

NEW JERSEY CLEAN AIR COUNCIL

Clean Air Council Members

James Blando, Ph.D., Chairman
Leonard Bielory, M.D., Vice Chairman
Ferdows Ali, Ph.D.
Jorge H. Berkowitz, Ph.D.
Joseph Constance
Michael Egenton
John Elston
Manuel Fuentes-Cotto
Toby Hanna, P.E.
Richard M. Lynch, Ph.D.
John Maxwell
Pam Mount

Clean Air Council Members

Joyce Paul
Joseph Spatola, Ph.D.
Kenneth Thoman
Junfeng (Jim) Zhang, Ph.D.
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NJ CLEAN AIR COUNCIL MEETING RECORD

January 9, 2008, 9:30 a.m.

IBEW, Local 94

219 Franklin St.

Hightstown, NJ 08520

CALL TO ORDER: James Blando opened the meeting.

COUNCIL MEMBERS PRESENT: All of the Council members were present with the changes noted below. (**See Attachment 1 – Attendance Sheet**)

EXCUSED: Jorge Berkowitz, Joseph Constance, Richard Lynch

SPEAKERS: Bill O’Sullivan, Director, Division of Air Quality; Katie Watson, Executive Director, NationsPort

PUBLIC: Kelly Moretta, Schering-Plough Corp.; Michael Hornsby, PSEG; Sue Shannon, Peg Hanna, NJDEP

Meeting Record

Roll call was taken. Chairman called for motion to approve the December minutes. Irwin Zonis made the motion to approve December minutes. James Blando seconded the motion. The December minutes were approved by a unanimous vote.

Administrative Report

Presented by Bill O’Sullivan, Director, Division of Air Quality:

1. **PM2.5**—Modeling of the emissions from the Portland Generating Plant in Northampton County indicates that this plant causes high fine particles (PM2.5) and sulfur dioxide in Knowlton Township. A public meeting was held on December 6 to discuss designating Knowlton as nonattainment for PM2.5, and this was recommended to USEPA on December 18. NJDEP also filed suit against Reliant’s Portland Plant for violation of prevention of significant deterioration (PSD).

2. Wood burning—NJDEP is reviewing an application from TreeCycle LLC to operate a large wood-fired furnace, used to dry wood pellets to burn in wood stoves. Better air pollution control for this furnace will be required before the application can be approved. Also, NJDEP has received increased complaints on wood burning. The PM2.5 and haze State Implementation Plans (SIPs) will include commitment on measures to reduce air pollution from wood burning.
3. North Bergen Transfer Station—Westside Transload, LLC has submitted an application for an Air Pollution Control Permit to Construct and Certificate to Operate a railroad transfer station to move 1,500 tons of construction debris each day from trucks to railcars. The facility has proposed to install a \$1 million State-of-the-Art filtration system.
4. Lead—USEPA is proposing to revise the NAAQS for Lead. The Clean Air Scientific Advisory Committee (CASAC) has recommended that the standards be lowered from 1.5 ug/m³ to about 0.1 ug/m³.
5. California Car Green House Gas (GHG) Standards—USEPA denied California's waiver in late December. On January 3, 2008, New Jersey and other states joined California's lawsuit appealing this denial.
6. Diesel Retrofit—The Department of treasury issued a Notice of Intent to Award for the school bus and solid waste vehicle components of the mandatory diesel retrofit program contract on November 21, 2007. One protest was received, where the protester disputed the rejection of his proposal. The State rejected the proposal because the cost was excessive compared to the other bids received. The current regulatory deadline of March 6, 2008 for solid waste collection vehicles to submit their paperwork is being extended.
7. 2006 Motor Vehicle Inspection and Maintenance (I/M) Program—The report will be transmitted to USEPA shortly. The key statistics indicate that:
 - The program is testing vehicles properly;
 - The overall initial emission test pass rate is 87.5%;
 - Vehicles that fail the emissions test are receiving repairs that lower emission concentrations at the tailpipe by 42.9% for oxides of nitrogen, 54.8% for hydrocarbons and 65.1% for carbon monoxide.
8. Stack Testing Laboratory Audit Project—USEPA agreed to fund the program for another year.
9. Drycleaners—A hearing will be held on January 18, for the rule to ban perchloroethylene (perc) after 2020.
10. Greenhouse Gas (GHG) Rules—The Regional Greenhouse Gas Initiative (RGGI) law passed through the Legislature on January 7. It includes auction of CO₂ allowances which are capped for electric generation. Rule proposals are expected this spring and adopted by January 2009. Both a RGGI rule and a GHG inventory rule are under development.
11. New Inspection & Maintenance Program—Bids by four vendors are under evaluation. A contract award is expected by February 2008. This contract is for five years.

