 30, 2001	5.330 sets VOC content limits for various auto & light truck manufacturing operations. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Metal Furniture, Surface Coating of	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume III: Surface Coating of Metal Furniture (EPA-450/277-032, 12/77, NTIS PB-278-257).	Applies to surface coating of metal furniture by metal furniture manufacturers.	10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations	July 12, 1979	Jan. 30, 2001	5.330 sets a 3.0 #/gal VOC content limit for metal furniture coatings. Requirements satisfy RACT.
Metal Parts and Products, Surface Coating of Miscellaneous	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VI: Surface Coating of Miscellaneous Metal Parts and Products (EPA-450/2-78-015, 6/78, NTIS PB-286-157).	Applies to industries that are not covered by specific CTG documents (Specific CTGs have been published for can, coil, automobile and light duty truck, metal furniture, magnet wire, and large appliances.).	10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations	July 12, 1979	Jan. 30, 2001	5.330 sets a 4.3 #/gal VOC content limit for the coating of other metal products. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Solvent Metal Cleaning	Control of Volatile Organic Emissions from Solvent Metal Cleaning (EPA-450/2-77-022, 11/77, NTIS PB-274-557).	Applies to cold cleaners, open top vapor degreasers, and conveyORIZED degreasers which use volatile solvents to clean metal parts.	10 CSR 10-5.300 Control of Emissions From Solvent Metal Cleaning	June 11, 1979	May 30, 2002	5.300 sets VOC limits on cleaning solvents & requires appropriate operations. Requirements satisfy RACT.
	Halogenated Solvent Cleaners (EPA 450 3-89-030).		10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	June 11, 1979	Oct.30, 2003	MACT subpart T applies to degreasers using solvents that contain ≥ 5 percent of any of six halogenated solvents and requires specific work practices and equipment designs. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Wood Furniture Manufacturing	Control of VOC Emissions from Wood Furniture Manufacturing Operations (EPA-453/R-96-007, 4/96, NTIS PB-96-178-769).	Applies to any facility that finishes wood furniture, or performs cleaning or wash off associated with wood furniture finishing operations.	10 CSR 10-5.530 Control of Emissions From Wood Furniture Manufacturing Operations	Feb. 29, 2000	Feb. 29, 2000	The CTG recommends the implementation of work practice standards and reformulations. 5.530 sets VOC content limits for various applications and work practice standards. Requirements satisfy RACT.
AutoTransport – Business Machine Plastic Coatings	AutoTransport - Business Machine Plastic (EPA 453 R-94-017).	Applies to surface coating of plastics used in motor vehicles and business machines.	10 CSR 10-6.070 New Source Performance Regulations	April 11, 1980	Nov. 30, 2005	NSPS Subpart TTT establishes VOC content limits for various coating operations. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
<p>Cans, Coils, Paper, Fabrics, Automobiles, and Light Duty Trucks, Surface Coating of</p>	<p>Control of Volatile Organic Emissions from Existing Stationary Sources - Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks (EPA-450/2-77-008, 5/77, NTIS PB-272-445).</p>	<p>For cans, applies to sheet basecoat and overvarnish, two piece can exterior basecoat and overvarnish, Two and three-piece can interior body spray, two-piece can exterior end spray or roll coat, Three piece can side seam spray, and end sealing compound. For coil coating, applies to prime and topcoat or single coat operation.</p>	<p>10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations, 10 CSR 10-6.070 New Source Performance Regulations, & 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations .</p>	<p>July 12, 1979, April 11, 1980, & Dec. 30, 1996</p>	<p>Jan. 30, 2001, Nov. 30, 2005, & Nov. 30, 2005</p>	<p>5.330 sets a 2.6 #/gal VOC content limit for coils, and similar limits for various can coating operations. NSPS subpart WW and the following MACTs (SSSS), (JJJJ), and (OOOO) also apply. Requirements satisfy RACT.</p>
<p>Ink and Paint Manufacturing</p>	<p>Control of VOC from Ink and Paint Manufacturing (EPA 453 3-92-013).</p>	<p>Applies to products of the paint manufacturing industry, including architectural coatings, product coating for original equipment manufacturers, and special-purpose coatings. Also applies to ink manufacturing, including letterpress inks, lithographic and offset inks, gravure inks, and flexographic inks.</p>	<p>10 CSR 10-5.390 Control of Emissions From Manufacture of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products</p>	<p>Mar. 11, 1984</p>	<p>Aug. 30, 2000</p>	<p>5.390 establishes equipment operation practices to reduce emissions. No new cost data is available. Requirements satisfy RACT.</p>

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Large Appliances. Surface Coating of	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume V: Surface Coating of Large Appliances, EPA-450/2-77-034, NTIS PB-278-259).	Applies to the coating of large appliances, such as doors, cases, lids, panels and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dish washers, trash compactors, air conditioners, and similar products.	10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations, 10 CSR 10-6.070 New Source Performance Regulations, & 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	July 12, 1979, April 11, 1980, & Dec. 30, 1996	Jan. 30, 2001, Nov. 30, 2005, & Nov. 30, 2005	5.330 sets a 2.8 #/gal VOC content limit for coating of large appliances. NSPS subpart SS and the following MACT (NNNN) apply. Requirements satisfy RACT.
Magnet Wire, Surface Coating for Insulation of	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume IV: Surface Coating of Insulation of Magnet Wire (EPA- 450/2-77-033, 12/77, NTIS PB-278-258), CTG.	Applies to wire coating curing ovens.	10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations	July 12, 1979	Jan. 30, 2001	5.330 sets a 1.7 #/gal VOC content limit for the coating of other metal products. Requirements satisfy RACT.
Petroleum						

