NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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NOV 10 2017

Peter D. Lopez
Regional Administrator
U.S. Environmental Protection Agency, Region 2
290 Broadway, 26th Floor
New York, NY 10007-1866

Dear Administrator Lopez:

DEC is submitting two documents for approval into the New York State Implementation Plan (SIP) for the 2008 ozone National Ambient Air Quality Standards (NAAQS). The New York-Northern New Jersey-Long Island, NY-NJ-CT area (hereafter the New York metropolitan area, or NYMA) was reclassified to moderate nonattainment for the 2008 NAAQS on May 4, 2016; DEC was therefore statutorily required to submit an attainment demonstration and a Reasonably Available Control Technology (RACT) demonstration to EPA as SIP revisions.

First, the enclosed attainment demonstration, being submitted pursuant to Clean Air Act (CAA) section 182(b), establishes that the NYMA is unable to reach attainment of the 2008 NAAQS by the statutory deadline of July 20, 2018. DEC is requesting that EPA issue an expeditious reclassification to serious nonattainment so New York, New Jersey, and Connecticut have adequate time to develop complete SIPs that forecast attainment in the NYMA by the serious area deadline of July 20, 2021.

This attainment demonstration includes complete 2011 baseline and 2017 projection inventories, and determines that the area is meeting the three-percent-per-year reasonable further progress requirements. DEC also certifies that certain previously-approved CAA requirements for ozone nonattainment areas remain adequate, and that no revisions to the state plan are necessary for these previously-approved requirements. Specifically, DEC certifies that the emission inventory, emission statement, vehicle inspection and maintenance, nonattainment new source review, and RACT requirements are up-to-date and valid for the 2008 ozone NAAQS.

Second, DEC is submitting a RACT demonstration pursuant to CAA section 172(c)(1) that confirms the New York portion of the NYMA is meeting the requirements for RACT in a moderate nonattainment area. Subject sources within the nonattainment area are controlled by standards that, at a minimum, meet RACT.

The proposed SIP revisions underwent a public review period. A Notice of Public Hearing was published in DEC's Environmental Notice Bulletin on July 19, 2017. A public hearing was held in Long Island City on August 21, 2017, and DEC accepted written comments through August 28, 2017. Comments were received from EPA

Region 2 and the Connecticut Department of Energy & Environmental Protection. Note that no changes were made to either document as a result of comments received.

The following documents are enclosed:

1. Attainment demonstration for the moderate NYMA nonattainment area;
2. RACT demonstration for the moderate NYMA nonattainment area;
3. Notice of Public Hearing as published in the July 19, 2017 ENB;
4. Hearing Report for the public hearing held in Long Island City on August 21, 2017;
5. Official transcript of the August 21, 2017 public hearing; and,
6. Assessment of Public Comments

Please contact Mr. Robert Bielawa or Mr. Scott Wajda-Griffin at 518-402-8396 if you have any questions.

Sincerely,

J. Jared Snyder
Deputy Commissioner
Office of Air Resources, Climate Change and Energy

Enclosures

c: R. Ruvo, EPA
R. Bielawa
S. Wajda-Griffin

NEW YORK
STATE OF
OPPORTUNITY.

Department of
Environmental
Conservation

NEW YORK
STATE IMPLEMENTATION PLAN
FOR THE 2008 OZONE
NATIONAL AMBIENT AIR QUALITY STANDARDS

REASONABLY AVAILABLE CONTROL TECHNOLOGY DEMONSTRATION FOR THE NEW YORK METROPOLITAN AREA MODERATE NONATTAINMENT AREA

Final Proposed Revision

November 2017

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Bureau of Air Quality Planning

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Acronyms and Abbreviations

ACT	Alternative Control Techniques
AEL	Alternate Emission Limit
BACT	Best Available Control Technology
CAA	Clean Air Act
CTG	Control Techniques Guidelines
DEC	New York State Department of Environmental Conservation
EPA	United States Environmental Protection Agency
FSEL	Facility-Specific Emission Limit
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NAAQS	National Ambient Air Quality Standards
NNSR	Nonattainment New Source Review
NO_x	Oxides of Nitrogen
NYCRR	New York Codes, Rules, and Regulations
NYMA	New York Metropolitan Area
ORVR	On-Board Refueling and Vapor Recovery
OTC	Ozone Transport Commission
OTR	Ozone Transport Region
PPM	Parts per Million
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIP	State Implementation Plan
TPY	Tons per Year
VOC	Volatile Organic Compound

Introduction

On March 12, 2008, the United States Environmental Protection Agency (EPA) revised the primary and secondary National Ambient Air Quality Standards (NAAQS) for ozone to a level of 0.075 parts per million (ppm) over an 8-hour period.[1] One of the key requirements related to the implementation of the 2008 8-hour ozone NAAQS is a revision to the State Implementation Plan (SIP) demonstrating the proper application of Reasonably Available Control Technology (RACT), pursuant to Clean Air Act (CAA) Section 172(c)(1). This SIP revision satisfies this requirement.

RACT is defined as the lowest emissions limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. CAA Section 183 requires EPA to issue (and periodically update as needed) guidance that would help states and sources meet RACT requirements. This includes the development of Control Techniques Guidelines (CTG) and Alternative Control Techniques (ACT) for controlling volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) from stationary sources. CTGs are used to presumptively define VOC RACT while ACTs describe available control technologies and their respective cost effectiveness. A current list of EPA-approved CTGs and ACTs for reducing emissions of ozone precursors can be found at the following webpage: https://www.epa.gov/ozone-pollution/control-techniques-guidelines-and-alternative-control-techniques-documents-reducing

CAA Sections 182(b)(2) and 182(f) require ozone nonattainment areas classified as moderate and above to adopt RACT for sources that are subject to CTGs, and for non-CTG major sources of VOCs and NO_x. CAA Section 184 further requires states such as New York that reside in the Ozone Transport Region (OTR) to implement RACT with respect to all sources covered by CTGs.

RACT for the 2008 8-Hour Ozone NAAQS

DEC submitted a RACT SIP for the entire state of New York on December 22, 2014 because it is located within the Ozone Transport Region (OTR) and therefore was required to demonstrate that current statewide regulations fulfill 2008 ozone NAAQS RACT requirements for all CTG categories and all major non-CTG sources. Now, a RACT SIP is required for the New York-Northern New Jersey-Long Island, NY-NJ-CT nonattainment area (hereafter known as the New York metropolitan area or NYMA) because it was reclassified from marginal to moderate nonattainment in 2016.[2] The New York portion of the tri-state NYMA is comprised of Bronx, Kings, Nassau, New

[1] "National Ambient Air Quality Standards for Ozone." Final Rule. Published March 27, 2008; effective May 27, 2008. 60 FR 16436-16514.

2 "Determination of Attainment by the Attainment Date, Extension of the Attainment Date, and Reclassification of Several Areas for the 2008 Ozone National Ambient Air Quality Standards." Final Rule. Published May 4, 2016; effective June 3, 2016. 81 FR 26697-26722.

York, Queens, Richmond, Rockland, Suffolk, and Westchester Counties. DEC utilized the final implementation rule for the 2008 ozone NAAQS, as well as previous EPA guidance, in the development of this RACT SIP.[3]

The required RACT demonstration must contain adopted RACT regulations, certifications (where appropriate) that existing provisions represent RACT, and/or negative declarations that there are no sources in the state covered by a specific CTG source category. Absent data indicating that the previous RACT demonstration is no longer appropriate, the state need not submit a new RACT requirement for these sources in its SIP. In such cases, the state should submit a certification as part of its SIP revision—with appropriate supporting information such as consideration of new data—that these sources are already subject to SIP-approved requirements that still meet the RACT obligation.

An 8-hour ozone RACT determination is required for major stationary sources that have the potential to emit (PTE) 100 tons per year (tpy) or more of NO_x or 50 tpy or more of VOC within a moderate nonattainment area or the OTR. The NYMA (as well as the Lower Orange County metropolitan area) has previously been classified as severe under the 1-hour ozone NAAQS and, due to the anti-backsliding provisions of the CAA, must continue to utilize the more stringent PTE thresholds of 25 tpy of NO_x or VOC to satisfy RACT.

