

**AIR RESOURCES COUNCIL  
MINUTES OF MEETING #199  
08/22/11**

**MEMBERS PRESENT:** Chairman Robert Duval, Vice-Chairman David Collins, Debra Hale, William Smagula, Georgia Murray, Steven Walker, Deborah Chabot, Terry Callum, Ryan Bielagus

**MEMBERS NOT PRESENT:** Raymond Donald

**NHDES – ARD PERSONNEL:** Craig Wright, Anne Keach, Peter Demas, Paula Scott, Barbara Hoffman, Michael Fitzgerald, Jeffrey Underhill, Gary Milbury, Kendall Perkins, Elizabeth Nixon

**OTHER INTERESTED PARTIES:** Atty. Linda Landis, PSNH; Atty. Barry Needleman, McLane PA

**Call to Order:**

Chairman Duval called Meeting #199 of the Air Resources Council (ARC) to order at 9:10 a.m. on Monday, August 22, 2011. Chairman Duval announced that a quorum was present.

**Approval of Minutes:**

William Smagula entered a motion to accept the minutes of meeting #198. Ryan Bielagus seconded the motion. All were in favor of accepting the minutes of meeting #198.

**Division Activities & Legislative Update:**

Chairman Duval introduced Craig Wright, Assistant Director of the Air Resources Division (ARD). Mr. Wright provided members of the ARC with an update regarding the following issues relevant to the Air Resources Division.

**Permitting Activities**

1. Mr. Wright stated that the ARC dismissed the appeal of the proposed Title V Permit for PSNH Merrimack Station on June 20, 2011. Under the Clean Air Act (CAA), the NHDES has requested a 45-day review of the permit through the Environmental Protection Agency (EPA) on July 21, 2011. The NHDES has received comments from EPA which the NHDES will address in the coming week with the intention that EPA will be able to complete its review of the permit, which will effectuate the finalization of Title V permit for the source.
2. The NHDES recently held two public hearing for proposed asphalt plants in Winchester and Franklin New Hampshire. No appeals have been filed regarding these proposed permits; however, concerned citizens have requested legislation in the next session to review asphalt plant regulation in New Hampshire.
3. The NHDES has recently simplified its permitting process by allowing sources to apply for General State Permits and Permits By Notification (small sources) on-line. The next steps will include the consideration of expanding the on-line permitting program to other permit categories. The NHDES is working with the Department of Information and Technology (DOIT) to develop software in order to provide this service. The ARD has hired a Business Systems Analyst to work with the ARD and DOIT in the development of this expanded permitting process for permitted sources in New Hampshire.

**Legislation**

House Bill 248, which establishes a commission to study business regulation in New Hampshire passed in the 2011 Legislative session and became law (Chapter 263). This commission was established to study business regulation in New Hampshire, the impact they have on employment growth and business profitability, and the costs and benefits associated with the current regulatory environment. One of the goals for the commission is to review New Hampshire's business oversights that fall under the umbrella of environmental construction/permitting regulations. The members of the commission will include four members of the House of Representatives; three members of the Senate, and public members representing specific groups and interests to create a commission comprised from both the private and public sector. Mr. Wright stated that further information regarding the findings of this commission will be forthcoming.

### Stage II Vapor Recovery Systems Opt-Out

Mr. Wright introduced Michael Fitzgerald, Administrator of the Technical Services Bureau. Mr. Fitzgerald provided members with a handout explaining the Stage II Vapor Recovery Systems (VRS) at gasoline dispensing facilities (GDF). Mr. Fitzgerald stated that the Stage II vapor recovery program is required by section 182(b)(3) of the CAA, which directs states air pollution control agencies with moderate or worse national ambient air quality standards (NAAQS) to require Stage II VRS at GDFs as a volatile organic compound (VOC) emissions reduction control measure. Mr. Fitzgerald added that the Waste Management Division has been implementing this program in accordance with the Underground Storage Tank rules.

Mr. Fitzgerald explained that the CAA also required EOA to develop standards for On-board Refueling Vapor Recovery (ORVR) controls on new light-duty vehicles, which were phased in between 1998 and 2002. Because Vacuum assist Stage II control systems, which predominate in New Hampshire, are not fully compatible with ORVR-equipped vehicles and therefore ORVR equipped vehicle impact the effectiveness of the vacuum assist State II VRS, resulting in an increase in emissions from the level expected when refueling a non-ORVR equipped vehicle.