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Bulk Gasoline Plants	Control of Volatile Organic Emissions from Bulk Gasoline Plants (EPA-450/2-77-035, 12/77, NTIS PB-276-722), CTG.	Applies to bulk plants with daily throughputs of 76,000 liters (20,077 gal.) gasoline or less.	10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer	March 14, 1967	Aug. 30, 1999	5.220 requires equipment specifications and operating procedures in accordance with the CTG. Requirements satisfy RACT.
External Floating Roof Tanks, Petroleum Liquid Storage in	Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks (EPA-450-2/78-047, 12/78, NTIS PB-290-579), CTG.	Applies to external floating roof tanks larger than 150,000 liters (~40,000 gal. Or 950 bbls.) storing petroleum liquids.	10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer	March 14, 1967	Aug. 30, 1999	5.220 requires equipment specifications and operating procedures in accordance with the CTG. Requirements satisfy RACT.
External Floating Roof Tanks, Petroleum Liquid Storage in	Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA 453 R-94-00).	Applies to storage tanks in all industries, but primarily in the petroleum refineries, pipelines, chemical plants, liquid terminals	10 CSR 10-5.500 Control of Emissions From Volatile Organic Liquid Storage	Feb. 29, 2000	Feb. 29, 2000	5.500 requires equipment specifications and operating procedures in accordance with the CTG. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Fixed Roof Tanks, Storage of Petroleum Liquids in	Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed Roof Tanks (EPA-450/2-77-036, 12/77, NTIS PB-276-749) Organic Liquid Storage (EPA 453 R-94-00).	Applies to storage vessels with capacities greater than 150,000 liters containing petroleum liquids with a true vapor pressure greater than 10.5 KPa. Exempts fixed roof tanks with capacities less than 1,600,000 liters used to store produced crude or condensate prior to lease custody transfer.	10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer	March 14, 1967	Aug. 30, 1999	5.220 requires equipment specifications and operating procedures in accordance with the CTG. Requirements satisfy RACT.
	Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA 453 R-94-00).	Applies to storage tanks in all industries, but primarily in the petroleum refineries, pipelines, chemical plants, and liquid terminals.	10 CSR 10-5.500 Control of Emissions From Volatile Organic Liquid Storage	Feb. 29, 2000	Feb. 29, 2000	5.500 requires equipment specifications and operating procedures in accordance with the CTG. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds	Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds, (EPA-450/2-77-025, 10/77, NTIS PB-275-662).	Applies to non-condensables from vacuum producing systems, wastewater separators, and all pressurized process units.	CSR 10-6.070 New Source Performance Regulations, &10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	April 11, 1980, & Dec. 30, 1996	Nov. 30, 2005, & Nov. 30, 2005	NSPS subpart QQQ and the following MACT subparts (CC) & (VV) apply to petroleum refineries and oil separators. Requirements satisfy RACT.
Gasoline Dispensing Stage II Vapor Recovery	Stage II Gasoline Dispensing Facilities (EPA 450 3-91-022a).	Applies to gasoline dispensing into motor vehicles at gasoline dispensing facilities.	10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer	March 14, 1967	Aug. 30, 1999	Guidance recommends establishing equipment requirements, maintenance and exemption levels, and testing and recordkeeping requirements. These elements are all provided in 5.220. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Gasoline Service Stations	Design Criteria for Stage I Vapor Control Systems - Gasoline Service Stations, (11/75), CTG.	Applies to filling of gasoline storage tanks from gasoline tanker trucks.	10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer	March 14, 1967	Aug. 30, 1999	Section (4) of 5.220 requires service station operators to accept product deliveries by trucks equipped with appropriate vapor recovery systems. Requirements satisfy RACT.
Organic Liquid Storage	Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA 453 R-94-001).	Applies to storage tanks in all industries, but primarily in the petroleum refineries, pipelines, chemical plants, and liquid terminals.	10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer	March 14, 1967	Aug. 30, 1999	5.220 requires Volatile Organic Liquid storage tanks to be equipped with appropriate vapor loss control devices. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Tank Trucks, Gasoline Loading Terminals	Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals (EPA-450/2-77-026, 12/77, NTIS PB-275-060);10/77.	Applies to tank truck terminals with daily throughputs greater than 76,000 liters (20,077 gal.).	10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer, 10 CSR 10-6.070 New Source Performance Regulations, &10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	March 14, 1967, April 11, 1980, & Dec. 30, 1996	Aug. 30, 1999, Nov. 30, 2005, & Nov. 30, 2005	5.220 requires tanks at gasoline bulk plants to be equipped with vapor loss control devices. NSPS subparts K, Ka, Kb, XX, and MACT subpart R apply. Requirements satisfy RACT.
Tank Trucks, Gasoline, and Vapor Collection Systems	Control of VOC Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA-450/2-78-051, 12/78, NTIS PB-290-568).	Applies to gasoline tank trucks that are equipped with vapor collection systems and the vapor collection systems at bulk terminals, bulk plants and service stations.	10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer, 10 CSR 10-6.070 New Source Performance Regulations, &10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	March 14, 1967, April 11, 1980, & Dec. 30, 1996	Aug. 30, 1999, Nov. 30, 2005, & Nov. 30, 2005	5.220 requires leak testing. NSPS Subpart XX requiring vapor collection devices applies. MACT subpart R also applies requiring monthly leak inspections. Requirements satisfy RACT.
Other						

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Cutback Asphalt	Control of VOC from Use of Cutback Asphalt (EPA-450/2-77-037, NTIS PB 278-185).	Applies to use of cutback asphalt used for roadway paving.	10 CSR 10-5.310 Liquefied Cutback Asphalt Paving Restricted	July 12, 1979	Mar. 11, 1989	5.310 prohibits the use of cutback asphalt paving during the ozone season. Requirements satisfy RACT.
Ethylene Oxide -Sterilization and Aeration	Ethylene Oxide Sterilization Fumigation (EPA 450 3-89-007).	Applies to ethylene oxide used as a sterilant/fumigant in production of medical equipment supplies, in miscellaneous sterilization and fumigation operations, and at hospitals.	10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	Dec. 30, 1996	Nov. 30, 2005	MACT subpart O applies requiring 99 percent emission reductions. Requirements satisfy RACT.
Large Petroleum Dry Cleaners	Control of VOC Emissions from Large Petroleum Dry Cleaners, EPA-450/3-82-009, 9/82, NTIS PB-83-124-875).	Applies to petroleum solvent dry cleaning facilities that consume 123,000 liters or more of petroleum solvent per year.	10 CSR 10-6.070 New Source Performance Regulations	April 11, 1980	Nov. 30, 2005	MACT subpart M applies requiring equipment, work practices and other operational requirements. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
<p>Perchloroethylene Dry Cleaning Systems</p>	<p>Control of Volatile Organic Emissions from Perchloroethylene Dry Cleaning Systems (EPA-450/2-78-050, 12/78, NTIS PB-290-13).</p>	<p>Applies to all dry cleaning systems that use perchlorethylene.</p>	<p>10 CSR 10-6.075 Maximum Achievable Control Technology Regulations</p>	<p>Dec. 30, 1996</p>	<p>Nov. 30, 2005</p>	<p>Perc is no longer considered a VOC. MACT subpart M applies requiring equipment, work practices and other operational requirements. Requirements satisfy RACT.</p>