RACT SIP Certification for the NYMA

As mentioned above, DEC evaluated its existing RACT regulations in a December 22, 2014 submission and determined that they constitute RACT on a statewide basis for the 2008 8-hour ozone NAAQS. These regulations are consistent with the CTGs and ACTs that have been issued by EPA to date. A number of New York's RACT regulations have been updated within the last few years, relying on guidance and best emissions control technology data to establish control requirements. RACT determinations made on a source-specific basis are consistent with the latest emission control technology and follow the cost thresholds – established in 1994 and continuously adjusted to account for inflation – to determine what constitutes technically and economically feasible controls. To date, EPA has not taken action on the statewide RACT SIP submitted on December 22, 2014.

This updated RACT analysis for the NYMA moderate nonattainment area supports the primary findings of the 2014 statewide submission: namely, that New York State (and, therein, the NYMA) has fulfilled its CAA obligations for RACT. One exception is for the industrial cleaning solvents CTG issued by EPA in September 2006, for which DEC has initiated a rulemaking process to include those requirements in Title 6 of the New York Codes, Rules, and Regulations (NYCRR) Part 226. In addition, EPA finalized its CTG

[3] "Implementation of the 2008 National Ambient Air Quality Standards for Ozone; State Implementation Plan Requirements." Published March 6, 2015; effective April 6, 2015. 80 FR 12264-12319.

for the oil and natural gas industry (EPA-453/B-16-001) on October 20, 2016. DEC hereby commits to adopting this CTG via a new regulation in a timely manner.

In this review DEC notes that many of EPA's CTG and ACTs have not been evaluated or updated in over 20 years. CAA section 183(b) requires that EPA periodically review and update CTGs. EPA must continue to evaluate and update these documents so that reasonable controls are applied on ozone precursor-emitting sources.

Identification of RACT Sources and Applicable DEC Regulations

Appendix A contains a complete list of CTGs and ACTs issued by EPA, along with the corresponding DEC regulations that cover existing sources subject to RACT in New York State, including the NYMA. RACT compliance for major non-CTG sources is regulated by the provisions in 6 NYCRR Part 212, "General Process Emission Sources."

Many of DEC's RACT regulations were updated for the 1997 8-hour ozone NAAQS. The "state effective date" column of Appendix A refers to the last regulatory revision that was related to the associated CTG. (For example, Part 205 was revised in June 2007, though this revision did not affect the traffic marking coatings emission limit that was established in November, 2003 in response to the CTG. This is also the reason there are multiple effective dates associated with Part 228.)

DEC has reviewed the CTG/ACT categories for which a negative declaration had previously been claimed and provides its updated findings in the next section.

DEC certifies that the following current regulations constitute RACT for the 2008 8-hour ozone NAAQS for the moderate NYMA nonattainment area because they incorporate the most up-to-date pollution control technologies and economic considerations.

NO_x RACT Regulations

- Subpart 212-3, "Reasonably Available Control Technology for Major Facilities"
- Subpart 212-4, "Control of Nitrogen Oxides for Hot Mix Asphalt Production Plants"
- Part 214, "Byproduct Coke Oven Batteries"
- Part 216, "Iron and/or Steel Processes"
- Subpart 220-1, "Portland Cement Plants"
- Subpart 220-2, "Glass Plants"
- Subpart 227-2, "Reasonably Available Control Technology (RACT) for Major Facilities of Oxides of Nitrogen (NO_x)"

VOC RACT Regulations

- Subpart 212-3, "Reasonably Available Control Technology for Major Facilities"
- Part 226, "Solvent Metal Cleaning Processes"
- Part 228, "Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers"

- Part 229, “Petroleum and Volatile Organic Liquid Storage and Transfer”
- Part 230, “Gasoline Dispensing Sites and Transport Vehicles”
- Part 233, “Pharmaceutical and Cosmetic Manufacturing Processes”
- Part 234, “Graphic Arts”

Other DEC regulations control certain sources to a greater degree than RACT. New major facilities or modifications to existing major or minor sources in New York State are subject to the provisions of 6 NYCRR Part 231, “New Source Review for New and Modified Facilities.” Because New York State is located entirely in the OTR, Nonattainment New Source Review (NNSR) applies statewide for ozone precursor pollutants (VOC and NO_x) regardless of the area’s designation status. Major-source pollutant thresholds are lower in the NYMA, however, due to the area’s former severe classification under the 1-hour ozone NAAQS: 25 tons per year for VOC or NOx, as opposed to 50 or 100 tons, respectively, throughout the rest of the state. The NYMA also has a lower significant source project threshold and significant net emission increase threshold, as well as a more stringent offset ratio for both precursors.

NNSR requires the application of Lowest Achievable Emission Rate (LAER), which is more stringent than RACT. As both a criteria pollutant and a precursor to ozone, NO_x sources are subject to a dual review under the Prevention of Significant Deterioration (PSD) and NNSR control programs. PSD requires a review of Best Available Control Technology (BACT) which is also more stringent than RACT, though less stringent than LAER.

New York also relies upon federal rules such as the National Emission Standards for Hazardous Air Pollutants (NESHAPs) regulated under CAA Section 112. NESHAPs establish Maximum Achievable Control Technology (MACT), which may be more stringent than RACT, to control hazardous air pollutants. These federal requirements are incorporated by reference into 6 NYCRR Part 200, “General Provisions.”

Negative Declaration

DEC is certifying that no sources are located in New York State (and therefore the NYMA) for six CTGs. This certification results from a review of the emission inventory and emission statements. The CTGs for which the negative declaration is applicable are listed in the following table.

CTG or ACT Category	Existing Sources?	Conclusion
Control of Volatile Organic Emissions from Manufacture of Vegetable Oils, EPA-450/2-78-035, June 1978 (Group II)	No	Negative declaration confirmed
Control of Volatile Organic Compound Emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins, EPA-450/3-83-008, Nov. 1983 (Group III)	No	No sources identified, though CTG requirements covered by 6 NYCRR Part 236
Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants, EPA-450/2-83-007, Dec. 1983 (Group III)	No	Negative declaration confirmed
Control of Volatile Organic Compound Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry, EPA-450/3-84-015, Dec. 1984 (Group III)	No	Negative declaration confirmed
Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials, EPA-453/R-08-004, Sept. 2008	No	Negative declaration confirmed; EPA recognized in 79 FR 12082
Control of Volatile Organic Compound Emissions from the Application of Agricultural Pesticides, EPA-453/R-92-011, March 1993	No	Negative declaration confirmed; DEC does not have authority to regulate application of agricultural. pesticides

Oil and Natural Gas CTG

The oil and natural gas CTG, issued on October 20, 2016 (effective October 27, 2016), is the first new CTG issued by EPA since September 2008. This CTG applies to onshore oil production, natural gas production, natural gas processing, and natural gas transmission and storage, and makes RACT recommendations that impact storage vessels, compressors, and equipment leaks from natural gas processing plants. It also makes RACT recommendations for some pneumatic devices at natural gas plants, but there are no operating gas plants in New York State at this time. The following table summarizes some of the recommended RACT emission limits or measures from the final CTG.

Emission Source	RACT Recommendation
Storage Vessels	95% Reduction from vessels with PTE > 6 tpy
Pneumatic Controllers	Zero at NG plants, < 6 std cubic feet per hr elsewhere
Pneumatic Pumps	Zero at NG plants, 95% reduction (if existing control) elsewhere
Reciprocating Compressors	Replace rod packing by 26,000 hrs/36 months or route emissions under a closed negative pressure system
Centrifugal Compressors	Wet seal 95% reduction or switch to dry seal
Equipment Leaks	Optical Gas Imaging at processing plants

DEC plans to adopt and implement the recently-finalized CTG in a timely manner, and will ensure that the statewide inventory for any subject equipment is up-to-date and accurate. Currently, DEC estimates that there are 66 compressors statewide, with 5 located in the NYMA.

Source-Specific RACT Determinations

In instances where a facility is unable to meet the relevant presumptive RACT emission limit due to technical or economic infeasibility, an alternate emission limit (AEL) – also called a variance – is agreed to by DEC and the facility owner and incorporated into the facility's operating permit. Some DEC regulations (e.g., 6 NYCRR Part 220) do not define presumptive RACT limits due to the uniqueness of each facility; in these cases, each facility performs a complete RACT analysis from which a facility-specific emission limit (FSEL) is established. A case-by-case RACT analysis may also be required for sources that are not in a source category covered by an existing state regulation or addressed by a CTG. Pursuant to the CAA, source-specific RACT determinations that are made part of a facility's operating permit must be approved by EPA as revisions to the New York SIP.