Due to the recognized conflict with ORVR technology required by the CAA on 1998 and new vehicles, and the potential for this conflicting technology to increase refueling-related emissions; the NHDES is seeking to remove the requirement to install Stage II controls on new or significantly modified gasoline dispensing facilities effective January 1, 2012 and require the decommissioning of untested existing Stage II systems by 2015. The requirement to pressure test these UST systems to detect vapor leakage will remain in effect.

Mr. Fitzgerald stated that modeling shows that the implementation of reformulated gasoline (RFG) in the four-county nonattainment area results in an excess benefit of 1.0 tons per day (3,751 lbs./day) which can be used as a comparable measure in accordance with the EPA OTR comparability study. These calculations are summarized below:

### **Projected 2012 New Hampshire Emissions Inventory**

*Estimates of the benefits of Stage II controls and the use of RFG*

1) Baseline estimates:

without Stage II controls in the 4-county area (with RFG in the 4-county area)

<b>Sector</b>	<b>VOC (pounds per summer day)</b>
Point	10,818
Area	117,861
Non-Road	78,936
<u>Mobile</u>	<u>41,514</u>
Total	249,129

2) Current conditions:

Stage II controls and RFG in the 4-county area

<b>Sector</b>	<b>VOC (pounds per summer day)</b>
Point	10,818
Area	116,930
Non-Road	78,936
<u>Mobile</u>	<u>41,514</u>
Total	248,197

-932

pounds per day from the baseline (i.e. a 932 pound per day benefit from Stage II controls in the 4-county area)

3) Estimates with conventional gas (no RFG) in the 4-county area

<b>Sector</b>	<b>VOC (pounds per summer day)</b>
Point	10,818
Area	116,930
Non-Road	78,936
<u>Mobile</u>	<u>45,265</u>
Total	251,948

3,751

pounds per day over the current conditions (i.e. a 3,751 pound per day benefit from RFG)

4) Estimates with Stage II controls statewide

(with RFG in the 4-county area) - OTR estimate, comparable measures

<b>Sector</b>	<b>VOC (pounds per summer day)</b>
Point	10,818
Area	116,261
Non-Road	78,936
<u>Mobile</u>	<u>41,514</u>
Total	247,529

-1,600

pounds per day from the baseline (i.e. a 1,600 pound per day benefit from Stage II controls statewide)

### Air Monitoring Update

Mr. Fitzgerald provided members of the Air Resources Council with an overview of the Air Resources Division Air Quality monitoring Program highlighting the National Core (NCORE) and the National Visibility Tracking Monitoring Network (IMPROVE).

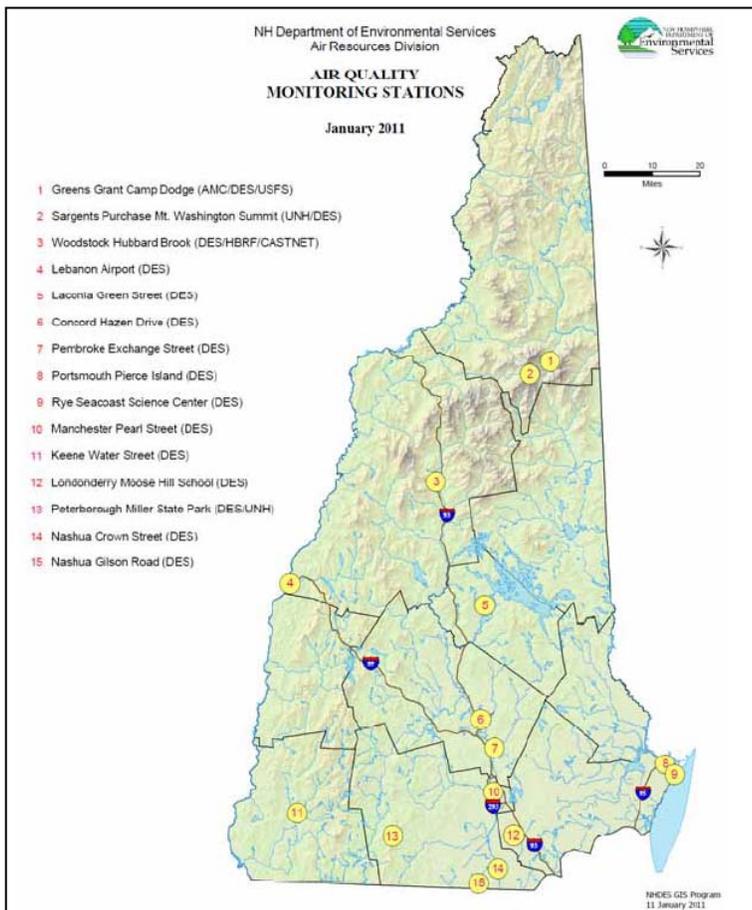
The Air Resources Division monitors air quality to:

- Obtain high quality data
  - Reliable
  - Validated QA/QC
- Determine the status of air quality in New Hampshire
- Predict air pollution episodes
- Enact protective actions and warnings
- Determine short and long term air quality trends in New Hampshire for attainment planning

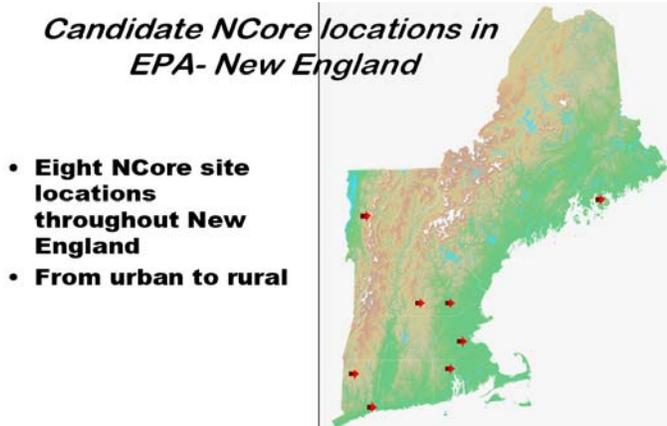
Mr. Fitzgerald outlined the air quality monitoring methodology as follows:

- Air flows into the monitor
- The analyzer tells how much pollution is in the air. Small particles collected on the filters are weighed to see how many are in the air
- New Hampshire has 15 monitoring stations that collect information on many different air pollutants. Weather information like wind speed, wind direction, and temperature is also collected
- Measurements from all stations are sent to Concord
  - Data is quality assured, analyzed, and reported
  - Used for compliance assessment for NAAQS and air pollution forecasting
  - Current air quality is posted to DES website

The following map depicts the air quality monitoring locations throughout the State of New Hampshire:



The following map depicts the eight NCore Consolidated Multi-Pollutant Monitoring sites throughout New England:



Most existing monitoring sites measure one or two pollutant species which may be of concern for the location. NCore monitors use a multi-parameter approach to capture a more complete picture of the air quality in a specific location representative of a significant population segment.

**Parameter**

- PM2.5 speciation
- PM2.5 FRM mass
- Continuous PM2.5 mass
- Continuous PM(10-2.5) mass
- Ozone (O3)
- Carbon monoxide (CO)
- Sulfur dioxide (SO2)
- Nitrogen oxide (NO)
- Total reactive nitrogen (NOy)
- Ammonia (NH3)
- Nitric acid (HNO3)
- Surface meteorology

The NCore Network addresses the following objectives:

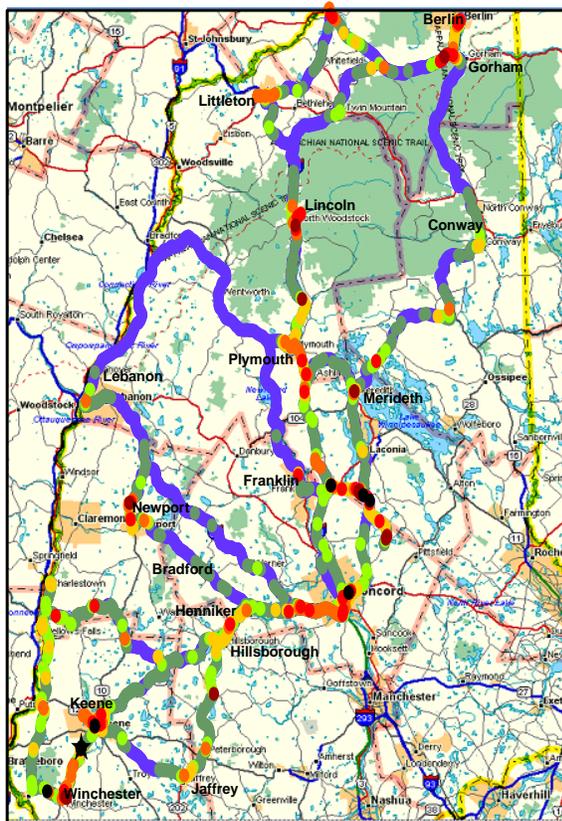
- Timely reporting of data to public
- Support for development of attainment strategies
- Tracking of long-term trends of criteria and non-criteria pollutants and their precursors
- Determination of NAAQS status and progress
- Support to scientific studies, ecosystem assessments and health research

The NCore monitoring station at the Moose Hill School is a state-of-the-art facility which incorporates energy efficient monitoring techniques such as:

- Solar Panels - photovoltaic system has been installed that can produce up to 1,800 watts of power to help supplement the energy used in the building for operating the air monitoring equipment and climate control systems.