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Synthetic Organic Chemical Manufacturing	Control of VOC Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry (EPA-450/3-84-015, 12/84; NTIS PB-85-164-275). Control of VOC Emissions from Reactor Processes and Distillation Operations in SOCFI (EPA-450/4-91-031, 11/15/93, NTIS PB-92-180-009).		10 CSR 10-5.420 Control of Equipment Leaks From Synthetic Organic Chemical and Polymer Manufacturing Plants, 10 CSR 10-6.070 New Source Performance Regulations, & 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	Sept. 26, 1986, April 11, 1980, & Dec. 30, 1996	Mar. 11, 1989, Nov. 30, 2005, & Nov. 30, 2005	5.420 provides for control of leaks from these facilities. NSPS subpart RRR requiring 98 percent VOC control efficiency and the following MACTs (F& G) apply. Requirements satisfy RACT.
Air Oxidation Processes in SOCFI	Air Oxidation Processes in SOCFI (EPA 450 3-84-015 VOC).	Applies to air oxidation processes used in the synthetic organic chemical manufacturing industry.	10 CSR 10-6.070 New Source Performance Regulations	April 11, 1980	Nov. 30, 2005	NSPS subpart RRR requiring 98 percent VOC control efficiency applies. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Batch Processes	Batch Processes (EPA 453 R-93-020).	Applies to plastic materials and resins, pharmaceuticals, gum and wood chemicals, cyclic crudes and intermediates, industrial organic chemicals, and agricultural chemicals.	10 CSR 10-5.540 Control of Emissions From Batch Process Operations	Feb. 29, 2000	Feb. 29, 2000	5.540 requires percent VOC reductions at different efficiencies dependent upon flow classification. Requirements satisfy RACT
Commercial Bakeries	Bakery Oven Emissions (EPA 453 R-92-017).	Applies to commercial bakery operations.	10 CSR 10-5.440 Control of Emissions from Bakery Ovens	May 28, 1995	Dec. 29, 2000	5.440 requires an 80 percent VOC reduction efficiency. Requirements satisfy RACT.
Leather Tanning and Finishing Operations	Leather Tanning and Finishing Operations (EPA 453 R-93-025).	Applies to leather finishing operations.	10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	Dec. 30, 1996	Nov. 30, 2005	MACT (TTTT) applies that establishes VOC emission rates per square feet of leather for various tanning operations. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Pharmaceutical Products	Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products (EPA-450/2-78-029, 1278, NTIS PB-290-580).	Applies to facilities and operations that synthesize pharmaceutical products.	10 CSR 10-5.350 Control of Emissions From Manufacture of Synthesized Pharmaceutical Products, & 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	Sept. 12, 1980, & Dec. 30, 1996	Mar. 11, 1989, & Nov. 30, 2005	5.350 establishes performance specifications for condensers or equivalent requirements for other VOC control techniques. MACT (GGG) also applies. Requirements satisfy RACT.

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
<p>Polyester Resin</p>	<p>Control of VOC Emissions from Manufacture of High – Density Polyethylene, Polypropylene, and Polystyrene Resins (EPA-450/3-83-008, 11/83, NTIS PB-84-134-600).</p> <p>Control of VOC Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (EPA-450/3-83-006, 3/84, NTIS PB-84-189-372).</p> <p>Polystyrene Foam Manufacturing (EPA 450 3-90-020).</p>	<p>Applies to the manufacturing of high-density polyethylene, polypropylene, and polystyrene.</p> <p>Applies to emissions from equipment used in synthetic organic chemical polymers and resins.</p> <p>Applies to polystyrene foam manufacturing.</p>	<p>10 CSR 10-5.410 Control of Emissions From Manufacture of Polystyrene Resin, & 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations</p>	<p>May 11, 1985, & Dec. 30, 1996</p>	<p>Mar. 11, 1989, & Nov. 30, 2005</p>	<p>5.410 establishes a 0.24-pound per 2000 pound polystyrene production VOC limit. MACT subparts U, HH, JJJ, and M MMMM also apply requiring various emission control strategies. Requirements satisfy RACT.</p>

Table A: VOC Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Synthetic Organic Chemical and Polymer Manufacturing Equipment, Equipment Leaks from	Control of VOC Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (EPA-450/3-83-006, 3/84, NTIS PB-84-189-372).	Applies to leaks of process fluids (gaseous or liquid) from plant equipment such as pumps, compressors, in-line process valves, pressure relief devices, open-ended valves, sampling connections, flanges, agitators, and cooling towers.	10 CSR 10-5.550 Control of Volatile Organic Compound Emissions From Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry	Feb. 29, 2000	Feb. 29, 2000	5.420 provides for appropriate control of leaks from these facilities. Requirements satisfy RACT.

Table B: NOx Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Stationary Source NOx						
Electric Utility Boilers	NOx Utility Boilers (EPA 453 R- 94-023).	Applies to electric utility boilers.	10 CSR 10-5.510 Control of Emissions of Nitrogen Oxides, 10 CSR 10-6.360 Control of NOx Emissions From electric Generating Units and Non-Electric Generating Boilers, & 10 CSR 10-6.070 New Source Performance Regulations	Feb. 29, 2000, Oct. 30, 2005, & April 11, 1980	May 30, 2006, Oct. 30, 2005, & Nov. 30, 2005	5.510 establishes NOx emission limits for different fuels and various boiler configurations. 6.360 establishes a NOx emission budget for electric generating utilities. These rules were included as Missouri's response to the NOx SIP call which was approved by EPA on 8/15/06. NSPS subparts D, Da, and Db also apply. Requirements satisfy RACT.