DEC's DAR-20 guidance, titled "Economic and Technical Analysis for Reasonably Available Control Technology (RACT)," provides procedures for conducting the economic and technical feasibility analysis used to evaluate requests for source-specific RACT emission limits. This guidance also states that such determinations must be re-evaluated upon renewal of the emission source owner's permit. A re-evaluation must contain the latest control technologies and strategies available, and account for an inflation-adjusted economic threshold.

DEC has periodically submitted "bundles" of source-specific RACT determinations to EPA for approval into the SIP. A list of single-source RACT determinations that have been submitted to EPA and which are pending approval as SIP revisions is included as Appendix B. DEC monitors the AELs and FSELs incorporated in Air State Facility and Title V permits, and will continue to submit these source-specific RACT determinations to EPA as needed.

Conclusion

DEC certifies that the RACT requirements for the 2008 8-hour ozone NAAQS for the NYMA moderate nonattainment area have been satisfied and are consistent with the most recent emissions control technology and economic considerations. DEC also certifies that all CTG sources, major non-CTG sources, and sources subject to source-specific RACT are controlled by RACT or better standards with two exceptions. Sources subject to the industrial cleaning solvents CTG will be regulated through a revision to 6 NYCRR Part 226, and sources covered by the recently released oil and natural gas CTG will be regulated through a new rule that is not yet determined.

Appendix A:

Control Techniques Guidelines and Alternative Control Techniques Documents

RACT Source Categories	6 NYCRR Part	6 NYCRR Title	State Effective Date	EPA Approval Effective Date	FR Citation (Pub. Date)
CTG Documents: Pre-1990 (Groups I, II, and III)					
1. Design Criteria for State I Vapor Control Systems - Service Stations, Nov. 1975 (Group I)	230	Gasoline Dispensing Sites and Transport Vehicles	9/22/1994	6/29/1998	63 FR 23665 (4/30/1998)
2. Control of Volatile Organic Emissions from Existing Stationary Sources, Volume I: Control Methods for Surface Coating Operations, EPA-450/2-76-028, Nov. 1976 (Group I)	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
3. 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, May 1977 (Group I)	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
4. Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds, EPA-450/2-77-025, Oct. 1977 (Group I)	223	Petroleum Refineries	8/9/1984	9/17/1985	50 FR 29381 (7/19/1985)
5. Control of Volatile Organic Emissions from Solvent Metal Cleaning, EPA-450/2-77-022, Nov. 1977 (Group I)	226	Solvent Metal Cleaning Processes	5/7/2003	2/23/2004	69 FR 3237 (1/23/2004)
6. Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals, EPA-450/2-77-026, Dec. 1977. (Group I)	229	Petroleum and Volatile Organic Liquid Storage and Transfer	4/4/1993	1/22/1998	62 FR 67004 (12/23/1997)
7. Control of Volatile Organic Emissions from Existing Stationary Sources, Volume III: Surface Coating of Metal Furniture, EPA-450/2-77-032, Dec. 1977 (Group I)	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
8. Control of Volatile Organic Emissions from Existing Stationary Sources, Volume IV: Surface Coating of Insulation of Magnet Wire, EPA-450/2-77-033, Dec. 1977 (Group I)	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
9. Control of Volatile Organic Emissions from Existing Stationary Sources, Volume V: Surface Coating of Large Appliances, EPA-450/2-77-034, Dec. 1977 (Group I)	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
10. Control of Volatile Organic Emissions from Bulk Gasoline Plants, EPA-450/2-77-035, Dec. 1977 (Group I)	229	Petroleum and Volatile Organic Liquid Storage and Transfer	4/4/1993	1/22/1998	62 FR 67004 (12/23/1997)
11. Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed Roof Tanks, EPA-450/2-77-036, Dec. 1977 (Group I)	229	Petroleum and Volatile Organic Liquid Storage and Transfer	4/4/1993	1/22/1998	62 FR 67004 (12/23/1997)
12. Control of Volatile Organic Compounds from Use of Cutback Asphalt, EPA-450/2-77-037, Dec. 1977 (Group I)	241	Asphalt Pavement and Asphalt Based Surface Coating	1/1/2011	4/9/2012	77 FR 13974 (3/8/2012)
13. Control Techniques for Volatile Organic Emissions from Stationary Sources, EPA-450/2-78-022, May 1978 (Group II)	N/A	Guidance			
14. Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VI: Surface Coating of Miscellaneous Metal Parts and Products, EPA-450/2-78-015, June 1978 (Group II)	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)

RACT Source Categories	6 NYCRR Part	6 NYCRR Title	State Effective Date	EPA Approval Effective Date	FR Citation (Pub. Date)
15. Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VII: Factory Surface Coating of Flat Wood Paneling, EPA-450/2-78-032 June 1978 (Group II)	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
16. Control of Volatile Organic Emissions from Manufacture of Vegetable Oils, EPA-450/2-78-035, June 1978 (Group II)	-	'No Sources' finding confirmed			
17. Control of Volatile Organic Compound Leaks from Petroleum Refinery Equipment, EPA-450/2-78-036, June 1978 (Group II)	223	Petroleum Refineries	8/9/1984	9/17/1985	50 FR 29381 (7/19/1985)
18. Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products,EPA-450/2-78-029, Dec. 1978 (Group II)	233	Pharmaceutical and Cosmetic Manufacturing Processes	4/4/1993	1/22/1998	62 FR 67004 (12/23/1997)
19. Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires, EPA-450/2-78-030, Dec. 1978 (Group II)	212 / NSPS BBB	General Process Emission Sources	9/22/1994	11/26/2001	66 FR 48957 (9/25/2001)
20. Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VIII: Graphic Arts - Rotogravure and Flexography, EPA-450/2-78-033, Dec. 1978 (Group II)	234	Graphic Arts	7/8/2010	8/23/2010	75 FR 43066 (7/23/2010)
21. Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks, EPA-450-2/78-047, Dec. 1978 (Group II)	229	Petroleum and Volatile Organic Liquid Storage and Transfer	4/4/1993	1/22/1998	62 FR 67004 (12/23/1997)
22. Control of Volatile Organic Emissions from Perchloroethylene Dry Cleaning Systems, EPA-450/2-78-050, Dec. 1978 (Group II)	232	Perchloroethylene Dry Cleaning Facilities	Perchloroethylene exempted as a VOC (61 FR 4588) -- CTG no longer relevant		
23. Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems, EPA-450/2-78-051, Dec. 1978 (Group II)	230	Gasoline Dispensing Sites and Transport Vehicles	9/22/1994	6/29/1998	63 FR 23665 (4/30/1998)
24. Control of Volatile Organic Compound Emissions from Large Petroleum Dry Cleaners, EPA-450/3-82-009, Sept. 1982 (Group III)	212	General Process Emission Sources	9/22/1994	11/26/2001	66 FR 48957 (9/25/2001)
25. Control of Volatile Organic Compound Emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins, EPA-450/3-83-008, Nov. 1983 (Group III)	236	Synthetic Organic Chemical Manufacturing Facility Component Leaks	1/12/1992	8/26/1993	58 FR 40057 (7/27/1993)
26. Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants, EPA-450/2-83-007, Dec. 1983 (Group III)	-	'No Sources' finding (40 CFR 52.1683) confirmed			
27. Control of Volatile Organic Compound Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment, EPA-450/3-83-006, March 1984 (Group III)	236	Synthetic Organic Chemical Manufacturing Facility Component Leaks	1/12/1992	8/26/1993	58 FR 40057 (7/27/1993)
28. Control of Volatile Organic Compound Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry, EPA-450/3-84-015, Dec. 1984 (Group III)	-	'No Sources' finding (40 CFR 52.1683) confirmed			

