



Connecticut Department of Energy and Environmental Protection



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

RACT under the 2008 Ozone NAAQS: What Will it Mean for Connecticut?

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Where We are Going



- Part 1: A RACT Primer
 - What RACT is
 - What sources are subject to RACT
 - How RACT is determined, including a little history
- Part 2: What We Need to Do
 - Timing
 - Predictions
- Conclusion: Opportunities to Participate



Part 1: A RACT Primer



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What is RACT?

- Reasonably Available Control Technology
- An ozone nonattainment requirement
- “The lowest emission 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 (1979)
- Over time, RACT changes as the cost of control methods decrease or as new controls are developed.
- Cost thresholds for defining economic feasibility are rare
 - NYDEC established RACT thresholds in 1994 that are still in use, adjusted for inflation:
 - VOC (severe area) \$5,000/ton; VOC (marginal area) \$3,000/ton
 - NOx (statewide) \$3,000/ton
- RACT may be determined for a source category or a single source



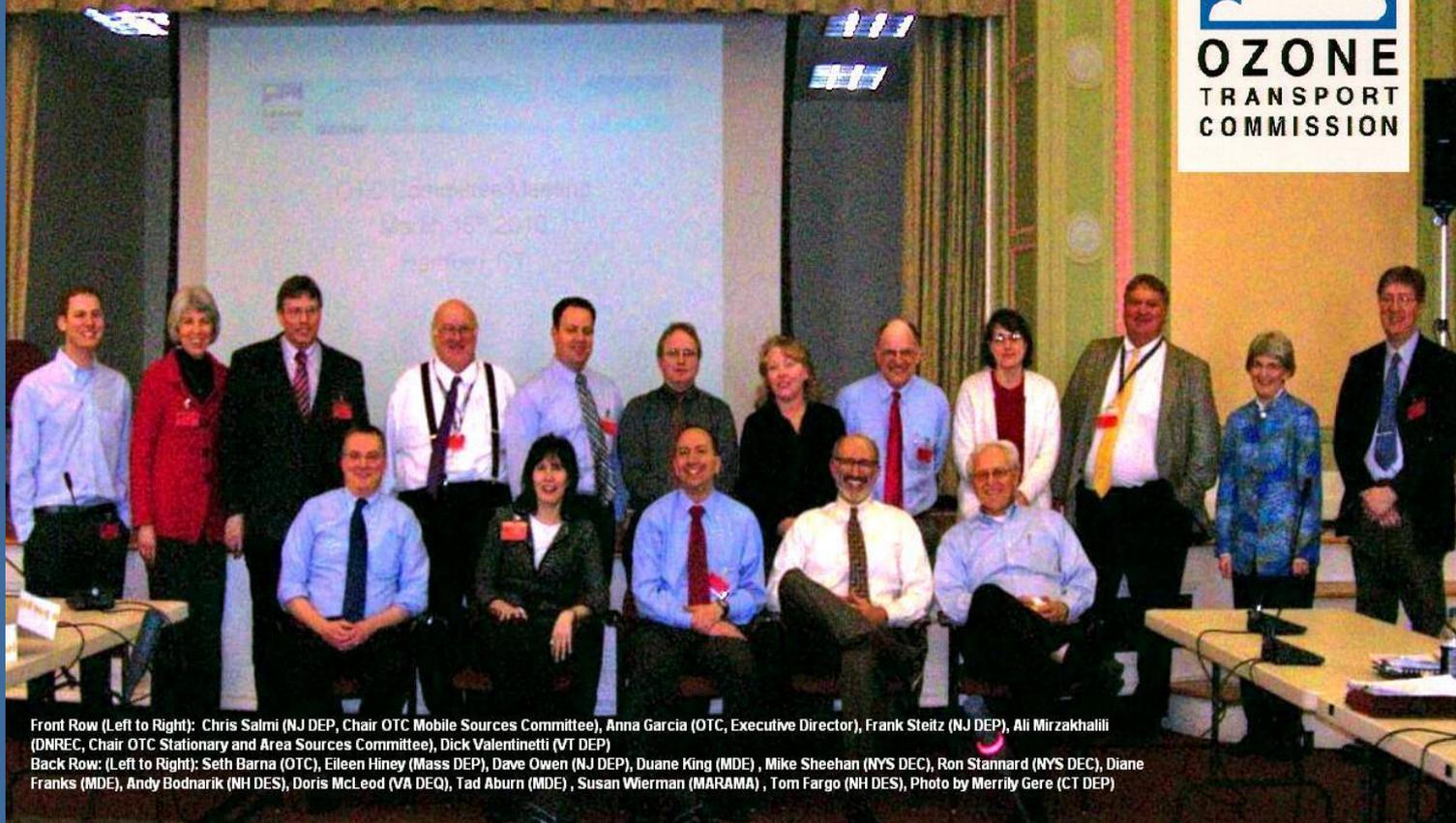
Legal Basis: Clean Air Act, Title 1, Part D, Subpart 2

