Clean Air Act Advisory Committee
Permits/New Source Review/Air Toxics Subcommittee
Utility MACT Working Group
Summary of Working Group Meeting 03/04-05/02

The fifth meeting of the working group established under the Clean Air Act Advisory Committee's (CAAAC) Permits/New Source Review/Air Toxics Subcommittee was held on March 4/5, 2002 at the STAPPA/ALAPCO Headquarters and the Renaissance Mayflower Hotel in Washington, D.C.

March 4, 2002

A brief report by the "ranking" mini group was followed by Working Group discussion. The mini-group has decided not to pursue output-based emission calculations. This topic can still be pursued when the form of the standard is discussed, but its pursuit is more than what this mini-group feels is important for the identification of best performing units.

The mini-group members remain bothered by the presence of the negative percent removal units in the data base and have asked that EPA investigate this issue further. The effect of these data on the reliability of the whole data set remains. The EPA and others agreed to examine the negative percent reduction data, particularly those tests on the five baghouse units. There was also discussion related to the variability of the data, including the use of statistical methods to ensure that the identified "best performing units" were, in fact, best performing at all times.

A 2-page report was distributed that presented the initial conclusions and next steps as identified by the mini-group. Working Group members were asked to review this report and provide comment by e-mail to Felice Stadler. This report will be discussed in detail at the next meeting of the Working Group.

Next was a presentation by industry representatives of the "subcategorization" mini-group followed by Working Group discussion. A paper on this topic is being prepared by the industry representatives on the mini group that will be distributed to the Working Group members and placed on the web site.

The presentation related to problems encountered with fuel switching -- boiler issues (e.g., slagging, fouling, efficiency losses), pulverizer issues (e.g., heating values, grindability, abrasiveness), and fan issues. The main problem is when one goes from high rank to a lesser rank coal. The biggest problem in going from a low rank to a higher rank coal is maintaining superheat and reheat temperatures (furnace size issues), along with safety issues from coal handling, the potential to increase other emissions (e.g., NO_x, HCl), and increased corrosion. Switching coal types is not infeasible but there are costs and other impacts involved.

The question was asked regarding historic fuel switching for acid rain compliance purposes and why one could coal switch for acid rain purposes but not for the purpose of mercury control. The apparent answer is that switching for acid rain purposes was within coal ranks and consisted of a switch to a lower sulfur coal. Problems, even with this limited switching, were encountered but were not considered major. However, impacts were reported with as little as 10 percent of the new coal being blended. The DOE data should be a source of information on what typical levels of blending are occurring now. Comment was also made regarding the NO_x SIP call and its effect on further constraining the ability of utilities to coal switch, since sulfur content can foul the catalysts necessary for NO_x control.

Following the industry presentation was a presentation by environmental representatives of the "subcategorization" mini-group and Working Group discussion. Some bases for subcategorization were discounted (i.e., fuel type, cost, amount of emissions, control technologies, achievability of control), with the "size, class, and type" distinction being reiterated. Two potential subcategorization approaches were suggested:

1. Two subcategories: all oil-fired and all coal-fired units
2. Three subcategories: all oil-fired units; conventional pulverized coal-fired (e.g., wall-fired, tangential-fired, cyclone-fired, stoker) units; and fluidized bed combustion (FBC) units.

Comments were made regarding the use of fuel switching/blending as a compliance option. The issue was discussed of the placement into one fuel subcategory resulting in being limited in the ability to switch coals in the future. One premise on subcategorization is that it should be done on the basis of that scheme best suited to design the controls based on cost with fuel switching being a compliance option. Subcategorization on boiler type may provide more flexibility, leaving open the option to choose the coal type. Subcategorization by coal type would seem to limit fuel flexibility.

A presentation by Basin Electric Cooperative Association on behalf of the National Rural Electric Cooperative Association was aimed at lignite and the issues leading to why a lignite boiler would never switch to a higher rank coal. It was indicated that most, if not all, lignite units are "mine mouth" (i.e., located at the mine where the mine exists only for the plant and with no capacity to receive coal from truck or commercial rail facilities). The issues of coal contracts, boiler design, and economic impact on lignite States were also discussed.

A brief presentation by EPA was made on the non-mercury HAP. The presentation is also available on the web site. This presentation dealt with the amount of data available and where it might lead the Agency.

The "non-mercury HAP" mini-group reported that it is just beginning to identify issues. One thing they are looking at is the grouping of pollutants. If non-mercury HAP were grouped by metals/PM ($PM_{2.5}$), organics, and acid gases what pollutants would be left out? Another question is

whether such use of "surrogates" for individual HAP is legal. A question as to the data adequacy was also raised as most of the data are from 1994 or before, there are limited data for some HAP, and the level of QA/QC on the data is unknown. Further, once the best performing units are identified with regard to mercury, the Working Group needs to consider the collateral benefits control of the non-mercury HAP that are also realized.