RACT Source Categories	6 NYCRR Part	6 NYCRR Title	State Effective Date	EPA Approval Effective Date	FR Citation (Pub. Date)
CTG Documents: Post-1990					
1. Control Techniques for Volatile Organic Compound Emissions from Stationary Sources, EPA-453/R-92-018, Dec. 1992	N/A	Guidance			
2. Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations in SOCMI, EPA-450/4-91-031, Nov. 15, 1993	236/212	Synthetic Organic Chemical Manufacturing Facility Component Leaks / General Process Emission Sources	1/12/1992 - 9/22/1994	8/26/1993 - 11/26/2001	58 FR 40057 (7/27/1993) - 66 FR 48957 (9/25/2001)
3. Control of Volatile Organic Compound Emissions from Offset Lithographic Printing - DRAFT, September 1993.	234	Graphic Arts	See ACT for Offset Lithographic Printing		
4. Beyond Volatile Organic Compound-Reasonably Available Control Technology-Control Technology Guidelines Requirements, EPA-453/R-95-010, April 1995	N/A	Guidance			
5. Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations, EPA-453/R-96-007, April 1996	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	6/5/2013	4/3/2014	79 FR 12082 (3/4/2014)
6. Control Techniques Guidelines for Shipbuilding and Ship Repair Operations (Surface Coating) - Aug. 1996 (61 FR 44050), Aug. 27, 1996	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
7. Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations, EPA-453/R-97-004, Dec. 1997	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
8. Control Techniques Guidelines for Industrial Cleaning Solvents, EPA-453/R-06-001, Sept. 2006	-	Existing sources to be addressed via Part 226 revision			
9. Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, EPA-453/R-06-002, Sept. 2006	234	Graphic Arts	7/8/2010	4/9/2012	77 FR 13974 (3/8/2012)
10. Control Techniques Guidelines for Flexible Package Printing, EPA-453/R-06-003, Sept. 2006	234	Graphic Arts	7/8/2010	4/9/2012	77 FR 13974 (3/8/2012)
11. Control Techniques Guidelines for Flat Wood Paneling Coatings, EPA-453/R-06-004, Sept. 2006	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	6/5/2013	4/3/2014	79 FR 12082 (3/4/2014)
12. Control Techniques Guidelines for Paper, Film, and Foil Coatings, EPA-453/R-07-003, Sept. 2007	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	6/5/2013	4/3/2014	79 FR 12082 (3/4/2014)
13. Control Techniques Guidelines for Large Appliance Coatings, EPA-453/R-07-004, Sept. 2007	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	6/5/2013	4/3/2014	79 FR 12082 (3/4/2014)
14. Control Techniques Guidelines for Metal Furniture Coatings, EPA-453/R-07-005, Sept. 2007	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	6/5/2013	4/3/2014	79 FR 12082 (3/4/2014)

RACT Source Categories	6 NYCRR Part	6 NYCRR Title	State Effective Date	EPA Approval Effective Date	FR Citation (Pub. Date)
15. Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, EPA-453/R-08-003, Sept. 2008	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	6/5/2013	4/3/2014	79 FR 12082 (3/4/2014)
16. Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials, EPA-453/R-08-004, Sept. 2008	-	No Sources	-	4/3/2014	79 FR 12082 (3/4/2014)
17. Control Techniques Guidelines for Miscellaneous Industrial Adhesives, EPA-453/R-08-005, Sept. 2008	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	9/30/2010	4/9/2012	77 FR 13974 (3/8/2012)
18. Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings, EPA-453/R-08-006, Sept. 2008	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	6/5/2013	4/3/2014	79 FR 12082 (3/4/2014)
19. Control Techniques Guidelines for the Oil and Natural Gas Industry, EPA-453/B-16-001, Oct. 2016	-	Existing sources to be addressed via regulatory revision/adoption			
ACT Documents for VOCs: Pre-1990					
1. Control Techniques for Organic Emissions from Plywood Veneer Dryers, EPA-450/3-83-012, May 1983	212/228	General Process Emission Sources/ Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	9/22/1994 - 8/23/2003	11/26/2001 - 2/23/2004	66 FR 48957 (9/25/2001) - 69 FR 3237 (1/23/2004)
2. Reduction of Volatile Organic Compound Emissions from the Application of Traffic Markings, EPA-450/3-88-007, Aug. 1988	205	Architectural and Industrial Maintenance (AIM) Coatings	11/22/2003	1/12/2005	69 FR 72118 (12/13/2004)
3. Reduction of Volatile Organic Compound Emissions from Automobile Refinishing, EPA-450/3-88-009, Oct. 1988	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
4. Alternative Control Technology Document - Ethylene Oxide Sterilization/Fumigation Operations, EPA-450/3-89-007, March 1989	212	General Process Emission Sources	9/22/1994	11/26/2001	66 FR 48957 (9/25/2001)
5. Alternative Control Technology Document - Halogenated Solvent Cleaners, EPA-450/3-89-030, Aug. 1989	226	Solvent Metal Cleaning Processes	5/7/2003	2/23/2004	69 FR 3237 (1/23/2004)
ACT Documents for VOCs: Post-1990					
1. Alternative Control Technology Document: Organic Waste Process Vents, EPA-450/3-91-007, Dec. 1990	212	General Process Emission Sources	9/22/1994	11/26/2001	66 FR 48957 (9/25/2001)
2. Control of VOC Emissions from Polystyrene Foam Manufacturing, EPA-450/3-90-020, Sept. 1990	212	General Process Emission Sources	9/22/1994	11/26/2001	66 FR 48957 (9/25/2001)
3. Alternative Control Technology Document: Bakery Ovens, EPA-453/R-92-017, Dec. 1992	212	General Process Emission Sources (+ Air Guide 31 - DEC Implementation Guidance)	9/22/1994	11/26/2001	66 FR 48957 (9/25/2001)

RACT Source Categories	6 NYCRR Part	6 NYCRR Title	State Effective Date	EPA Approval Effective Date	FR Citation (Pub. Date)
4. Control of Volatile Organic Compound Emissions from the Application of Agricultural Pesticides, EPA-453/R-92-011, March 1993	-	'No Sources' finding confirmed; DEC does not have authority to regulate application of agricultural pesticides			
5. Control of Volatile Organic Compound Emissions from Batch Processes, EPA-453/R-93-017, Feb. 1994	236/212	Synthetic Organic Chemical Manufacturing Facility Component Leaks / General Process Emission Sources	1/12/1992 - 9/22/1994	8/26/1993 - 11/26/2001	58 FR 40057 (7/27/1993) - 66 FR 48957 (9/25/2001)
6. Volatile Organic Liquids Storage in Floating and Fixed Roof Tanks, EPA-453/R-94-001, Feb. 1994	229	Petroleum and Volatile Organic Liquid Storage and Transfer	4/4/1993	1/22/1998	62 FR 67004 (12/23/1997)
7. Alternative Control Techniques Document: Industrial Cleaning Solvents, EPA-453/R-94-015, Feb. 1994	226	Solvent Metal Cleaning Processes	5/7/2003	2/23/2004	69 FR 3237 (1/23/2004)
8. Alternative Control Techniques Document: Surface Coating of Automotive/Transportation and Business Machine Plastic Parts, EPA-453/R-94-017, Feb. 1994	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
9. Alternative Control Techniques Document: Automobile Refinishing, EPA-453/R-94-031, April 1994	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
10. Alternative Control Techniques Document: Surface Coating Operations at Shipbuilding and Ship Repair Facilities, EPA-453/R-94-032, April 1994	228	Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	8/23/2003	2/23/2004	69 FR 3237 (1/23/2004)
11. Alternative Control Techniques Document: Air Emissions from Industrial Wastewater, April 1994 [no report ID]	212 / NESHAP subpart G	General Process Emission Sources	9/22/1994	11/26/2001	66 FR 48957 (9/25/2001)
12. Alternative Control Techniques Document: Offset Lithographic Printing, EPA-453/R-94-054, June 1994	234	Graphic Arts	7/8/2010	4/9/2012	77 FR 13974 (3/8/2012)
ACT Documents for NOx					
1. NO_x Emissions from Iron & Steel Mills, EPA-453/R-94-065, Sept. 1994	214	By-Product Coke Oven Batteries	9/22/1994	8/21/2006	71 FR 41162 (7/20/2006)
2. NOx Emissions from Industrial/Commercial/Institutional (ICI) Boilers, EPA-453/R-94-022, March 1994	227-2	Reasonably Available Control Technology (RACT) for Major Facilities of Oxides of Nitrogen	7/8/2010	8/12/2013	78 FR 41846 (7/12/2013)
3. NOx Emissions from Glass Manufacturing, EPA-453/R-94-037, June 1994	220-2	Glass Plants	7/11/2010	8/12/2013 (Conditional)	78 FR 41846 (7/12/2013)
4. Internal Combustion NOx Part 1 & 2, EPA-453/R-93-032, July 1993/Updated Sept. 2000	227-2	Reasonably Available Control Technology (RACT) for Major Facilities of Oxides of Nitrogen	7/8/2010	8/12/2013	78 FR 41846 (7/12/2013)
5. NOx Emissions from Process Heater (Revised) EPA-453/R-93-034, Sept. 1993	227-2	Reasonably Available Control Technology (RACT) for Major Facilities of Oxides of Nitrogen	7/8/2010	8/12/2013	78 FR 41846 (7/12/2013)

