

May 12, 2006

Contact – Christine Schell

**Workgroup Recommendations and Other Potential Control Measures**  
**Overarching Workgroup Issues**

**GEN001 – Pollution Action Day Controls**

**DESCRIPTION**

This effort would focus on the “triggering” of emission reduction strategies on those days when they are most needed – days when the pollution levels are forecasted to be unhealthy. Measures would have either mandatory or voluntary (or some combination thereof) restrictions on a wide variety of activities that are deemed to significantly contribute to the increased pollution levels. The following table provides a list of measures under consideration. If implemented, this list may be modified and/or added to:

Table 1: Pollution Action Day Measures

<b>Measure</b>	<b>Suggested Implementation</b>	<b>Pollutant(s) Impacted</b>
Restrictions on commercial lawn and garden activities	Voluntary or Mandatory	Ozone and PM2.5
Restrictions on residential lawn and garden activities	Voluntary	Ozone and PM2.5
Limitations on construction activities	Voluntary or Mandatory	Ozone and PM2.5
Mass transit incentives	Voluntary	Ozone and PM2.5
Water craft and offroad vehicle restrictions	Voluntary or Mandatory	Ozone and PM2.5
Trip reduction programs (including ETR)	Voluntary	Ozone and PM2.5
Open burning restrictions	Mandatory	PM2.5
Ban application of pesticides	Mandatory	Ozone
Restriction of oil usage at major facilities (use of natural gas as an alternative)	Voluntary or Mandatory	Ozone and PM2.5
Drive thru restrictions	Voluntary or Mandatory	Ozone and PM2.5
Restrictions on woodburning (fireplaces, etc.)	Voluntary or Mandatory	PM2.5
Discouraging vehicle refueling (e.g., higher fuel costs during key time periods to discourage refueling at that time)	Voluntary	Ozone and PM2.5
Modifications to toll collection	Mandatory	Ozone and PM2.5
Increased telecommuting	Voluntary	Ozone and PM2.5
Public Awareness – signs, radio announcements, etc.	Mandatory	Ozone and PM2.5

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**IMPLEMENTATION**

This program would focus on activity restrictions or curtailments that would be triggered on pollution alert days. In essence, this measure is an expansion to the existing Ozone Action Partnership efforts, where a group of businesses and organizations take voluntary steps to help reduce the pollution that forms ozone. This works as follows: the NJDEP declares Ozone Action Days when they are forecasting high concentrations of ground-level ozone. Then the Partnership's participating businesses notify their employees so they can telecommute, share rides to work, use mass transit, and take other steps to help reduce smog. Similarly, the NJDEP has modified its Ozone Action Days to Pollution Action Days to encompass the effects of PM<sub>2.5</sub>, for which the state is also in nonattainment. Under this new effort, the NJDEP will declare a Pollution Action Day based on the NJDEP's forecast for the following day. Based on this forecasting, a list of restrictions would be implemented throughout the state, similar to the restrictions implemented when the state is under a drought emergency.

Depending on the severity of the forecasting for the next day, these restrictions could be implemented in a phased or tiered approach. For example, for a forecast of "unhealthy for sensitive individuals", a reduced list of measures could be implemented and/or they could be implemented on a voluntary basis only. For more severe forecast (e.g., "unhealthy for all individuals), more measures could be implemented and/or they could be mandatory restrictions. Should mandatory restrictions be in place, fines could be imposed for violations, similar to those implemented during drought emergencies.

**COST**

The cost to the State would be minimal, but would include continued implementation of its monitoring network; notification of Pollution Action Day and restrictions (as well as their implementation) to the public; enforcement should mandatory measures be implemented; and collection of any fines, should they be imposed.

Regardless of whether or not these measures were implemented on a voluntary or mandatory basis, their implementation will require state staff to implement. However, several of the implementation parts (including continuation of the monitoring network and notification of Pollution Action Days) are already part of the NJDEP's staff regular duties. Once automated, the notification system should not require additional resources beyond the NJDEP's existing notification system. Enforcement personnel would also be needed should fines be imposed. Finally, an effort of this nature would require other public outreach efforts (public radio spots, etc.) which would add to the cost. Some, if not

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all, of these public outreach effort costs could be covered through grant and/or SEP monies, or partnership efforts.

Total costs impacts to the public would depend on whether or not the measures were voluntary or mandatory, as mandatory implementation would require modifications to work processes (such as commercial lawn and garden and construction activities). Costs could be greater if voluntary episodic measures do not work, requiring more stringent mandatory controls to be imposed.

**EFFECTIVENESS**

Targeted emission reduction strategies (or episodic measures) are a new way of addressing the immediate health impacts from excessive emissions on high pollution days. The actual emission reductions expected from this program would vary depending on the number of measures implemented and the nature of that implementation (voluntary vs. mandatory). In addition, restrictions could involve shifting activities to non-peak pollution hours, which would not reduce the overall emissions, but would address their contribution to the pollution formation during critical time periods. It is difficult to quantify actual emission reductions through modeling for efforts of this nature, because of their varied implementation strategies (e.g, voluntary vs. mandatory, episodic, etc.). However, the State recognizes that there will be an ultimate environmental benefit from their implementation as the public changes its habits for the better, and as such, will work to incorporate those benefits into the State Implementation Plan (SIP). Irrespective of emission reduction potential, this measure could be critical to the State's public outreach message on air pollution, and on helping the public make informed choices with respect to their activities when the air quality is poor.

**COST EFFECTIVENESS**

The cost of this measure requires little additional costs to implement, and those costs could be partially offset by the collection of fines for violations of mandatory restrictions. Given that the costs would be relatively small, any emission reduction benefits would result in a favorable cost effectiveness scenario for this program. In the long term, benefits from these efforts could be greater if behavioral changes are realized.

**SOURCES**

1. Non-Automobile Gasoline Engines Workgroup
2. Diesel Initiatives Workgroup
3. Gasoline Cars and Trucks Workgroup

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4. Homes and Restaurants Workgroup
5. Stationary Combustion Sources Workgroup
6. Volatile Organic Compounds from Processes and Consumer Products Workgroup