Table B: NOx Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Industrial Commercial Boilers	Industrial Commercial Boilers (EPA 453 R-94-022).	Applies to boilers used in industrial facilities.	10 CSR 10-5.510 Control of Emissions of Nitrogen Oxides, & 10 CSR 10-6.360 Control of NOx Emissions From electric Generating Units and Non-Electric Generating Boilers	Feb. 29, 2000, & Oct. 30, 2005	May 30, 2006, & Oct. 30, 2005	5.510 establishes NOx emission limits for different fuels and various boiler configurations. 6.360 establishes a NOx emission budget for non-electric generating boilers. These rules were included as Missouri's response to the NOx SIP call which was approved by EPA on 8/15/06. Requirements satisfy RACT.

Table B: NOx Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Stationary Gas Turbines	Stationary Gas Turbines (EPA 453 R-93-007).	Applies to stationary gas turbines.	10 CSR 10-5.510 Control of Emissions of Nitrogen Oxides, & 10 CSR 10-6.070 New Source Performance Regulations	Feb. 29, 2000, & April 11, 1980	May 30, 2006, & Nov. 30, 2005	5.510 establishes NOx emission limits for different fuels and various boiler configurations. This rule was included as Missouri's response to the NOx SIP call which was approved by EPA on 8/15/06. NSPS subpart GG also applies. Requirements satisfy RACT.

Table B: NOx Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
Stationary Reciprocating Internal Combustion Engines	Stationary Reciprocating IC Engines (EPA 453 R-93-032).	Applies to stationary reciprocating internal combustion engines.	10 CSR 10-5.510 Control of Emissions of Nitrogen Oxides, & 10 CSR 10-6.390 Control of NOx Emissions From Large Stationary Internal Combustion Engines	Feb. 29, 2000, & Aug. 30, 2000	May 30, 2006, & Sept. 30, 2001	5.510 establishes NOx emission limits for different fuels and various boiler configurations. 6.390 establishes allowable NOx emission rates for large stationary internal combustion engines. These rules were included as Missouri's response to the NOx SIP call which was approved by EPA on 8/15/06. Requirements satisfy RACT.

Table B: NOx Source Categories, CTG/ACT List, and Applicable St. Louis Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	Missouri Rule	Original Effective Date	Date Last Amended	8-Hour RACT Determination
<p>Cement Manufacturing</p>	<p>Cement Manufacturing (EPA 453 R-94-004).</p>	<p>Applies to the kilns used in cement manufacturing.</p>	<p>10 CSR 10-5.510 Control of Emissions of Nitrogen Oxides, 10 CSR 10-6.380 Control of NOx Emissions From Portland Cement Kilns, 10 CSR 10-6.070 New Source Performance Regulations, & 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations</p>	<p>Feb. 29, 2000, Oct. 30, 2000, April 11, 1980, & Dec. 30, 1996</p>	<p>May 30, 2006, Oct. 30, 2000, Nov. 30, 2005, & Nov. 30, 2005</p>	<p>5.510 establishes NOx emission limits for different fuels and various boiler configurations. 6.380 specifies NOx control equipment and NOx emission levels for cement kilns. These rules were included as Missouri's response to the NOx SIP call which was approved by EPA on 8/15/06. NSPS subpart F and MACT subpart LLL also. Requirements satisfy RACT.</p>

Table C – VOC Source Categories and CTG/ACT List for Which There Are No Applicable Missouri Sources

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	St. Louis Sources?
Coatings and Solvents			
Automobile Refinishing	Automobile Refinishing (EPA 450 3-88-009).	Applies to automobile refinishing operations.	No
Shipbuilding	Shipbuilding and Ship Repair Operations (Surface Coating) (61 FR 44050, 8/27/96).	Applies to coatings and solvents used for building or maintaining metal marine or fresh-water metal hulled vessel used for military or commercial operations, including self-propelled vessels and those towed by other craft (barges). This definition includes, but is not limited to, all military vessels, commercial cargo and passenger (cruise) ships, ferries, barges, tankers, container ships, patrol and pilot boats, and dredges.	No
	Surface Coating Operations at Shipbuilding and Ship Repair Facilities (EPA-453/R-94-032, 4/94, NTIS PB-94-181-864).	Applies to any marine or fresh-water metal hulled vessel used for military or commercial operations, including self-propelled vessels and those towed by other craft. This definition includes, but is not limited to, all military vessels, commercial cargo and passenger ships, ferries, barges, tankers, container ships, patrol and pilot boats, and dredges. Pleasure craft, such as recreational boats and yachts, are not included.	No
Coatings and Solvents			
Flat Wood Paneling, Surface Coating of	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VII: Factory Surface of Flat Wood Paneling (EPA-450/2-78-032, 6/78, NTIS PB 286-199).	Applies to interior paneling made of wood products.	No

Table C – VOC Source Categories and CTG/ACT List for Which There Are No Applicable Missouri Rules, cont'

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	St. Louis Sources?
Petroleum			
Natural Gas/Gasoline Processing Plants, Equipment Leaks from	Control of VOC Equipment Leaks from Natural Gas/Gasoline Processing Plants (EPA-450/2-83-007, 12/83, NTIS PB-84-161-520), CTG.	Applies to facilities engaged in the separation of natural gas liquids from field gas and/or fraction of the liquids into natural gas products, such as ethane, propane, butane and natural gasoline. It is not applicable to compressor stations, dehydration units, sweetening units, field treatment, underground storage facilities, liquefied natural gas units and field gas gathering systems unless they are located at a gas plant.	No
Petroleum Refinery Equipment, Leaks from	Control of VOC Leaks from Petroleum Refinery Equipment (EPA-450/2-78-036, 6/78, NTIS PB-286-158).	Applies to leaks equipment such as pumps, compressors, flanges, valves and, pressure relief devices.	No
Other			
Agricultural Pesticides	Control of VOC from the Application of Agricultural Pesticides (EPA 453R-92-011).	Applies to pesticides used for agricultural purposes.	No
Plywood Veneer Dryers	Control Techniques for Organic Emissions from Plywood Veneer Dryers (EPA 450 3-83-012 VOC).	Applies to softwood plywood manufacturing operations.	No
Pneumatic Rubber Tires, Manufacture of	Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires (EPA-450/2-78-030,12/78, NTIS PB-290-557).	Applies to manufacturing processes; undertread cementing, tread-end cementing, bead dipping, and green tire spraying.	No