- Ozone nonattainment classification
 - Marginal areas: Correct pre-1990 RACT requirements (Section 182(a)(2)(A)) (the RACT fix-up)
 - Moderate and above areas: Adopt RACT for all VOC and NOx sources covered by a CTG and all major sources of VOC and NOx (Section 182(b)(2) and (f))
- Ozone Transport Region (Section 184(b)) = more than a fix-up

Even though Connecticut is marginal nonattainment for the 2008 ozone NAAQS, we are required to implement RACT for all CTG sources and all major sources of NOx and VOC



Ozone Transport Commission (OTC) SAS / Mobile Sources
Committee Meeting: Hartford, CT DEP, March 16th, 2010



Front Row (Left to Right): Chris Salmi (NJ DEP, Chair OTC Mobile Sources Committee), Anna Garcia (OTC, Executive Director), Frank Steitz (NJ DEP), Ali Mirzakhaili (DNREC, Chair OTC Stationary and Area Sources Committee), Dick Valentinetti (VT DEP)
Back Row: (Left to Right): Seth Barna (OTC), Eileen Hiney (Mass DEP), Dave Owen (NJ DEP), Duane King (MDE), Mike Sheehan (NYS DEC), Ron Stannard (NYS DEC), Diane Franks (MDE), Andy Bodnarik (NH DES), Doris McLeod (VA DEQ), Tad Aburn (MDE), Susan Wierman (MARAMA), Tom Fargo (NH DES), Photo by Merrily Gere (CT DEP)



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What Sources are Subject to RACT?

- Major Sources of VOC
- Major Sources of NO_x
- All Sources Subject to a Control Techniques Guideline (CTG)
 - CTGs have been issued for 44 VOC source categories



What is a Major Source?

- According to CAA section 302, a major source emits at least 100 tons per year of NO_x or VOC
- Except in the OTR, where a major source emits 50 tpy VOC or 100 tpy NO_x (CAA section 184(b)(2))
- Except that a major source in a severe or serious nonattainment area is defined by these emissions (CAA section 182(c)-(f)):
 - Serious \geq 50 tons VOC, 50 tons NO_x
 - Severe \geq 25 tons VOC, 25 tons NO_x



More: What is a Major Source?

- Use the marginal nonattainment classification based on the 2008 8-hour ozone NAAQS and membership in the OTR, and major sources would emit at least:
 - 50 tpy VOC
 - 100 tpy NO_x
- Except that under antibacksliding, a state may not remove RACT requirements for sources subject to RACT under ozone nonattainment classifications under previous NAAQS, and EPA suggests in the draft Implementation Rule that states may need to use the thresholds from the higher classifications.



What are we doing?: Major Sources

Major sources

- Create two lists of major sources of NO_x and VOC
- Use two different sets of thresholds
 - Assume the marginal classification for the 2008 8-hour ozone NAAQS applies: 50 tpy VOC, 100 tpy NO_x
 - Assume the serious and severe classifications under the 1-hour ozone NAAQS apply:
 - Greater CT: 50 tpy VOC, 50 tpy NO_x.
 - SWCT: 25 tpy VOC, 25 tpy NO_x



What are we doing?: CTG sources

- EPA issued 12 new CTGs in 2006-2008.
- In anticipation of the current RACT requirement, we revised RCSA section 22a-174-20 in 2009 and 2012 to adopt the requirements of the new CTGs.
- We submitted the new and revised requirements plus negative declarations for other source categories to EPA.
- EPA proposed to approve the CTG updates on May 24, 2013.
- We have largely satisfied the requirement to apply RACT to the VOC CTG sources. We will need to review some of the older CTG source categories to determine if an update is necessary.



