Ozone Transport Commission Stationary and Area Source Committee Update

OTC Committee Meeting
March 16th, 2010
Hartford, CT

Measure Development Process

- February 2009, OTC Committee Meeting
 - Presented timeline for SIP development
 - Requested ideas for control options
- June 2009, OTC Annual Meeting
 - Presented White Papers
 - Provided information for evaluating control measures
- September 2009, OTC Committee Meeting
 - Presented <u>Guidelines</u> at September Committee meeting
 - Described recommended provisions
- November 2009, OTC Fall Meeting
 - Review of comments received
 - Request for additional stakeholder contacts.

Updates on Measures

- March 2010, OTC Committee Meeting
 - Presenting draft Model Rules for several stationary and area source sectors
 - Incorporated many comments previously received
 - Seeking additional stakeholder comments
 - Open period: three weeks, April 6th.
- June 2010, OTC Annual Meeting
 - Stakeholder comments
 - Committee recommendations to the Commission

Updates on Measures

NOx Model Rules Drafted

- Oil and gas EGU boilers
- Stationary generators
- Small natural gas boilers ect.

VOC Model Rules Drafted

- Consumer products
- Large above ground storage tanks

- Boiler Serving EGUs
 - Not as cost effective as trading
 - Significant NOx emissions
 - Backstop for trading programs
 - See OTC / LADCO recommendation
 - Federal rules / legislation pending
 - Forces low sulfur coal usage
 - Redefined to oil and gas boilers only
 - Screening Modeling not specific enough
 - Screening efforts underway
 - Looking for IPM alternatives.



- Stationary Generators
 - Consistent definition of "emergency"
 - No state consistency on definition of "emergency"
 - NSPS definition does not allow peak shaving or demand response of any kind
 - Some states already allow such operation as an emergency
 - NSPS approach for new engines
 - Harmonizing timelines
 - Focusing on specific NOx limits rather than NOx and NMHC (hydrocarbons)

- Stationary Generators
 - NSPS approach for new engines
 - Sync state emissions standards with federal standards for emergency generators
 - Revise to include most stringent NSPS emissions standards for non-emergency generators
 - Defense training exemption
 - Included
 - Existing generators
 - No additional emissions standards for emergency generators
 - Approximate 90% reduction in emissions for existing non-emergency generators

- New small natural gas-fired ICI boilers, steam generators, process heaters, and water heaters
 - Requesting economic impact study on small businesses
 - Examining California ARB impact with NE perspective on this sector
 - Pollution transported into CT
 - Regional screening underway



- Consumer Products
 - Supports currently enforceable limit in CA
 - Used as basis for the Model Rules
 - Not to include windshield washer fluid or oven cleaner (non-aerosol)
 - Listed as TBD, pending CARB review
 - Not to include tech forcing limits
 - Included the categories, but not the limits
 - Encourages further air quality modeling
 - Underway

- Large Above Ground Storage VOC Tanks
 - East coast services available to meet demand.
 - Seeking additional comments on the draft Model Rule



Updates on Other Measures

Other NOx Measures Under Review

- Municipal waste incinerators
- High Electric Demand Day (HEDD) units
- Energy efficiency / renewable energy

Other VOC Measure Under Review

- Auto refinish possible supplemental guidance
- AIM coatings
- Solvents
- Stage 1 and 2 controls

- Municipal Waste Incinerators
 - Wait for EPA MACT
 - Pending federal proposal
 - Facility specific limits
 - Establish 24-hour and annual limits
 - Exceptions for start up, shutdown and malfunction



HEDD

A distributed generation
 strategy would be more effective



- Harmonizing with oil and gas boiler serving EGU and stationary generator drafts.
- Compiling state specific lists of HEDD units for screening modeling purposes.

- Auto Refinish
 - OTC Model Rule approved Nov 2009
 - Additional comments received NOV 2009
 - State rule makings underway
 - OTC offering assistance
 - Possible update of the OTC based on state rulemakings.

AIM Coatings

 Comments received / follow-up call held on "Suggested AIM Regulatory Language", showing suggested changes to the CARB SCM is under review by the Committee



- Solvent Degreaser
 - Inline for drafting, comments received below:
 - Reduces cleaning efficiency
 - Prefer current 1 mm HG limit
 - Exempt solvents have toxics issues
 - Exempt, medical equip, military equip, and

facilities with capture devices



Summary of stakeholder comments

- No comments from stakeholders
 - Minor new source review (NSR) control requirements
 - Measure under review potential white paper
 - Stage 1 & 2 compatibility
 - Examining input from stakeholders
 - Energy efficiency / renewable energy
 - SIP issue, beginning discussions with EPA on modeling and inventory information and overlap with GHG plans

Stationary and Area Source

NOx Measure	State Rules	Emissions Reduction	Cost
Boilers serving EGUs	DE, NJ,MA, MD	413 TPD OTR	\$1,100 - 8,700 per ton
New Small Gas Boilers	CA, TX	53 TPD OTR	\$3,300 to \$16,000 per ton
Municipal waste incinerators	NJ, MD	14 TPD OTR	\$2,140 per ton (SNCR)
HEDD EGUs	NJ	TBD	\$45,000 to \$300,000 per unit
Stationary Generator Regulation (DG)	DE, MA, MD, NJ	TBD	\$39,700 to \$79,700 per ton
Minor New Source Review	DE, CT, MD, MA, NJ, RI, PA , VA, VT	TBD	\$600 to \$18,000 per ton
Energy security / Energy efficiency	TBD	TBD	TBD

Stationary and Area Source

VOC Measure	State Rules	Emissions Reduction	Cost
AIM rule	CA	50 TPD OTR	\$2,240 per ton
Auto Refinishing	CA	21 TPD OTR	\$2,860 per ton
Consumer Products 2006	CA	19 TPD OTR	\$7,700 per ton
Lower VOC Solvent Degreaser	MD, CA	13 TPD OTR	\$1,400 per ton
Gas Stations	TBD	TBD	TBD
Large VOC Storage Tanks	MD, NJ	TBD	\$2,288 to \$29,000 per ton
Minor New Source Review	DE, CT, MD, MA, NJ, RI, PA, VA, VT	TBD	TBD

Measure Development Process

Next Steps

- Three Week Comment Period: Open
 - Pleases submit written comments by April 6th
 - Underline / strikeout with supplemental comments preferred.
 - Emissions impact will be important
- Committee Activates
 - Sector specific calls with stakeholders
 - develop screening modeling inputs and which measures to include
 - Update discussion papers
 - Make recommendation to the Commission