Table D – NO_x Source Categories and CTG/ACT List for Which There Are No Applicable Missouri Rules

CTG Source Category	CTG/ACT Reference Document	CTG/ACT Applicability	St. Louis Sources?
Stationary Source NO_x			
Glass Manufacturing	Glass Manufacturing (EPA 453 R-94-037).	Applies to glass manufacturing.	No
Iron and Steel	Iron and Steel Mills (EPA 453 R-94-065).	Applies to iron and steel manufacturing.	No
Nitric and Adipic Acid Manufacturing Plants	Nitric and Adipic Acid Manufacturing Plants (EPA 450 3-91-026).	Applies to nitric and adipic acid manufacturing operations.	No
Petroleum			
Process Heaters	Process Heaters Revised (EPA 453 R-93-034).	Applies to direct-fired heaters used primarily in the petroleum industry	No
Other			
Fuel Switching	Fuel Switching to Meet RACT for NO _x (EPA Memorandum, July 30, 1993).	Applies to switching to a cleaner burning fuel during ozone season.	N/A

Table E – Summary of St. Louis Nonattainment Area RACT Rules

Rule Number	Rule Purpose	Applicability
5.030	Restricts the emission of Particulate Matter (PM) from fuel burning equipment used for indirect heating.	See Applicability.
5.040	Prohibits operation of hand-fired fuel-burning equipment.	See Applicability.
5.070	Prohibits disposal by open burning.	See Applicability.
5.120	Sale of residential coal or fuel oil has records maintained.	See Applicability.
5.130	Specific coals to be cleaned prior to sale or use.	< 2% sulfur or 12% dry ash.
5.160	Restricts emission of excessive odor matter.	Specific areas and objectionable odors (definition).
5.170	Establishes methods and procedures for odor control when processing animal matter.	Heated of animal matter including cooking, drying, dehydrating, digesting, evaporating, rendering, and protein concentrating.
5.220	Restricts VOC emissions from the handling of petroleum liquids.	See Applicability (5 areas of concern).
5.295	Reduces VOC emission from aerospace manufacture facilities.	Table.
5.300	Reduces VOC emission from solvent metal cleaning operations.	Applies to all installations that emit VOC's from solvent metal cleaning or degreasing operations. Also applies to processes that use cold cleaners, open-top vapor degreasers to clean soils from metal surfaces.
5.310	Restricts VOC emissions from cutback paving operations.	Applies to producers and suppliers of liquefied cutback asphalt.
5.330	Restricts VOC's from industrial surfacing coating operations.	> 2.5 tons per year VOC. See Table.
5.340	Restricts VOC emission from rotogravure and flexographic printing facilities.	> 250 kg/day or 100 tons/yr VOC.
5.350	Restricts VOC emissions from the manufacture of synthesized pharmaceutical products.	> 15 lbs/day VOC.
5.360	Reduces VOC emissions as part of the Missouri State Implementation Plan for Ozone.	> 100 tons/yr or 250 kg/day VOC.
5.370	Restricts emissions of VOC's from deadener and adhesive applications.	> 100 tons/yr or 250 kg/day VOC.

Table E – Summary of St. Louis Nonattainment Area RACT Rules, cont'

Rule Number	Rule Purpose	Applicability
5.390	Reduces VOC's from the manufactures of paints, varnishes, lacquers, enamels and other surface coating products.	> 100 tons/yr or 250 kg/day VOC.
5.410	Restricts VOC emissions from the manufacture of polystyrene resin.	> 0.24 lbs/day per 2000 lbs of resin.
5.420	Controls leaks of VOC's from synthetic organic material and polymer manufacturing equipment.	> 980 tons/yr light liquid and gaseous VOC potential and producing intermediate or final products in 10-6.070.
5.430	Limits VOC emissions from the surface coating of chrome-plated plastic parts.	Seigel-Robert Plating Company, Inc. > 6.2 lbs/gal chrome-plated and extreme performance process. > 6.4 lbs/gal chrome resist process.
5.440	Restricts emission of VOC from bakery ovens at large commercial bakeries.	> 100 tons/yr or 250 kg/day VOC.
5.442	Restricts VOC emissions from lithographic printing operations.	See Emission Limits.
5.450	Limits the VOC content of traffic coatings.	See Emission Limit Formula.
5.451	Restricts VOC emissions from aluminum foil rolling mills.	> 100 tons/yr or 250 kg/day VOC.
5.455	Reduces VOC's from cleanup operations.	See Applicability.
5.490	Requires municipal solid waste landfills to monitor their non-methane organic compound emissions.	Applies to municipal solid waste landfills (MSW). See Applicability.
5.500	Limits the VOC emissions from installations with volatile organic liquid storage vessels by incorporating reasonably available control technology (RACT).	See Applicability.
5.510	Reduces Nitrogen Oxides by requiring major sources to install or comply with RACT.	Potential of > 100 tons/yr Nitrogen Oxide. See Applicability.
5.520	Reduces VOC emissions from major sources that have not been affected by other rulemakings.	Potential of > 100 tons/yr VOC. See Applicability.
5.530	Limits VOC emissions from wood furniture manufacturing operations by incorporating RACT.	All wood furniture manufacturing installations with a potential to emit of > 25 tons/yr VOC.
5.540	Limits VOC emissions from batch process operations by incorporating RACT.	> 100 tons/yr VOC. See Applicability.

Table E – Summary of St. Louis Nonattainment Area RACT Rules, cont'

Rule Number	Rule Purpose	Applicability
5.550	Limits VOC emissions from reactor processes and distillation operations.	See Applicability.