RACT Source Categories	6 NYCRR Part	6 NYCRR Title	State Effective Date	EPA Approval Effective Date	FR Citation (Pub. Date)
6. NOx Emissions from Stationary Gas Turbine, EPA-453/R-93-007, Jan. 1993	227-2	Reasonably Available Control Technology (RACT) for Major Facilities of Oxides of Nitrogen	7/8/2010	8/12/2013	78 FR 41846 (7/12/2013)
7. NOx Emissions from Utility Boiler, EPA-453/R-94-023, March 1994	227-2	Reasonably Available Control Technology (RACT) for Major Facilities of Oxides of Nitrogen	7/8/2010	8/12/2013	78 FR 41846 (7/12/2013)
8. NOx Emissions from Cement Manufacturing, EPA-453/R-94-004, March 1994 / NOx Control Technologies for the Cement Industry: Final Report, EPA-457/R-00-002, Sept. 2000	220-1	Portland Cement Plants	7/11/2010	8/12/2013 (Conditional)	78 FR 41846 (7/12/2013)
9. NOx Nitric and Adipic Acid Plants, EPA-450/3-91-026, Dec. 1991	224	Sulfuric and Nitric Acid Plants	5/10/1984	9/17/1985	50 FR 29381 (7/19/1985)

Appendix B:

List of Submitted Source-Specific RACT Determinations

Facility, DEC Permit ID, Location	Pollutant	Applicable Reg.	RACT Technology + Limit
Submissions from September 2008			
Entenmann's Bakery 1-4728-01480 Bay Shore, Suffolk Co.	VOC	212.10(c)(4)(iii)	No control due to economic infeasibility; variance for Emission Unit 'U-OVENS' granted.
Gershow Recycling 1-4722-00967 Medford, Suffolk Co.	NOx	227-2.4(f)	No control (other than existing natural gas-fired engines equipped with SNCR) due to economic infeasibility of multiple control systems; 6.0 g/bhp-hr limit on engine.
Art Restoration by Demetrius 2-6205-00053 New York, New York Co.	VOC	228.3(e)	Limits of 4 lb VOC/gal coating and total VOC emissions (fugitive + collected) of 0.02 tpy.
Interstate Brands Corp. 2-6307-00276 Jamaica, Queens Co.	VOC	212.10(c)(4)(iii)	No control due to economic infeasibility of multiple control systems. Total VOC emissions (fugitive + collected) from this oven limited to 23.9 tpy.
Cogen Corporation 2-6101-00381 Brooklyn, Kings Co.	NOx	227-2.5(c)	Limited each of three diesel-fired IC engines (ES 00001, 00002, 00003) to 6.6 g/bhp-hr and to 300-600 kW output. EU 0-00001 capped to 25.5 tpy NOx to support AEL. Aggregate operation time for the three engines limited to 8000 hours per year.
Ametek Rotron Technical Motors Div. 3-5158-00043 Woodstock, Ulster Co.	VOC	228.3(e)	Variance granted for non-compliant coatings. Total VOC emissions from facility, excluding combustion sources, not to exceed 12.5 tons in any 12-month rolling period.
Northeast Solite Corp. 3-5148-00084 Mt. Marion, Ulster Co.	NOx	212.10(c)(3)	Facility is utilizing tangential firing of kilns to minimize NOx emissions.
Norbord Industries 4-1230-00019 Deposit, Delaware Co.	NOx + VOC	212.10(c)(3); 212.10(c)(4)(iii)	NOx: No controls due to economic infeasibility. EU '1-BOILR' (Process B01) limited to 144.5 tpy. EU '1-DRYER' limited to 241.7 tpy. VOC: RACT for EU '1-DRYER' met through LAER, which achieves ~95% destruction and ~2.1 ppm VOC emissions. LAER on EU '1-PRESS' achieves only 56.4% (less than req'd 81% for RACT). This EU limited to 700ºF and 5 ppmvd.
Owens-Corning 4-0122-00004 Feura Bush, Albany Co.	NOx + VOC	212.10(c)(3); 212.10(c)(4)(iii)	No control other than existing oxy-fuel combustion for NOx emissions. The sum of future potential emissions from the EU's in the permit are capped at 54.776 tpy and 220.157 tpy for VOC and NOx, respectively.
Tennessee Gas Pipeline Co. Station 254 4-1026-00037 Chatham, Columbia Co.	NOx	227-2.5(c)	Implementing enhanced mixing on six Worthington UTC-165T engines; limit of 6.0 g/bhp-hr.
Von Roll USA 4-4228-00076 Schenectady, Schenectady Co.	VOC	212.10(c)(4)(iii)	No control due to economic infeasibility of multiple control systems. Emissions limited to 20 tpy VOC.
A. Schonbek & Company 5-0942-00001 Plattsburg, Clinton Co.	VOC	228.3(e)	Use of low-VOC powder coatings & laser cutting of pre-finished stainless steel; Emission Unit O-OEU03 limited to 20 tpy.
C.R. Bard Inc 5-5234-00007 Queensbury, Warren Co.	VOC	228.3(e)	Metal surface coating processes require use of noncompliant coatings; Total usage limited to 5 tpy.
Commonwealth Plywood 5-5352-00007 Whitehall, Washington Co.	VOC	212.10(c)(4)(iii)	No control is considered RACT. Combined VOC emissions from direct + indirect-fired dryers estimated at 58.8 tpy.
Finch Pruyn & Co. 5-5205-00005 Glens Falls, Warren Co.	NOx	227-2.5(c); 212.10(c)(3)	Power Boilers contain low-NOx burners; no further control. Power Boilers (5): 0.45 lb/mmBTU limit. Recovery Boilers (4): 0.55 lb/mmBTU limit. Woodwaste Boiler (1): 0.28 lb/mmBTU limit.

Facility, DEC Permit ID, Location	Pollutant	Applicable Reg.	RACT Technology + Limit
International Paper 5-1548-00008 Ticonderoga, Essex Co.	NOx	212.10(c)(3)	Installed Turbulent Diffusion Technology burner; no additional controls. Limits on lime kiln of 120ppmvw (10% O2) and recovery boiler of 100ppmvd (8% O2).
Lehigh Northeast Cement Company 5-5205-00013 Glens Falls, Warren Co.	NOx	220.6(b)(1)	Undergoing a number of process modifications and efficiency training. Limit on EU '0-UKILN' of 372.7 lb/hr from Consent Order No. D5-0001-97-06.
ALCOA 6-4058-00003 Massena, St. Lawrence Co.	NOx + VOC	212.10(c)(3); 212.10(f)	Permit contains variances for six emission sources: **ES C0030 (Chip Melter #1): Current equipment (nat. gas pre-mix burners) considered RACT for NOx. **ES C0044, ES C0045 (Chip Melter/Dryer #2): Current equipment (low NOx burners, staged air combustion) considered RACT for NOx. **ES M003C, ES M024F (#15, #32 Melting/Holding Furnaces): Current equipment (low NOx burners) considered RACT for NOx. **ES SS078 (Anode Baking Furnace): No control is considered RACT for VOC and NOx.
GM Powertrain 6-4058-00004 Massena, St. Lawrence Co.	VOC	212.10(f)	No control due to economic infeasibility. Emissions from each of three pentane reduction chambers less than the 3.0 lb/hr exemption limit but just over the 15 lb/day exemption limit; each PRC emits approximately 1.8 lb/hr.
Knowlton Specialty Papers 6-2218-00017 Watertown, Jefferson Co.	VOC	212.10(c)(4)(iii)	No control due to economic infeasibility for both resin kitchen and methanol storage tanks. RACT for VOC emissions for Process MIX, which includes resin kitchen, met by maintaining closed vessel lids. This EU limited to 36 tpy VOC overall. VOC emissions from storage tank unit will be limited by restricting the methanol throughput of the tanks to 1250 tpy.
Tennessee Gas Pipeline Co. Station 245 6-2156-00018 West Winfield, Herkimer Co.	NOx	227-2.5(c)	Will meet RACT on Clark TLAD-6 & Ingersoll-Rand PSVG-6 engines. Implementing enhanced mixing on five Worthington UTC-165T engines and one Worthington ML-12 engine; accepting limits of 6.0 g/bhp-hr and 13.3 g/bhp-hr, respectively.
Utica Metal Products 6-3016-00065 Utica, Oneida Co.	VOC	228.3(e)	No control (thermal oxidizer economically infeasible); 9.9 tpy limit.
Cornell University 7-5007-00030 Ithaca, Tompkins Co.	NOx	227-2.5(c)	Boiler #8 RACT is no control; limit of 0.40 lb NOx/mmBTU.
Dominion Transmission - Borger Station 7-5024-00007 Dryden, Tompkins Co.	NOx	227-2.5(c)	Variance on three natural gas-fired stationary combustion turbines. Combined alternate limits of 84 lb/hr and 150 ppmvd. Includes clause to give preferential operation to any new, lower-emitting turbine.