The "coal" mini-group provided another data analysis presentation listing data points from continuous emission monitor (CEM) measurements at a unit equipped with a fabric filter. The CEM measured 3-minute readings and which were averaged and plotted as hourly data points. This plot showed scattered variability of mercury emissions. The Working Group asked if the data could be provided using 3-hr averages, and if similar data could be collected on additional units.

Several members made comments that the data are adequate for identification of best performing units, but not adequate for setting performance limits. Selection of an appropriate averaging time could help alleviate issues related to data variability.

March 5, 2002

A brief presentation by EPA was made on the oil-fired unit data available. The presentation is also available on the web site. This presentation dealt with the amount of data available and where it might lead the Agency. It is estimated there are approximately 150 units operating at 70 facilities in 18 States. Based on information in the Final Report to Congress, approximately one-third of the units have an electrostatic precipitator (ESP) and none have flue gas desulfurization (FGD) systems. Twenty tests have been run on 13 units, with 3 of the units having ESP controls. Nickel is the HAP of concern. Further information is needed on the availability of low-metal oil, the effect of desulfurization of gasoline, and the use of particulate matter as a surrogate for metals. Members of the "oil" mini-group are contacting the American Petroleum Institute (API) about the impact of the Phase II Sulfur rules on the oil supply in general.

There followed an open discussion by the Working Group. Data adequacy came up again as a topic. It was requested that the statistical analysis paper provided at the February 5 meeting by the "ranking" mini-group be expanded to answer some of the data questions raised on pages 5 and 7 of the paper.

Review of action items and discussion of next steps

April 3 was set as the date for our next meeting, which will be an all-day meeting at the EPA facilities in Research Triangle Park, North Carolina. The following topics/action items were suggested:

- Data adequacy will remain a topic. People were asked to consider the "ranking" mini-group's paper with issues and recommendations.

- Further work on the statistical paper provided by the "ranking" mini-group was supported. In addition, further analysis of the negative removal tests will be conducted.

- Non-mercury HAP will be looked at with regard to grouping (i.e., appropriate surrogates) and collateral benefits from mercury controls.

- The "coal" mini-group volunteered to generate some proposals for subcategories and MACT floors as input to IPM and REMSAD modeling efforts.

Presentations on the on-going DOE mercury control test program will be solicited for the May 2002 meeting, also to be held in Research Triangle Park, North Carolina.

CLEAN AIR ACT ADVISORY COMMITTEE
PERMITS/NEW SOURCE REVIEW/AIR TOXICS SUBCOMMITTEE
UTILITY MACT WORKING GROUP

March 4, 2002

STAPPA/ALAPCO Headquarters
The Hall of States Building, Room 333
444 North Capitol Street, N.W.
Washington, D.C. 20001

AGENDA

1:00 p.m. - 1:15 p.m.	Introductions and opening remarks by Sally Shaver and John Paul, Co-chairs
1:15 p.m. - 1:45 p.m.	Presentation by Ranking Mini Group and discussion by Working Group - Felice Stadler
1:45 p.m. - 2:15 p.m.	Presentation by Subcategorization Mini Group - Mike Geers
2:15 p.m. - 2:30 p.m.	Presentation by Subcategorization Mini Group - Sandra Schubert
2:30 p.m. - 3:00 p.m.	Presentation by Rural Electric Cooperative Association - Bill Wemhoff
3:00 p.m. - 3:30 p.m.	Discussion of subcategorization presentations by Working Group
3:30 p.m. - 3:45 p.m.	EPA presentation on non-mercury HAP
3:45 p.m. - 4:00 p.m.	Presentation by Non-mercury HAP Mini Group - Martha Keating
4:00 p.m. - 4:45 p.m.	Working Group discussion of non-mercury HAP
4:45 p.m. - 5:00 p.m.	Presentation by Coal Mini Group and discussion by Working Group - Lee Zeugin
5:00 p.m.	Adjourn

CLEAN AIR ACT ADVISORY COMMITTEE
PERMITS/NEW SOURCE REVIEW/AIR TOXICS SUBCOMMITTEE
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March 5, 2002

Renaissance Mayflower Hotel
1127 Connecticut Avenue, N.W.
Washington, D.C.

AGENDA

8:00 a.m. - 8:15 a.m.	Introductions and opening remarks by Sally Shaver and John Paul, Co-chairs
8:15 a.m. - 8:45 a.m.	EPA Presentation on oil data
8:45 a.m. - 9:45 a.m.	Open discussion by Working Group
9:45 a.m. - 10:00 a.m.	Review of action items and discussion of next steps
10:00 a.m.	Adjourn