Table F – RACT, NESHAP, & NSPS Regulations Applicable to Major Sources in St. Louis Nonattainment Area

Facility	RIP	Plan	SIC Code	SIC Description	Production	OP Type	NESHAPS & MACTs	NSPS	RACT Rules
AEROFIL TECHNOLOGY INC	071	0151	7389	BUSINESS SERVICES, NEC (PACKAGING AND LABELING SERVICES)	CHEMICAL PACKAGING AND LABELING SERVICES	P70			5.030, 5.300
ACCUREZ LLC - U S POLYMERS	510	1216	2851	PAINTS, VARNISHES, LACQUERS, ENAMELS AND ALLIED PRODUCTS	VARNISH	P70			Pending Permit Review
AERO METAL FINISHING	099	0114	3471		METAL FINISHING	INT	N		5.040, 5.070, 5.160, 5.330
ALLIED HEALTH CARE PRODUCTS	510	1460	3841	Surgical and Medical Instruments and Apparatus (except tranquilizer guns and operating room tables)	MEDICAL GAS SYSTEMS/MEDICAL PRODUCTS	P70	A, T		5.030, 5.040, 5.300
ALLSAFE SERVICES & MATERIALS (ASMC)	189	0315	3231	Glass Products Made of Purchased Glass	PAVEMENT REFLECTIVE TAPE	P70	M		5.040, 5.330
AMERENUE	071	0003	4911	Electric Services (hydroelectric power generation)	ELECTRICITY	P70	ZZZZ		5.030, 5.300
AMERENUE	099	0016	4911	Electric Services (hydroelectric power generation)	ELECTRICITY	P70	A, B, ZZZZ, DDDDD		5.030, 5.220, 5.300
AMERENUE	183	0001	4911	Electric Services (hydroelectric power generation)	ELECTRICITY	P70	ZZZZ		5.030, 5.220, 5.300
AMERENUE	189	0010	4911	Electric Services (hydroelectric power generation)	ELECTRICITY	P70	ZZZZ		5.030, 5.120, 5.220, 5.300
AMERENUE	189	0023	4911	Electric Services (hydroelectric power generation)	ELECTRICITY	P70			5.040
AMERICAN AIRLINES INC - OLD NATURAL BRIDGE	189	1173	4581		COMMERICAL AIRCRAFT	INT			Pending Permit Review
ANHEUSER-BUSCH INC	510	0003	2082	MALT BEVERAGES (MALT EXTRACT)	BEER BREWING AND PACKAGING	P70			Pending Permit Review
ARCADE PRINTING	189	1232	2752		INSERT PRINTING	P70			Pending Permit Review
BARNES JEWISH HOSPITAL	510	0204	8062	GENERAL MEDICAL AND SURGICAL HOSPITALS	HOSPITAL	P70		Dc, Kb	5.030, 5.040, 5.220, 5.300

Table F – RACT, NESHAP, & NSPS Regulations Applicable to Major Sources in St. Louis Nonattainment Area

Facility	FIP	Plant	SIC Code	SIC Description	Product	OP Type	NESHAPS & MACTs	NSPS	RACT Rules
BELT SERVICE CORP	189	1012	3052	RUBBER AND PLASTICS HOSE AND BELTING	CONVEYOR BELTS	P70	M		5.040
BFI MISSOURI PASS LANDFILL	189	0281	4953	Refuse Systems (solid waste landfills)	LANDFILL	P70	M	CC	5.040, 5.490
BLUEGRASS CONTAINER COMPANY, LLC	071	0031	2657	Folding Paperboard Boxes, Including Sanitary (except paperboard backs for blister or skin packages)	PAPER BOXES	P70	M		5.030, 5.300, 5.442
BRENNTAG MID-SOUTH INC	510	1093	5169	CHEMICALS AND ALLIED PRODUCTS, NEC (AGENTS AND BROKERS)	BULK CHEMICALS	P70	M	Kb	5.030, 5.040, 5.220
BRIDGETON LANDFILL, LLC	189	0312	4953	Refuse Systems (solid waste landfills)	LANDFILL	P70		CC	5.040, 5.490
BULL MOOSE TUBE CO	071	0087	3317		TUBES	INT			5.040, 5.070, 5.160, 5.300, 5.330
CAMIE-CAMPBELL INC - WATSON IND PARK	189	0327	2899	Chemicals and Chemical Preparations, NEC (table salt)	PRESSURE ADHESIVES	P70	M		5.040
CANAM STEEL CORP	071	0014	3441	Fabricated Structural Metal	STEEL JOISTS	P70			5.300, 5.330
CHRYSLER ASSEMBLY SOUTH PLANT	189	0002	3711	Motor Vehicles and Passenger Car Bodies (automobiles)	AUTOMOBILES	P70		A, MM	5.220, 5.300, 5.330, 5.370, 5.442
CLEAN INDUSTRIAL	510	0642	7216		DRY CLEANING	P70			Pending Permit Review
DAIMLERCHRYSLER CORP. NORTH PLANT	189	0231	3711	Motor Vehicles and Passenger Car Bodies (automobiles)	TRUCK ASSEMBLY	P70		A, Dc, MM	5.030, 5.220, 5.300, 5.330, 5.442
DOE RUN COMPANY	099	0003	3339	Primary Smelting and Refining of Nonferrous Metals, Except Copper and Aluminum	LEAD REFINING	P70	A, TTT	B, R	5.300
DOW CHEMICAL COMPANY THE	099	0014	3086	PLASTICS FOAM PRODUCTS (POLYSTYRENE FOAM PRODUCTS)	EXTRUDED POLYSTYRENE	P70	H, JJJ		5.410

Table F – RACT, NESHAP, & NSPS Regulations Applicable to Major Sources in St. Louis Nonattainment Area