Update on Port Emissions and Improvements

Presented by Katie Watson, Executive Director, NationsPort:

1. A. Emissions Inventory--The portion of the Northeastern New Jersey Airshed emissions inventory created by the activities of Port of New York & New Jersey terminal operators.

1. Emissions Inventory - Fine Particulate (PM_{2.5})--The total for on-road and non-road PM_{2.5} emissions in 2002 for the Northeastern New Jersey airshed was estimated to be 3,613 tons per year. Total non-road PM_{2.5} emissions were 2,296 tons per year, leaving the balance of 1,407 tons per year from the on-road fleet.
 2. Emissions Inventory - Oxides of Nitrogen (NO_x)--The total for on-road and non-road NO_x emissions in 2002 for the Northeastern New Jersey airshed was estimated to be 149,075 tons per year. Total non-road NO_x emissions were 31,628 tons per year, leaving the balance of 117,447 tons per year from the on-road fleet.
 3. On-Road Emissions - Trucking (Long Haul & Drayage)--Higher engine temperatures achieved on long haul truck trips enable more complete fuel combustion, resulting in the production of less particulate matter but higher levels of NO_x. Conversely, the drayage fleet with frequent short trips, starts and stops, produces relatively higher levels of PM and lower levels of NO_x. All truck emissions (including drayage fleet emissions) are captured in the on-road inventory rather than the non-road inventory which is the focus of port-based activities.
- B. Port Specific Emissions--Port of New York and New Jersey Annual Cargo Handling Equipment Emissions – 2002, Tons Per Year [Note 1]
1. Terminal Type (totals for auto-marine, locomotives and containers)
 - NO_x--2,498
 - VOC--187
 - CO—862
 - PM-10--138
 - PM_{2.5}--127
 - SO₂--396
 2. Port of New York and New Jersey Annual Car Carrier and Containership Emissions – 2002, Tons Per Year [Note 2]
 - Vessel Type (totals for car carrier and containerships)
 - NO_x--1,914
 - VOC--73
 - CO--329
 - PM-10--114
 - PM_{2.5}--105
 - SO₂--1,842
 3. Port PM_{2.5}--Total PM_{2.5} emissions from auto-marine, locomotive and container cargo handling and vessel emissions at the port account for 10 percent of the total on-road and non-road PM_{2.5} in the Northeastern New Jersey airshed.
 4. Port Oxides of Nitrogen (NO_x)--Total NO_x emissions from auto-marine, locomotive and container cargo handling activities at the port account for just over 1 percent of the total NO_x emissions from all sources (on-road, area, point and non-road) or 1.67 percent of the total on-road and non-road NO_x emissions in the Northeastern New Jersey airshed.
 5. Port of New York & New Jersey vessel emissions account for under 1 percent of the total airshed NO_x (on-road, non-road, as well as area and point sources) or 1.28 percent of the total on-road and non-road NO_x. Thus, from a total of 215,525 tons per year NO_x emissions in the airshed only 4,412.32 tons per year (2 percent) are within the direct control of direct port providers.

ENVIRONMENTAL ACTIVITIES TO DATE:

