OZONE TRANSPORT COMMISSION

Connecticut

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Maine

Maryland

Massachusetts

New Hampshire

New Jersey

New York

Pennsylvania

Rhode Island

Vermont

Virginia

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ADDENDUM TO RESOLUTION 06-02 OF THE OZONE TRANSPORT COMMISSION CONCERNING COORDINATION AND IMPLEMENTATION OF REGIONAL OZONE CONTROL STRATEGIES FOR VARIOUS SOURCES

Whereas, the Ozone Transport Commission (OTC) was established under Sections 176A and 184 of the federal Clean Air Act (CAA) to ensure the development and implementation of regional strategies to reduce concentrations of ground-level ozone to healthful levels; and,

Whereas, ozone has been shown to cause respiratory illnesses, exacerbate or trigger asthma related episodes, increase respiratory-related emergency room and hospital admissions and compromise the immune system leading to increased incidents of other respiratory illnesses, including pneumonia and bronchitis, and to cause premature death; and,

Whereas, the OTC is charged with exploring the contributions of all sources of air pollution to the ozone problem, including the transport of ozone and its precursors nitrogen oxides (NO_X) and volatile organic compounds (VOCs) into as well as throughout the ozone transport region; and,

Whereas, the OTC, its staff and its member state staff have evaluated emissions from a full range of source categories and, as directed by the Commission through its charge to the Control Strategies Committee and its Statement with regard to regional control measures (November, 2005), are recommending certain control measures for a variety of mobile, stationary and area sources; and,

Whereas, the respective state-sponsored workgroups and the Control Strategy Committee have, after soliciting stakeholder input, and consideration of the costs and magnitude of reductions potentially achievable, identified reasonable, technically feasible and cost-effective control measures for a variety of source categories; and,

Whereas, on February 23, 2006, the OTC directed "the Executive staff to work with staff of the OTC member states to advance air quality modeling efforts to ensure the control strategy modeling for 2009 reflects the appropriate level of reductions from" a variety of sources, including Industrial, Commercial and Institutional (ICI) Boilers and Glass Furnaces; and

Whereas, on June **7**, 2006 the OTC adopted Resolution 06-02 addressing a variety of control strategies in various source categories, but did not complete work addressing ICI Boilers and Glass Furnaces, and additional work was also needed with regard to Asphalt Production; and

Whereas, in the intervening months, staff of the OTC and workgroup members engaged the owners and operators of ICI boilers, glass furnaces, and asphalt producers and their representatives in discussions and analysis in order to complete a recommendation for action by the Commission; and

Whereas, the Control Strategies Committee has now made recommendations for region-wide emission limitations for glass furnaces, asphalt production and ICI Boilers;

THEREFORE, BE IT RESOLVED that the OTC member states will pursue as necessary and appropriate state-specific rulemakings or other implementation methods to establish emission reduction percentages, limitations on emission rates or technologies consistent with the guidelines included in the table attached.

Be it further resolved that the OTC states commit to pursue consistent rulemakings as needed and appropriate for these source categories. It is understood that states may ultimately be more or less restrictive in implementing these guidelines; and,

Be it further resolved that the SO_2 Emission Reduction guidelines be presented to the MANE-VU Board of Directors in its role as the region's Regional Planning Organization for regional haze, for its consideration and adoption; and

Be it further resolved that the compliance dates in said regulations should be targeted for January 1, 2009 or as soon as practicable thereafter; and,

Be it further resolved that should a member state find that rule amendments would be enhanced by OTC development of a model rule for either of these categories, that OTC staff be so notified, and that OTC staff make every effort to accommodate any such request, and

Be it further resolved, that this Addendum supercedes those guidelines previously listed in Resolution 06-02 for the sources addressed herein.

Adopted by the Commission on *November 15, 2006*

David K. Paylor

David Paylor, Director, Virginia DEQ
Chair

Table of Source Categories and Emission Rate Guidelines for Asphalt Production, Glass Furnaces and ICI Boilers

Source Category	Emission Rate	
Asphalt Plant		
Major Sources	lbs NOx/ton	% Reduction
Batch Mix Plant – Natural Gas	0.02	35
Batch Mix Plant – Distillate Oil/Waste oil	0.09	35
Drum Mix Plant – Natural Gas	0.02	35
Drum Mix Plant – Distillate Oil/Waste oil	0.04	35
Minor Sources		
Batch or Drum Mix Plant – Natural Gas	Low NOx Burner Technology, or Best Management Practices.	
Batch or Drum Mix Plant – Distillate Oil/Waste oil	Low NOx Burner Technology, or Best Management Practices.	
Glass Furnaces	(lbs NOx/ton of glass pulled)[1]	
	Block 24 Hr Average	Rolling 30-Day Average
Container Glass	4.0	4.0
Fiberglass	4.0	4.0
Flat Glass	9.2	7.0

Industrial, Commercial and Institutional (ICI) Boilers

ICI Boiler Size (mmBtu/hr)	Control Strategy/ Compliance Option[2]	NOx Control Measure	SO_2 Control Measure
5-25		Annual Boiler Tune-Up	#2 fuel oil - 0.05% S by wt. by 2012 #4 fuel oil - 0.25% S by wt. by 2012
25-100		Initial NOx Stack Test for 25-100 mmBtu/hr Retest Every 5 Years for 50-100 mmBtu/hr Annual Boiler Tune-up	#2 fuel oil - 0.05% S by wt. by 2012 #4 fuel oil - 0.25% S by wt. by 2012 #6 fuel oil - 0.50% S by wt. by 2012
	Option #1	Natural Gas 0.05 lb NOx/mmBtu	
		#2 Fuel Oil 0.08 lb NOx/mmBtu	
		#4 or #6 Fuel Oil 0.20 lb NOx/mmBtu	
		Coal 0.30 lb NOx/mmBtu	
	Option #2	50% Reduction from uncontrolled	
	Option #3	Purchase current year NOx Allowances equal to reductions needed to achieve the required emission rates	
		Natural Gas 0.10 lb NOx/mmBtu	

[1] Compliance date is 2009. NOx Allowances may be surrendered in lieu of meeting the emission rate based on a percentage of the excess emissions from the facility, at the discretion of the State.

[2] Where options are presented, choice of option is at the discretion of the State and where they allow, the Source.

100-250	Option #1	#2, #4, or #6 Fuel Oil 0.20 lb NOx/mmBtu	#2 fuel oil - 0.05% S by wt. by 2012 #4 fuel oil - 0.25% S by wt. by 2012 #6 fuel oil - 0.50% S by wt. by 2012
		Natural Gas & Fuel Oil Combined 0.20 lb NOx/mmBtu	
		Coal Wall-fired 0.14 lb NOx/mm Btu Tangential 0.12 lb NOx/mm Btu Stoker 0.22 lb NOx/mm Btu FBC 0.08 lb NOx/mm Btu	
	Option #2	LNB/SNCR, LNB/FGR, SCR, or some combination of these controls in conjunction with Low Nox Burner Technology	
	Option #3	60% Reduction from uncontrolled	
	Option #4	Purchase current year NOx Allowances equal to reductions needed to achieve the required emission rates	
>250	Option #1	Purchase current year NOx allowances equal to reductions needed to achieve the required emission rates	Purchase current year SO_2 allowances equal to reductions needed to achieve the required emission rates
	Option #2	Phase I – 2009 Emission Rate Equal to EGUs of Similar Size	Phase I – 2009 Emission Rate Equal to EGUs of Similar Size
		Phase II – 2013 Emission Rate Equal to EGUs of Similar Size	Phase II – 2013 Emission Rate Equal to EGUs of Similar Size