

DEPARTMENT OF ENVIRONMENTAL QUALITY

Air Resources Impact Work Group

Final Summary of July 18, 2002 meeting

The second meeting of DEQ's Air Resources Impact Work Group was held on July 18, 2002, at the DEQ Central Office. Frank Dukes, Director, Institute for Environmental Negotiation at UVa. facilitated the meeting. He reviewed the charge and the objectives of the work group and stated that the focus of the work is on technical aspects of combined air pollution impacts and not policy. He raised the issue of the difference in the definitions of cumulative and combined impacts. DEQ indicated the difference between the two definitions may be very small but DEQ views combined impacts to mean the air quality that results from multi **point sources** of emissions. Cumulative impacts mean the air quality that results from **all sources of emissions-- point, area, mobile, and off-road**. DEQ was asked to provide a pie chart of the distribution of emissions between these four categories. At this point, Mr. Dukes said the goal for today's meeting was to discuss the issues associated with Objective I of the four Objectives previously laid out by Mr. Burnley. He also, provided an overview of the meeting agenda.

The work group raised a number general questions and issues. DEQ was requested to post the map of power plants and ozone monitors on the web page for the work group's information. A question was asked about companies withdrawing their DEQ permit application and why the SCC would go forward with public hearings. It was explained that the DEQ and SCC processes are separate actions, and that one could proceed without the other. A statement was made that not enough ozone monitors are sited in Central Virginia and that needs to be addressed. Also, the group should consider the health effects of PM2.5 since there is no bright line between good and bad air quality relative to health effects. Suggestion was made that air pollution impacts on agriculture and forestry as well as health should be considered. A question was asked about which air pollution sources should the group be considering and DEQ responded that the work of the group should be focused on power plants and **other major point sources**. Also, a question was asked about the sources of PM2.5 emissions.

The group reviewed the list of 5 issues that had been submitted by members and agreed that establishment of two smaller work groups would help flesh out the issues and options for (1) modeling and (2) monitoring. Members were asked to sign-up for one of these groups. There were also questions and concerns raised about emission control efficiencies on major facilities, and what source sizes (e.g. tons per year) should be considered? And finally, the group asked which pollutants should be considered in the assessment of combined impacts. Some suggested that all the criteria pollutants, including ozone, and other impacts like visibility be included in such assessments.

Several presentations were made at this point in the meeting based upon requests from the June 18th meeting. First, DEQ presented information about the current statewide air monitoring network and how monitoring sites are selected and approved by the EPA. Also, information was provided about the installation and operational costs for various types of monitors. DEQ was asked to provide information about its budget for the air monitoring program.

DEQ provided a brief description of the ozone modeling that has been done to date relative to combined impacts primarily from new and proposed power plants. Questions were asked about how DEQ considers local versus regional ozone impacts and what types of sources of ozone are included in this modeling. It was mentioned that 50 to 75% of ozone is transported into Virginia at certain times under certain adverse weather conditions. Also, the question was asked about how does modeling results compare with ozone monitored data? DEQ mentioned that EPA has performed an analysis in an attempt to interpolate between monitored ozone data and modeled pollution levels and although there is some controversy about the results, the group asked to be presented with a copy of this study. DEQ provided information about the work that is being conducted to develop programs to address the regional haze and visibility impairment problems under the direction of the regional group known as VISTAS---Visibility Improvement State and Tribal Association of the Southeast.

Next an overview of the modeling analysis required by DEQ for all PSD sources was provided. (Note: the CAA does not require ozone modeling for PSD sources). This discussion included the factors considered when developing inputs for the specific model and how that information is used depends upon the type of source(s) to be modeled and source location. This presentation covered the purpose of the modeling assessment on air quality, use of significant air quality levels, area of impacts, required protocol for conducting this analysis, Class II and Class I impact analysis, and brief information about the MARAMA modeling proposal. DEQ provided a list of the models currently being used as well as those that are expected to be available for use in the near future after EPA's approval. Group members were directed to the following internet site for more information on the specific models: EPA.gov/TTN/SCRAM

The NPS presented information on how it reviews air quality impacts from PSD sources on federal Class I areas, and how the permit application process should proceed including the need for pre-application meetings with the source and with the state permitting agency. The PowerPoint presentation of this information was provided to the group prior to the meeting.

Towards the conclusion of this meeting, Mr. Dukes restated that at the next meeting, the group would be reformed into two groups---one for air monitoring and one for modeling---and that each group would meet separately to address the issues and questions raised in the previous two meetings.

The volunteers for the each group are as follows:

Monitoring Sub-Group

Ellie Irons---DEQ

Ted Handel--Consultant

Monica Gibson--SELC

Tom Jennings--DEQ

Dudley Rochester--ALAV

Modeling Sub-Group

Chuck Turner--DEQ

Kirit Chaudhari--DEQ

Tom Botkins--Westvaco

Sheryl Raulston--Int. Paper

Ken McBee--DEQ

Joel Cohn--M. Pirnie

Greg Kunkel--Tenaska

Cathy Taylor--Dominion

Mark Scruggs-- NPS

Dan Homes--PEC

Note: The modeling sub-group does not have a representative from an environmental group--a better balance in the make-up of that group would be helpful.

Some overall general issues and questions raised at the meeting:

NPS: What about background and fugitive emission baselines?

Other states: what are they doing?

What is Virginia's budget for air quality programs versus other states?

Monitoring:

What are the gaps in air quality monitoring?

Does it affect the quality of information?

What data are available from outside organizations?

What new technology exists?

Where are pollution sources located?

Which sources should we focus on?

What are the costs versus available resources?

Information needs: EPA's Kriging proposal and monitoring siting criteria

Modeling:

What models are coming on-line and what can they do differently?

What types of sources should we look at?

Technical capabilities--can they predict minor source impacts?

What is the availability of emissions inventory data?

Use of pre-application/construction data from proposed sources?

What data are considered?

Information needed: Status and cost of new models

The next meeting is scheduled for August 8, 2002. The meeting will start at 10 a.m. and be held at DEQ's Central Office in Richmond.

The July 26, 20002, draft summary of the July 18th meeting has been revised to reflect clarification of the new source review permit requirements for the construction of numerous small sources at the same site. A statement was made that a source could avoid certain permit requirements if it constructs a number of small sources rather than one large source. In fact, this type of construction program would not be allowed, without a permit, if the purpose is to avoid some permit requirements such as those of the PSD program. DEQ's permit regulations prevent the construction of a number of small sources that would have emissions just under the permit trigger threshold for obtaining a permit if it is determined that such construction is otherwise to avoid the requirement to obtain a permit. 8/9/02