- Improved efficiency and fleet modernization
- The average age of cargo handling equipment on the 5 terminals decreased by two years - from model year 1997 in 2002 to model year 1999 in 2004 with an accompanying reduction in emissions of NOx, PM, VOC, CO and SO2 by over 30 percent in each case.
- Support for the development of a major rail distribution network to shift cargo from trucks to rail
- With only two rail operations open, one in Elizabeth and the other at Port Newark, we increased our rail volume to 303,032 boxes, 6.9% higher than last year. This elimination of 300,000 truck trips is higher than the national intermodal increase which was 6.4%. A third on-port rail operation is planned for Staten Island. The terminal community is also working on a fixed-rate rail/non-rail incentive program which would reduce the rate dramatically for all cargo moved out of the port by rail rather than by truck, no matter where it goes. Currently, cargo can be moved to destinations more than 260 miles from the port at a rate of \$21 versus \$120 per container.
- Use of low sulfur fuels--The Starcrest Consulting report update identifies two of the five terminals-in 2004 exclusively using un-dyed highway diesel in their cargo handling equipment and one using dyed non-road diesel to fuel its cranes and un-dyed-highway diesel for all other Cargo handling equipment. None of the-terminals was identified as using ultra low sulfur diesel (ULSD).
- Alternatively fueled vehicles/equipment--Since the Starcrest Consulting 2002 Report, 47 diesel cranes have been replaced with electric cranes at a cost of \$367 million. In addition, there is electrically powered equipment not accounted for in the Starcrest inventories including electric ship-to-shore container gantry cranes, and various electric high-lows of varying ages.
- Decreased idling time as a result of increased vehicle throughput--Electronic gates installed at Maher Terminal alone provides the ability to handle 13,000 vehicles per week but the capacity is currently averaging 8 times the current demand. To increase demand requires downstream changes in the warehousing sector such as allowing trucks 24/7 unloading ability (this may be controlled by local zoning issues) or by at least extending daylight hours at warehouses to allow truckers to take advantage of early morning delivery and late pickup times which, in combination with overnight truck parks, would extend the work day improving profitability for the drivers as well as enhancing productivity and air quality.
- Trucking--There are a number of independent private initiatives underway in the Port of New York & New Jersey trucking community including leading an initiative with USEPA to better define the operating parameters of the cross harbor drayage fleet; to deploy and assess the costs and emission reduction benefits of a number of "clean transport" strategies ranging from retrofits whose recharging/powering needs are addressed in a solar environment; alternative fueling including CNG and battery in an effort to create a Port of New York & New Jersey based "green supply chain" on a voluntary basis.

The port terminal community at large supports idling reduction strategies for vehicles at the port and also supports controlling emissions from refrigerated trailers (Transportation Refrigeration Units). There is currently one overnight park in the port area where Interport Maintenance Company, Inc maintains 25 acres of secure storage

for bobtails and chassis mounted containers. Truck drivers can leave their vehicles there pending access to port or warehouse facilities, or for maintenance purposes. While the port entry facilities are not "overnight" locations whereby truck operators are completely stationary for periods of time, there are efforts underway within the North Jersey Transportation Planning Authority to locate necessary overnight truck stops within the port region equipped with IdleAire or similar emission reducing technologies.

- Fuels:

- Low sulfur/ultra low sulfur diesel fuel-- A number of the terminal operators have already changed from using typical non-road (unregulated) diesel fuel which has a sulfur level of around 3000 ppm to current highway diesel fuel with a maximum sulfur content of 500 ppm.

- Battery electric engines--The port community supports the evolution of battery or electric power alternatives in any marine or on-dock equipment if the alternatives maintain a utility level equal to or greater than that of conventionally fueled vessels, vehicles and equipment The community fully supports incentives for the purchase of battery electric locomotives (a switcher locomotive that provides substantial environmental benefits) and is willing to work with manufacturers of such equipment to provide a test-bed environment for technology "proof of concept" work.

Notes:

[1] The Port of New York and New Jersey Emissions Inventory for Container Terminal Cargo Handling Equipment, Automarine Terminal Vehicles, and Associated Locomotives, Starcrest Consulting Group, LLC, June 2003.

[2] The New York, Northern New Jersey, Long Island Non-attainment Area Commercial Vessel Emissions Inventory - Volume 1 - Report, Starcrest Consulting Group, LLC, April 2003.

NEW BUSINESS/OLD BUSINESS

- Irwin Zonis suggested that members familiarize themselves with the RGGI legislation
- Public Hearing: speakers' list discussed and copy will be sent to members; include a sentence in the invitation letter asking speakers to bring a summary of their remarks to the hearing; picture for brochure open to suggestions.
- Send congratulatory/thank you letter to Eleese Evans.
- Chairman called for motion to adjourn the meeting. Dr. Bielory made the motion to adjourn, seconded by Michael Egenton. The meeting was adjourned.

ARTICLES OF INTEREST

- News Clips

NEXT MEETING

February 13, 2008, 9:30 a.m. Rutgers EcoComplex, 1200 Florence-Columbus Rd
First Floor, Room 105 & 106, Bordentown, NJ 08505