- Insulation of the structure was maximized by using foil-faced insulation and the largest R-values possible in the ceiling, wall sheathing, wall cavities and floor
- The lights in the building use a combination of light-emitting diode (LED) light bulbs and the most efficient T5 fluorescent lamps available.
- The heating and cooling system uses an electric heat pump and is Energy Star rated.
- The most efficient insulated glass available is used in all of the doors.

Dr. Jeffrey Underhill, Chief Scientist for the Air Resources Division provided the following slide to depict the Beta Attenuation Monitoring (BAM) results.



## Composite New Hampshire PM2.5 Mobile Monitoring (January - March, 2011)

PDR Relative to the Keene BAM Unit

Relative PDR to the Keene BAM Unit

- 0.0 to 0.3
- 0.3 to 0.7
- 0.7 to 0.9
- 0.9 to 1.1
- 1.1 to 1.5
- 1.5 to 2.0
- 2.0 to 3.0
- 3.0 to 8.0
- ★ 8.0 to 18.0

### How to Interpret Map

PDR data was corrected to BAM 2.5 levels using colocated PDR/BAM calibration data. Corrected data was then normalized to the running Keene BAM to provide relative data for how each location compares to the Keene BAM location.

Lower values (less than 1.0) indicate lower remote PM2.5 levels than measured in Keene at that time.

Higher values (than 1.0) indicate higher remote PM2.5 levels than Keene at that time.

Note: Values greater than 1.0 indicate the instantaneous PDR value is higher than the hourly average value for the Keene BAM Unit

Dr. Underhill informed members of the ARC that all IMPROVE and NCORE data is available on the NHDES website, and represent real-time monitoring data.

### Env-A 300, Ambient Air Quality Standards

This item was tabled until the next meeting of the Air Resources Council on September 19, 2011.

### Status of Appeals:

Peter Demas of the NHDES Legal Unit introduced Paula Scott, Appeals Clerk. Ms. Scott provided members of the ARC with an update regarding the following appeals:

Docket No. 10-13 ARC – Kalwall Corporation regarding payment of emission-based fees. Chairman Duval reminded Ms. Scott that the ARC requested a written status summary at the ARC meeting on

May 16, 2011 and expects a summary of settlement discussions at the September 19, 2011 meeting.

Docket No. 09-43 ARC – Public Service of New Hampshire (PSNH) regarding DES' Final Responses to Requests for Bonus Carbon Dioxide (CO<sub>2</sub>) Allowances as amended and dated December 3, 2009. The order granting the appeal, remand back to the NHDES and granted Assented-To Motion to Retain Jurisdiction was sent on June 27, 2011. Also, the Decision and Order on the Motion for Reconsideration by CLF was denied and sent on June 27, 2011.

Docket No. 10-06 ARC – NH Sierra Club, et al regarding the March 15, 2010, Proposed Title V Operating Permit to PSNH Merrimack Station. A hearing on this matter was held on April 18, 2011. The Order was issued on June 20, 2011. The appeal was dismissed.

Docket No. 11-10 ARC – Public Service of New Hampshire (PSNH) regarding the NHDES Final Determination of Baseline Mercury Input of June 28, 2011.

The following ARC members recused themselves from hearing the matter:

David Collins, Contractor for PSNH  
William Smagula, PSNH Employee  
Debra Hale, Collaborates with PSNH on projects

The following members are not recused and have agreed to hear the matter without bias:

Robert Duval  
Deborah Chabot  
Georgia Murray  
Terry Callum  
Steven Walker  
J. Ryan Bielagus

Chairman Duval stated that the Office of the Attorney General will appoint a hearings officer in the matter.

Steven Walker entered a motion to accept the appeal. Terry Callum seconded the motion. All were in favor. The appeal was accepted by the non-recused members of the ARC.

### **Other Business**

Chairman Duval set the next meeting of the Air Resources Council to be held on September 19, 2011.

### **Adjourn**

Having no further business to discuss, Terry Callum entered a motion to adjourn. Debra Hale seconded the motion. All were in favor. Meeting #199 of the Air Resources Council adjourned at 10:25 a.m. on August 22, 2011.