Facility	PLP	Plant	SIC Code	SIC description	Product	OP Type	NESHAPS & MACTs	NSPS	RACT Rules
ELEMENTIS SPECIALTIES INC	510	0066	2851	PAINTS, VARNISHES, LACQUERS, ENAMELS AND ALLIED PRODUCTS	RHEOLOGICAL ADDITIVES - WHITE LEAD	P70			5.030, 5.300, 5.520
ENERGY CENTER (THE)	510	1505	4911	Electric Services (fossil fuel power generation)	ENERGY	P70		Kb	5.030, 5.300
F&S REAL ESTATE INC	189	1520	2759		PLASTIC BAG PRINTING	UNK			Pending Permit Review
FEDERAL-MOGUL FRICTION PRODUCTS	510	0072	3321	Gray and Ductile Iron Foundries	CASTINGS	P70			none, but not major for NOx or VOC
FORD MOTOR COMPANY	189	0015	3711	Motor Vehicles and Passenger Car Bodies (automobiles)	AUTOMOTIVE ASSEMBLY (AEROSTAR)	P70			Pending Permit Review
FRED WEBER - FESTUS ASPHALT PLANT	099	0007	2951		ASPHALT	INT			5.040, 5.070, 5.160, 5.300, 5.310
FRED WEBER INC SANITARY LANDFILL	189	0308	4953	Refuse Systems (solid waste landfills)	LANDFILL	P70		CC	5.040, 5.490
GENERAL MOTORS	183	0076	3711	Motor Vehicles and Passenger Car Bodies (automobiles)	AUTOMOBILES	P70			5.030, 5.160
GKN AEROSPACE SERVICES INC	189	1489	3728	Aircraft Parts and Auxiliary Equipment, NEC (fluid power aircraft subassemblies)	AIRCRAFT PARTS AND AUXILLARY EQUIP	P70			Pending Permit Review
ICL PERFORMANCE PRODUCTS LP	510	0070	2819	Industrial Inorganic Chemicals, NEC (except activated carbon and charcoal, alumina, recovering sulfur from natural gas, and inorganic dyes)	PHOSPHATES AND PHOSPHORIC ACID	P70			5.030, 5.300, 5.510
JW ALUMINUM	510	0118	3497	Metal Foil and Leaf (laminated aluminum foil rolls and sheets for flexible packaging uses)	FOIL PACKS	P70	A, RRR	Kb	5.030, 5.300, 5.451
K & R WOOD PRODUCTS INC	183	0119	2511	Wood Household Furniture, Except Upholstered (except wood box spring frames)	FURNITURE, WOOD	P70	JJ		5.040

Table F – RACT, NESHAP, & NSPS Regulations Applicable to Major Sources in St. Louis Nonattainment Area

Facility	FIP	Plant	SIC Code	SIC Description	Product	OP Type	NESHAPS & MACTs	NSPS	RACT Rules
KV PHARMACEUTICAL COMPANY	189	1047	2834	Pharmaceutical Preparations	PHARMACEUTICALS	P70			Pending Permit Review
MALLINCKRODT INC	510	0017	2834	Pharmaceutical Preparations	PHARMACEUTICALS	P70			Pending Permit Review
MARQUETTE TOOL & DIE	510	0162	3544	Special Dies and Tools, Die Sets, Jigs and Fixtures, and Industrial Molds (industrial molds)	MANUFACTURES METAL AUTOMOTIVE PARTS	P70	T		5.300
MCDONNELL DOUGLAS CORP	183	0010	3674	Semiconductors and Related Devices	ELECTRONIC	P70	A, B, M, T, GG, JJ, ZZZZ, DDDDD	Kb	5.030, 5.070, 5.220, 5.295, 5.300, 5.450
MCDONNELL DOUGLAS CORP./BOEING COMPANY	189	0230	3721	Aircraft (except research and development not producing prototypes)	AEROSPACE PRODUCTS	P70	N, T, GG	Dc, Kb	5.120, 5.295, 5.300, 5.330, 5.450
MEMC - ST. PETERS	183	0027	3674	Semiconductors and Related Devices	ELECTRONIC	INT			5.220, 5.450
MERAMEC INDUSTRIES INC	071	0068	3089	Plastics Products, NEC (plastics sausage casings)	SHOE SOLES	P70			5.300, 5.330
METAL CONTAINER CORPORATION	099	0044	3411	Metal Cans	CANS BEER	P70		WW	5.030, 5.040, 5.330
METROPOLITAN ST. LOUIS SEWER DISTRICT	189	1205	4952	SEWERAGE SYSTEMS	WASTEWATER TREATMENT	P70	M		5.030, 5.220, 5.300
METROPOLITAN ST. LOUIS SEWER DISTRICT	510	0053	4952	SEWERAGE SYSTEMS	WASTE WATER TREATMENT	P70	C, E	O, Dc	5.220, 5.300, 5.510
MID-WEST INDUSTRIAL CHEMICAL	510	1077	2891	ADHESIVES AND SEALANTS	ADHESIVES	P70			5.030, 5.390
MSD - COLDWATER CREEK	189	1210	4952	SEWERAGE SYSTEMS	WASTEWATER TREATMENT	P70	M		5.040, 5.300
MSD - LEMAY WASTEWATER TREATMENT	189	0217	4952	SEWERAGE SYSTEMS	WASTEWATER TREATMENT	P70	C, E, M	O	5.040, 5.220, 5.300
NATIONAL GRAPHICS	510	0054	2672	Coated and Laminated Paper, NEC	SURFACE COATING OF PAPER - FILM	P70			5.030, 5.040, 5.330

Table F – RACT, NESHAP, & NSPS Regulations Applicable to Major Sources in St. Louis Nonattainment Area

Facility	FIP	Plan	SIC Code	SIC Description	Product	OP Type	NESHAPS & MACTs	NSPS	RACT Rules
NEW WORLD PASTA	510	2433	2098	Macaroni, Spaghetti, Vermicelli and Noodles	DRY PASTA PRODUCTION	P70	M	Dc	5.030, 5.040, 5.300
NORTHSIDE LANDFILL INC	071	0156	4953	Refuse Systems (solid waste landfills)	LANDFILL	P70	OOO		5.040
O'FALLON CASTING LLC	183	0077	3324	Steel Investment Foundries	NON-FERROUS INVESTMENT CASTING	P70	A, C		none, but not major for NOx or VOC
ONYX OAK RIDGE LANDFILL INC	189	0310	4953	Refuse Systems (solid waste landfills)	LANDFILL	P70			5.040, 5.300, 5.490
P D GEORGE CO (THE)	510	0096	2851	PAINTS, VARNISHES, LACQUERS, ENAMELS AND ALLIED PRODUCTS	PAINTS	P70		Dc, Kb	5.030, 5.220, 5.300, 5.390
PERFECT CIRCLE DIV. OF DANA CORPORATION	189	0025	3592	Carburetors, Pistons, Piston Rings, and Valves	PISTON RINGS	P70	A, T		5.300, 5.450
PLAZE INCORPORATED	071	0157	2899	Chemicals and Chemical Preparations, NEC (table salt)	AEROSOL FILLER	P70	M		none, but not major for NOx or VOC
PQ CORPORATION (THE)	510	0809	2819	Industrial Inorganic Chemicals, NEC (recovering sulfur from natural gas)	SODIUM SILICATE & SILICA GEL	P70			5.030, 5.510
PRECOAT METALS	510	0027	3479	COATING, ENGRAVING, AND ALLIED SERVICES, NEC (EXCEPT JEWELRY, SILVERWARE, AND FLATWARE ENGRAVING AND ETCHING)	MET.COATIN	P70		Dc, TT	5.030, 5.300, 5.330
PRINTPACK INC	189	0208	2671	Packaging Paper and Plastics Film, Coated and Laminated (except single-web and multi-web plastics packaging film and sheet)	FLEXIBLE PACKAGING	P70	A, M		5.030, 5.300, 5.340, 5.450
PRO-TECT MFG INC - FERGUSON AVENUE	189	0317	3086	PLASTICS FOAM PRODUCTS (POLYSTYRENE FOAM PRODUCTS)	MATS	P70	M		5.040
RC CEMENT COMPANY	099	0002	3241		CEMENT PRODUCTION	P70	A, M, LLL	F	5.300
SAINT-GOBAIN CONTAINERS INC	099	0068	3221	Glass Containers	GLASS CONTAINERS	P70		CC	5.030, 5.300, 5.510