How to do a RACT analysis?

- Provide adequate documentation that we have considered control technology that is economically and technically feasible. (From the 2008 Ozone Implementation Rule.)
 - Generally, controls that are in use by existing sources in the same source category are technically and economically feasible.
- Do not rely on previous RACT determinations without looking at the most recent information.
- Do not rely on elderly CTGs and ACTs (all the ACTs are very old).
- Consider the RACT/BACT/LAER Clearinghouse and requirements in other nonattainment areas.



History – RACT under the 1997 Ozone NAAQS

- Certified that controls adopted under the 1-hour ozone NAAQS were still RACT for the 8-hour ozone NAAQS.
 - RCSA sections 22a-174-22 and 22a-174-38 for NO_x.
 - RCSA sections 22a-174-20, -30 and -32 for VOC.
- Committed to adopt two OTC model rules:
 - Asphalt paving, RCSA section 22a-174-20(k)
 - Solvent degreasing, RCSA section 22a-174-20(l)
- Committed to revise RCSA section 22a-174-22 to include “beyond RACT” levels of control.
- EPA approved the RACT SIP effective July 29, 2013
 - Despite our failure to complete the rulemaking for RCSA section 22a-174-22.



Part 2: What We Will Do



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Two To Dos

1. Develop and submit a RACT SIP with commitments to revise regulations to adopt new RACT requirements
2. Revise regulations



Timing

- RACT SIP is due July 20, 2014
- New RACT requirements must be effective by January 1, 2017.
- As a marginal area, Connecticut's attainment date is December 31, 2015!



What is included in a RACT SIP?

- Adopted RACT regulations or commitments to adopt/update regulations
- Certifications that existing requirements are RACT (if no new requirements are adopted).
- Negative declarations if there are no sources covered by a CTG source category.
- Submit all appropriate supporting information.



Merrily's Guesses: What We May Do

RCSA section 22a-174-38
MWC MACT update

RCSA section
22a-174-22

RCSA section 22a-174-20(f)?
Polystyrene production?
Asphalt plants?
Large laundry facilities?

RCSA section 22a-174-20(a)
Aboveground storage tanks

RCSA section 22a-174-20(b)
and -30
Stage I vapor recovery



Challenges Ahead

- Other states are revising requirements for RACT, particularly for fuel-burning equipment (e.g., NY and MD)
- EPA approvals under close scrutiny
 - For the 1997 ozone NAAQS, even other states (namely New Jersey) submitted critical comments.
 - Sierra Club and others are challenging approvals related to attainment and regional haze.
- Governor Malloy's Executive Order No. 37 towards a more transparent and efficient regulatory process
 - Lengthens with process with more steps and longer comment periods
 - Increases the amount of documentation we must prepare.



Review

- RACT is a CAA-required level of control for major sources of NO_x and VOC and non-major CTG sources.
- We will submit a RACT SIP by July 2014. That will be our roadmap of regulatory changes to come.
- The regulatory changes necessary for RACT under the 2008 ozone NAAQS will be in place by January 2017.



Opportunities for You to Participate

- RACT SIP requires notice and comment (spring/early summer 2014)
- Each regulatory adoption or amendment will require notice and comment (summer 2014 through 2016).



Why Kirk is Better than Picard

- Kirk never drinks tea.
- If Kirk encounters a strange spinning probe, he blows it up.
- One word: hair.
- Kirk would personally remove Wesley Crusher from the bridge.
- Kirk doesn't do what the doctor tells him to do.
- Kirk would never sing to children in a crisis.
- Kirk can beat a Vulcan at chess.



Questions?

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