Facility, DEC Permit ID, Location		Pollutant	Applicable Reg.	RACT Technology + Limit
Kodak Operations at Eastman Business Park 8-2614-00205 Rochester, Monroe Co.	EU 1, EP 110C6	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 30.02 tpy.
	EU 12, EP 30-N1, ES 030AW	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 8.0 tpy.
	EU 17, EPs R16-1 + R16-2	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 11.0 tpy.
	EU 20, EP 81-11, ES 081AK	VOC	226.5	Conversion to tape process yields 1.5 tpy limit.
	EU 21, EP 116-1	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 0.14 tpy.
	EU 21, EPs D63-5 + 120A5	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 4.1 tpy for EP 120A5; 0.09 tpy for EP D63-5.
	EU 24, EPs 317-5, 317-7, 317-9, 317W5, 317W3	VOC	212.10(c)(4)(iii)	Implemented a number of minor process revisions on EPs. EPs 317-5, 317-7, 317-9, 317W5: 0.6 tpy combined cap. EP 317W3: 3.1 tpy cap.
	EU 47, EPs 38-10 + 38-16	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 0.47 tpy for EP 38-10; 2.0 tpy for EP 38-16.
	EU 48, EP 148X1	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 25 tpy.
	EU 53, EP 325X3	VOC	212.10(c)(4)(iii)	Improved lilly method, filter press purge reductions. Limit of 105 tpy.
	EU 54, EP 329M3	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 3.11 tpy.
	EU 60, EPs 301-5, 301X1, 301X2, 303A8, 303X1, 303X2, 304-3, 304A0, 304B0, 304X1, 304X2	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 150 tpy.
	EU 63, EP 101-1	NOx	212.10(c)(3)	Existing configuration is RACT. Limit of 25.5 tpy.
	EU 69, EP 35-P4	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 0.34 tpy.
	EU 71, EPs 49-32, 49-63, 49-70, 49-17, 49-04, 49-13, 49-44 (Pro. P73)	VOC	228.3(e)	Existing configuration is RACT. Less restrictive emission limits for each of 11 coatings used in process. Limit of 8.0 tpy overall.
	EU 77, EP 304A8	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 9.03 tpy.
	EU 79, EPs 119J3, 119X1, 119X2, 119X3, 119X4, 119X5, 119X6, 119X8, 119X9, 119KC, 119E5	VOC	212.10(c)(4)(iii)	Improved lilly method and solvent transfers. Limit of 92 tpy.
	EU 80, EP 30-M9, ES 030AV	VOC	212.10(c)(4)(iii)	Existing configuration is RACT. Limit of 9.0 tpy.
	EU 84, EP 308B7	VOC	212.10(f)	Existing configuration is RACT. Limit of 12 tpy.
	EU 85, EPs 59-89, 59-90, 59-91, 59-96, 59-97, 59-98, 59-99 (Pro. S26)	VOC	228.3(e)	Existing configuration is RACT. Combined limit of 1.6 tpy.
	EU 86, EP 319C1	NOx	212.10(c)(4)(iii)	Existing use of natural gas, low-NOx burners on RTO is RACT. Limit of 18.8 tpy.
	EU 86, EP 319X1	VOC	212.10(f)	Existing configuration is RACT. Limit of 2.6 tpy.
	EU 88, EP 308C1 (Process N20)	VOC	228.3(e)	Existing configuration is RACT. Limit of 4.34 tpy.
American Packaging Corporation 8-2614-00117 Rochester, Monroe Co.		VOC	228.3(e); 234.3(f)	No control; 57.4 tpy limit on non-compliant solvent-based inks and overlacquers.
Dominion Transmission - Woodhull Station 8-4682-00006 Woodhull, Steuben Co.		NOx	227-2.4(f)	Alternate schedule requested for meeting RACT emission levels. Facility can only modify two of its six engines at a time; last two engines are scheduled to be modified by late 2008.
US Gypsum Co - Oakfield Plant 8-1838-00007 Oakfield, Genesee Co.		NOx	227-2.5(c)	No control on cogeneration unit; 126.0 tpy limit on total NOx emissions on a rolling 12-month basis. Permit also includes a 186 ppm limit on NOx emissions.
Alstom Power - Air Preheater Company 9-0270-00025 Wellsville, Allegany Co.		VOC	228.3(e)	Variance is for use of non-compliant high-temperature surface coatings. Upper permit limit of 150 gallons per year of non-compliant coatings; maximum VOC content of non-compliant surface coating currently in use is 5.2 lb/gal.
E.I. Dupont Yerkes 9-1464-00031 Tonawanda, Erie Co.		VOC	212.10(c)(4)(iii)	Compliance plan identified 8 EP's with VOC emissions >3.0 lb/hr. RACT is no control. Tedlar SP process limited to 40 tpy.
MRC Bearings 9-0638-00066 Falconer, Chautauqua Co.		VOC	212.10(c)(4)(iii)	No control due to economic infeasibility. Combined emissions from EP135 and EP221 limited to 21 tpy.

Facility, DEC Permit ID, Location	Pollutant	Applicable Reg.	RACT Technology + Limit
Prestolite Electric, Inc. 9-5620-00027 Arcade, Wyoming Co.	VOC	228.3(e)	Variance is for use of non-compliant coatings. Exemption for process SCC.
Tennessee Gas Pipeline Co. Station 229 9-1440-00034 Eden, Erie Co.	NOx	227-2.5(c)	Implementing enhanced mixing on six Worthington UTC-165T engines. Variance limit of 6.0 g/bhp-hr.
Valeo Engine Cooling 9-0699-00056 Jamestown, Chautaugua Co.	VOC	212.10(c)(4)(iii)	No control due to technical & economic infeasibility. Emissions <3 lb/hr and <15 lb/day.
Submissions From August 2010			
Village of Freeport Power Plant 1 1-2820-00357 Freeport, Nassau Co.	NOx	227-2.5(c)	Ignition timing retard installed on engines 10 and 12 to reduce NOx emissions. Total NOx emissions minimized by restricting facility-wide ICE fuel combustion to no more than 250,000 gal of #2 oil per year.
NYC-DEP Owls Head WPCP 2-6102-00005 Brooklyn, Kings Co.	NOx	227-2.5(c)	Engines #1, 2, 3 limited to 6.05 g/bhp-hr when burning 100% diesel fuel. Engines #1, 2, 3 limited to 3.16 g/bhp-hr when burning 95% digester gas/5% diesel oil.
Revere Smelting & Refining Corp 3-3352-00145 Wallkill, Orange Co.	NOx	212.10(c)(3)	Short rotary furnace (EU 1-SRFKD, Process SRF) equipped with low-NOx burners which fire natural gas; replaces ambient air with high-purity oxygen to decrease NOx formation/improve efficiency.
Holcim (US) Inc - Catskill Plant 4-1926-00021 Catskill, Green Co.	NOx	220.6(b)	NOx emission limits of 18 lb/ton of clinker produced over 30-day rolling avg; 1653 lb/hr averaged over 24 hrs for a 30-day rolling avg.
A. Schonbek & Company 5-0942-00001 Plattsburg, Clinton Co.	VOC	228.3(e)	VOC emissions from Emission Unit O-OEU03, which uses non-compliant coatings, limited to 10 tpy as a 12- month rolling sum.
International Paper Ticonderoga Mill 5-1548-00008 Ticonderoga, Essex Co.	NOx	212.10(c)(3)	Limit on recovery boiler of 100ppmvd (8% O2).
Newton Falls Paper Manufacturing Plant 6-4026-00001 Newton Falls, St. Lawrence Co.	VOC	212.10(c)(4)(iii)	No control is RACT for Paper Machines #3 and #4. VOC emissions from Emission Sources PAPM3 and PAPM4 limited to 28.7 tpy and 28.2 tpy, respectively.
Dominion - Borger Station 7-5024-00007 Dryden, Tompkins Co.	NOx	227-2.4(f)	Combined allowable emissions from three turbines lowered from 84 lb/hr to 61 lb/hr.
Kodak Park Division [boilers] 8-2614-00205 Rochester, Monroe Co.	NOx	227-2.4	NOx emissions from each of the Package Boilers 1, 2, 3, and 4 (ES 031AC, 031AD, 031AE, 031AF) shall not exceed 0.57 lb/mmBtu and 56 lb/hr (per compliance plan). Each boiler limited to 200,000 gal #6 oil per year. Specific alternate NOx limits (per compliance plan) as follow: Boiler 41 (ES 031AG): 0.6 lb/mmBtu, 300 lb/hr; Boiler 42 (ES 031AH): 0.6 lb/mmBtu, 300 lb/hr; Boiler 43 (ES 031AI): 0.6 lb/mmBtu, 384 lb/hr.
Pactiv Corp. 8-3224-00108 Canandaigua, Ontario Co.	VOC	212.10(c)(4)(iii)	Foam extruders, thermoforming ops., foam roll storage operate w/ no control as RACT. Required to submit annual evaluation of potential compliance options. Alt. emission limit of 184.9 tpy for each of Processes EX1, RST, and TF1.
3M Tonawanda 9-1464-00164 Tonawanda, Erie Co.	VOC	212.10(c)(4)(iii)	Mother liquor wash table has been modified for greater throughput which results in an increase from 2.8 to 5.0 lb/hr VOC emissions and the need for a variance. RACT is no control.
TAM Ceramics LLC 9-2930-00032 Niagara, Niagara Co.	NOx	212.10(c)(3)	RACT is no control. Four arc furnaces are subject to NOx limits of 15.9 lb/hr/furnace and a combined 210 tpy.