Table F – RACT, NESHAP, & NSPS Regulations Applicable to Major Sources in St. Louis Nonattainment Area

Facility	FIP Plant	SIC Code	SIC Description	Product	OP Type	NESHAPS & MACTs	NSPS	RACT Rules	
SIGMA - ALDRICH MFG LLC	510	0697	2869	INDUSTRIAL ORGANIC CHEMICALS, NEC (EXCEPT ALIPHATICS, CARBON BISULFIDE, ETHYL ALCOHOL, CYCLOPROPANE, DIETHYLCYCLOHEXANE, NAPHTHALENE SULFONIC ACID, SYNTHETIC HYDRAULIC FLUIDS, AND FLUOROCARBON GASES)	BIO-ORGANIC CHEMICALS	P70	GGG	Dc	5.030, 5.350, 5.540
SIGMA - ALDRICH MFG LLC	510	1396	2869	INDUSTRIAL ORGANIC CHEMICALS, NEC (EXCEPT ALIPHATICS, CARBON BISULFIDE, ETHYL ALCOHOL, CYCLOPROPANE, DIETHYLCYCLOHEXANE, NAPHTHALENE SULFONIC ACID, SYNTHETIC HYDRAULIC FLUIDS, AND FLUOROCARBON GASES)	BIOLOGICAL & BIO-ORG CHEMICALS/BUFFERS	P70	GGG	Dc	5.030, 5.350, 5.540
SOLUTIA INC - QUEENY PLANT	510	0023	2869	Chemicals and Chemical Preparations, NEC (table salt)	Organic Chemical Manufacture	P70			Pending Permit Review
SOUTHWESTERN BELL TELEPHONE COMPANY	510	2545	4813	TELEPHONE COMMUNICATIONS, EXCEPT RADIOTELEPHONE (EXCEPT RESELLERS)	TELECOMMUNICATIONS	P70	M	Kb	5.040, 5.300
SPORLAN VALVE DIVISION	071	0178	3494	Valves and Pipe Fittings, NEC (except metal pipe hangers and supports)	VALVES	P70	T		5.300
SPORLAN VALVE DIVISION	071	0132	3491	Industrial Valves	VALVES	P70	M		5.040, 5.300, 5.330
ST. JOSEPH HEALTH CENTER	183	0019	8062		HEALTH CARE	INT	M		5.030, 5.040, 5.070, 5.120
ST. LOUIS METALLIZING COMPNAY	510	0175	3479	COATING, ENGRAVING, AND ALLIED SERVICES, NEC (EXCEPT JEWELRY, SILVERWARE, AND FLATWARE ENGRAVING AND ETCHING)	METALLIZING	P70	T		5.030, 5.300
STEELWELD EQUIPMENT - ST. CLAIR	071	0020	3713		TRUCK BODIES	INT			5.330

Table F – RACT, NESHAP, & NSPS Regulations Applicable to Major Sources in St. Louis Nonattainment Area

Facility	FIP	Plant	SIC Code	SIC Description	Product	OP Type	NESHAPS & MACTs	NSPS	RACT Rules
STERLING PROPERTIES	510	2378	4911	Electric Services (fossil fuel power generation)	ELECTRICITY (FOR OFFICE BUILDING)	P70			5.030, 5.300
SUPERIOR HOME PRODUCTS INC	183	0131	3089	Plastics Products, NEC (plastics sausage casings)	CULTURED MARBLE	P70			5.040
THERMO SCIENCE INC - FENTON	189	1147	2899	Chemicals and Chemical Preparations, NEC (table salt)	FIRE RETARDANT COATING	P70			Pending Permit Review
TRIGEN-ST. LOUIS ENERGY CORP	510	0038	4961	STEAM AND AIR-CONDITIONING SUPPLY	DISTRICT HEATING - STEAM	P70		Db, GG	5.030, 5.510
TRILLA ST. LOUIS CORPORATION	189	0226	3412	Metal Shipping Barrels, Drums, Kegs, and Pails	55 GALLON BARRELS	P70	M		5.040, 5.330, 5.450
U. S. RINGBINDER CORP	510	1123	2782	Blankbooks, Looseleaf Binders and Devices (checkbooks)	NOTEBOOKS	P70	A, T		5.030, 5.300
UNION PACIFIC RAILROAD CO	099	0011	3743	RAILROAD EQUIPMENT (EXCEPT LOCOMOTIVE FUEL LUBRICATING OR COOLING MEDIUM PUMPS)	RAIL CARS	P70	M		5.030, 5.070, 5.220, 5.330
WASHINGTON UNIV MED SCHOOL - BOILER PLANT	510	0040	8062		HEALTH CARE	P70		Dc	5.030, 5.300, 5.510
WASHINGTON UNIVERSITY	189	0042	8221		EDUCATION	INT		Dc	5.030, 5.300, 5.510
WOODBIDGE CORPORATION	183	0129	3086	PLASTICS FOAM PRODUCTS (POLYSTYRENE FOAM PRODUCTS)	FOAM SEATS	INT			5.030, 5.300