Facility, DEC Permit ID, Location	Pollutant	Applicable Reg.	RACT Technology + Limit
Globe Metallurgical Inc. 9-2911-00078 Niagara Falls, Niagara Co.	NOx	212.10(c)(3)	NOx emissions from electric arc furnace #9 and #11 limited to a combined 175.2 lb/hr and 767.3 tpy.
Metal Cladding Inc 9-2909-00052 Lockport, Niagara Co.	VOC	228.3(e)	Of the various coatings used at the facility, sixteen are non-compliant with five eligible for low-use exemption. Variance request due to economic infeasibility. VOC emissions from all surface coating operations are limited to 48 tpy.
Submissions from December 2013			
Lafarge Building Materials, Inc. 4-0124-00001 Ravena, Albany Co.	NOx	220-1	Operation of SNCR on Kilns 1 + 2. NOx limit on each kiln of 5.2 lb per ton of clinker on 30-day rolling avg. Overall 3,750 tpy NOx cap.
Lehigh Northeast Cement Company 5-5205-00013 Glens Falls, Warren Co.	NOx	220-1	Operation of SNCR. NOx limit of 2.88 lb per ton of clinker on 30-day rolling avg.
Owens-Corning Insulating Systems 4-0122-00004 Delmar, Albany Co.	NOx	220-2	Oxy-fuel firing technology on DM-1 + DM-2 melting furnaces represents RACT. NOx limit on each furnace of 4.0 lb NOx per ton of glass pulled on block 24-hr basis. Limit to be refined following 12 months of CEMS recording.
Owens-Brockway Glass Container Inc. 7-0552-00004 Sennett, Cayuga Co.	NOx	220-2	Installation of air staging system on melting furnaces A + B. NOx limit on each furnace of 4.0 lb per ton of glass produced on 30-day rolling avg. Idle mode limits of 50 lb/hr on furnace A and 40 lb/hr on furnace B on 3-hour rolling avg.
Ardagh Glass Inc. 8-0704-00036 Elmira, Chemung Co.	NOx	220-2	(f.k.a. Anchor Glass Container Corp.) Air staging technology and optimized combustion controls on furnaces 1 + 2. NOx limits of 4.49 and 5.00 lb per ton of glass produced for furnaces 1 + 2, respectively.
Guardian Geneva Float Glass Facility 8-3205-00041 Geneva, Ontario Co.	NOx	220-2	Current configuration with Low NOx burners, oxy-firing, and/or Type 1 or 2 3R control. NOx limit of 199 pounds per hour (6.8 pounds per ton) on 30-day rolling avg. RACT to be re-evaluated during cold tank repair (by 3/31/16).
Submission from August 2015			
Rockville Centre Power Plant 1-2820-00753 Rockville Centre, Nassau Co.	NOx	227-2.5(c)	Various permitted operating times, and designation of units 7, 8, 12 as emergency generators. Systemwide avg. emission rate limit of 6.2 g/bhp-hr.

Appendix C:

EPA-Approved New York State Regulations and Laws
as of May 19, 2017
(40 CFR Part 52.1670(c))

New York State Regulation	State Effective Date	Latest EPA Approval Date	Comments
Title 6:			
Part 200, General Provisions, Section 200.1	10/15/11	12/27/16, 81 FR 95049	The word odor is removed from the Subpart 200.1(d) definition of "air contaminant or air pollutant."
			Redesignation of non-attainment areas to attainment areas (200.1(av)) does not relieve a source from compliance with previously applicable requirements as per letter of Nov. 13, 1981 from H. Hovey, NYSDEC.
			Changes in definitions are acceptable to EPA unless a previously approved definition is necessary for implementation of an existing SIP regulation.
			EPA is including the definition of "Federally enforceable" with the understanding that (1) the definition applies to provisions of a Title V permit that are correctly identified as Federally enforceable, and (2) a source accepts operating limits and conditions to lower its potential to emit to become a minor source, not to "avoid" applicable requirements.
			EPA is approving incorporation by reference of those documents that are not already federally enforceable.
Sections 200.6 and 200.7	2/25/00	4/22/08, 73 FR 21548.	
Section 200.9	10/15/11	12/27/16, 81 FR 95049	EPA is approving reference documents that are not already Federally enforceable.
Part 201, Permits and Certificates	4/4/93	10/3/05, 70 FR 57511	This action removes subpart 201.5(e) from the State's Federally approved SIP.
Subpart 201-2.1(b)(21), Definitions	10/15/11	12/27/16, 81 FR 95049	EPA is including the definition of "Major stationary source or major source or major facility" with the understanding that the definition applies only to provisions of part 231.
Subpart 201-7.1, General	7/7/96	10/3/05, 70 FR 57511	
Subpart 201-7.2, Emission Capping Using Synthetic Minor Permits	7/7/96	10/3/05, 70 FR 57511	
Part 202, Emissions Testing, Sampling and Analytical Determinations	3/24/79	11/12/81, 46 FR 55690	
Subpart 202-2, Emission Statements	5/29/05	10/31/07, 72 FR 61530	Section 202-2.3(c)(9) requires facilities to report individual HAPs that may not be classified as criteria pollutants or precursors to assist the State in air quality planning needs. EPA will not take SIP-related enforcement action on these pollutants.
Part 204, NO_X Budget Trading Program	2/25/00	5/22/01, 66 FR 28063	Incorporates NO_XSIP Call and NO_X Budget Trading Program for 2003 and thereafter.
Part 205, Architectural and Industrial Maintenance (AIM) Coatings	1/1/11	3/8/12, 77 FR 13974	
Part 207, Control Measures for an Air Pollution Episode	2/22/79	11/12/81, 46 FR 55690	
Part 211, General Prohibitions	1/1/11	3/8/12, 77 FR 13974	Section 211.1 (previously numbered 211.2) is not part of the approved plan. (see 11/27/98, 63 FR 65559)
Part 212, General Process Emission Sources	9/30/10	7/12/13, 78 FR 41846	SIP revisions submitted in accordance with §212.10(c)(3) and 212.12(c) are effective only if approved by EPA.

Part 213, Contaminant Emissions from Ferrous Jobbing Foundries	5/1/72	9/22/72, 37 FR 19814	
Part 214, By-Product Coke Oven Batteries	9/22/94	7/20/06, 71 FR 41163	
Part 215, Open Fires	6/16/72	9/22/72, 37 FR 19814	
Part 216, Iron and/or Steel Processes	9/22/94	7/20/06, 71 FR 41163	
Part 217, Motor Vehicle Emissions			
Subpart 217-1, Motor Vehicle Enhanced Inspection and Maintenance Program Requirements Until December 31, 2010	12/5/10	2/28/12, 77 FR 11742	
Subpart 217-4, Inspection and Maintenance Program Audits Until December 31, 2010	12/5/10	2/28/12, 77 FR 11742	
Subpart 217-6, Motor Vehicle Enhanced Inspection and Maintenance Program Requirements Beginning January 1, 2011	12/5/10	2/28/12, 77 FR 11742	
Part 218, Emission Standards for Motor Vehicles and Motor Vehicle Engines			EPA's approval of part 218 only applies to light-duty vehicles.
Subpart 218-1: Applicability and Definitions	12/28/00	1/31/05, 70 FR 4773	
Subpart 218-2: Certification and Prohibitions	12/28/00	1/31/05, 70 FR 4773	
Subpart 218-3: Fleet Average	12/28/00	1/31/05, 70 FR 4773	
Subpart 218-4: Zero Emissions Vehicle Sales Mandate	5/28/92	1/6/95, 60 FR 2025	
Subpart 218-5: Testing	12/28/00	1/31/05, 70 FR 4773	
Subpart 218-6: Surveillance	12/28/00	1/31/05, 70 FR 4773	
Subpart 218-7: Aftermarket Parts	12/28/00	1/31/05, 70 FR 4773	
Subpart 218-8: Severability	12/28/00	1/31/05, 70 FR 4773	
Part 219, Incinerators	5/1/72	9/22/72, 37 FR 19814	
Part 220, Portland Cement Plants and Glass Plants	7/11/10	7/12/13, 78 FR 41846	SIP revisions submitted in accordance with §220-1.6(b)(4) and 220-2.3(a)(4) are effective only if approved by EPA.
Part 222, Incinerators—New York City, Nassau and Westchester Counties	6/17/72	9/22/72, 37 FR 19814	
Part 223, Petroleum Refineries	8/9/84	7/19/85, 50 FR 29382	
Part 224, Sulfuric and Nitric Acid Plants	5/10/84	7/19/85, 50 FR 29382	Variances adopted by the State pursuant to Part 224.6(b) become applicable only if approved by EPA as SIP revisions 7/19/85, 50 FR 29382.
Subpart 225-1, Fuel Composition and Use-Sulfur Limitations	3/24/79	11/12/81, 46 FR 55690	Variances adopted by the State pursuant to §§225.2(b) and (c), 225.3, and 225.5(c) become applicable only if approved by EPA or SIP revisions (40 CFR 52.1675(e)).

Subpart 225-2, Fuel Composition and Use-Waste Fuel	7/28/83	8/2/84, 49 FR 30936	
Part 225-3, Fuel Composition and Use—Gasoline	11/4/01	9/8/05, 70 FR 53304	The Variance adopted by the State pursuant to section 225-3.5 becomes applicable only if approved by EPA as a SIP revision.
Part 226, Solvent Metal Cleaning Processes	5/7/03	1/23/04, 69 FR 3240	
Part 227, Stationary Combustion Installations [1972 version]/section 227.2(b)(1)	5/1/72	9/22/72, 37 FR 19814	
Part 227, Stationary Combustion Installations			Existing Part 227 is renumbered Subpart 227-1.
Subpart 227-1, Stationary Combustion Installations	2/25/00	5/22/01, 66 FR 28063	Renumbered sections 227-1.2(a)(2), 227-1.4(a), and 227-1.4(d) continue to be disapproved according to 40 CFR 52.1678(d) and 52.1680(a). (New York repealed existing Part 227.5.)
Subpart 227-2, Reasonably Available Control Technology (RACT) For Major Facilities of Oxides of Nitrogen (NO_X)	7/8/10	7/12/13, 78 FR 41846	SIP revisions submitted in accordance with §227-2.3(c) are effective only if approved by EPA.
Subpart 227-3, Pre-2003 Nitrogen Oxides Emissions Budget and Allowance Program	3/5/99	5/22/01, 66 FR 28063	Approval of NO_X Budget Trading Program for 1999, 2000, 2001 and 2002. NO_X caps in the State during 2003 and thereafter established in Part 204.
Part 228, Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers	6/5/13	3/4/14, 79 FR 12084	
Part 229, Petroleum and Volatile Organic Liquid Storage and Transfer	4/4/93	12/23/97, 62 FR 67006	SIP revisions submitted in accordance with Section 229.3(g)(1) are effective only if approved by EPA.
Part 230, Gasoline Dispensing Sites and Transport Vehicles	9/22/94	4/30/98, 63 FR 23668	
Part 231, New Source Review for New and Modified Facilities	10/15/11	12/27/16, 81 FR 95049	Full approval except for certain revisions to 231-5.5(b)(3), 231-6.6(b)(3), 231-10.1(d), 231-12.4(a)(1), 231-12.7, and 231-13.5 Table 5 withdrawn by NYSDEC as per July 28, 2016 NYSDEC letter to EPA Region 2. The PM2.5 Significant Monitoring Concentration (SMC) is approved as 0 µg/m3 in 231-12.4(a)(1).
Part 232, Dry Cleaning	8/11/83	6/17/85, 50 FR 25079	EPA has not determined that §232.3(a) provides for reasonably available control technology.
Part 233, Pharmaceutical and Cosmetic Manufacturing Processes	4/4/93	12/23/97, 62 FR 67006	SIP revisions submitted in accordance with Section 223.3(h)(1) are effective only if approved by EPA.
Part 234, Graphic Arts	7/8/10	3/8/12, 77 FR 13974	SIP revisions submitted in accordance with §234.3(f) are effective only if approved by EPA.
Part 235, Consumer Products	10/15/09	5/28/10, 75 FR 29897	
Part 236, Synthetic Organic Chemical Manufacturing Facility Component Leaks	1/12/92	7/27/93, 58 FR 40059	Variances adopted by the State pursuant to Part 236.6(e)(3) become applicable only if approved by EPA as a SIP revision.
Part 239, Portable Fuel Container Spillage Control	7/30/09	5/28/10, 75 FR 29897	The specific application of provisions associated with alternate test methods, variances and innovative products, must be submitted to EPA as SIP revisions.

Part 240, Conformity to State or Federal Implementation Plans of Transportation Plans, Programs and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Laws			
Subpart 240-1, Transportation Conformity General Provisions	9/13/13	7/29/14, 79 FR 43945	
Subpart 240-2, Consultation	9/13/13	7/29/14, 79 FR 43945	
Subpart 240-3 Regional Transportation-Related Emissions and Enforceability	9/13/13	7/29/14, 79 FR 43945	
Part 241, Asphalt Pavement and Asphalt Based Surface Coating	1/1/11	3/8/12, 77 FR 13974.	
Part 243, CAIR NO_X Ozone Season Trading Program	10/19/07	1/24/08, 73 FR 4112	
Part 244, CAIR NO_X Annual Trading Program	10/19/07	1/24/08, 73 FR 4112	
Part 245, CAIR SO_2Trading Program	10/19/07	1/24/08, 73 FR 4112	
Part 249, Best Available Retrofit Technology (BART)	5/6/10	8/28/12, 77 FR 51915	
Title 15:			
Part 79, Motor Vehicle Inspection Regulations			
Sections 79.1-79.15, 79.17, 79.20, 79.21, 79.24, 79.25	12/29/10	2/28/12, 77 FR 11742	
Title 19:			
Part 937, Access To Publicly Available Records	8/27/12	6/20/13, 78 FR 37124	Only subpart 937.1(a) is approved into the SIP and is for the limited purpose of satisfying Clean Air Act Section 128(a)(2).
Environmental Conservation Law			
Section 19-0325	7/15/10	8/28/12, 77 FR 51915	
Public Officers Law			
Section 73-a, Financial disclosure	8/15/11	6/20/13, 78 FR 37124	Only subsections 73-a (2)(a)(i) and (ii) are approved into the SIP and are for the limited purpose of satisfying Clean Air Act Section 128(a)(2).