

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR DIVISION**

INTRA AGENCY MEMORANDUM

TO: File

FROM: Mary E. Major
Environmental Program Manager

SUBJECT: Meeting Minutes, –September 22, 2005- Regulatory Ad Hoc Advisory Group Concerning Clean Air Mercury Rule (Rev. F05)

DATE: September 28, 2005

INTRODUCTION

At 9:30 a.m., September 22, 2005, a meeting of the ad hoc advisory group concerning the Clean Air Mercury Rule (CAMR) was held in the First Floor Conference Room, Department of Environmental Quality, 629 East Main Street, Richmond, Virginia. A record of meeting attendees is included as Attachment A.

SUMMARY OF DISCUSSION

The facilitator opened the meeting by announcing that any position papers members want to develop on issues the group is unable to achieve consensus on must be forwarded to the DEQ by Monday, November 14, 2005.

The facilitator also reviewed the definition of consensus identified in the Ad Hoc Committee Protocol:

Consensus is defined as a willingness of each member of a group to be able to say that he or she *can live with the decisions reached and will not actively work against them outside of the process*

The group discussed the implication of including non-EGUs into the CAMR.

Information About Scrap/Metal Recycling Industry

Charles (Cricket) Williams Jr., Immediate Past Chairman of the Institute of Scrap Recycling Industries, provided the following information:

Non-EGUs are a very diverse group as evidenced by the various members of the

committee which includes the steel industry, recycling and coke industry. It also includes other sources not at the table. One could mandate that all mercury be removed from scrap metal; however that won't address mercury pollution from the coke or other industries. How could one develop a regulation without addressing specifically the other industries? Is it possible to do so in the timeframe for this regulation development?

Automobiles that have outlived their useful life are sent to the recycling yard to have any valuable parts (alternators, batteries, seats, lights etc.) removed. From the yard they are sent to a crushing facility then to a shredder. That shredded material is then sent to the steel mill for recycling into steel which is then shipped to the auto manufactures. As with any commodity, the material is sold to the highest bidder, which includes steel mills in China and other parts of the world.

Mercury is in the switches that come on automatically when the trunk or hood of an automobile is opened. The recycling industry is trying to have the auto manufactures pay for the removal of the switches at the recycling facility prior to it entering the waste stream. Since the manufactures are the ones that continue to use the switches, they should be the ones to pay for the removal. If there is no mercury in the waste stream to begin with then there is no cost for removal at the end of the process. Once the "scrapped" vehicle is crushed (flattened) then shredded, it is very difficult to capture the mercury to remove from the waste stream and much more expensive to remove it from the stack at the steel mill.

The recycling industry has formed coalitions to have legislation passed in other states (Maine, North Carolina, and Arkansas) that requires the removal of switches from the waste stream. They will be seeking similar legislative changes in Virginia. More information can be found on the web at <http://www.cleancarcampaign.org/mercury.shtml> and <http://www.isri.org>

Information About Steel Industry

Lawrence Heyd, Environmental Manager, Chaparral (Virginia) Inc., provided the following information:

Mercury emissions from Chaparral are about 300 lbs mercury/year with a gas throughput of about 1 million cubic feet of gas per minute. The facility does have a bag house. The industry would like to see the switches removed prior to shredded material coming to the mill. It is expensive to remove switches at the recycling facility but extraordinarily expensive to remove the mercury at the stack.

Europe stopped putting the mercury switches in automobiles in 1993. American auto manufactures stopped in 2003. It will take several years for entire fleet to turn over so that the switches are no longer in the "scrapped" cars. EPA is developing regulations for steel mills under Section 112(k) of the Clean Air Act. The regulations are being developed by EPA's Office of Air Quality Planning and Standards in Research Triangle

Park, NC. Mercury emissions from mills throughout the country will be addressed in that rulemaking. With pending federal regulation and the phase-out of the switches in automobiles, it is not cost-effective to control at this point.

It should be noted that scrap metal has a huge foreign market. Excessive regulation could send more metal to foreign markets with mills that have much less stringent controls than American steel mills. This not only will affect jobs but could result in an increase in global atmospheric mercury from places like China and India. These issues need extensive research prior to regulating any non-EGUs to minimize any unintended consequences. It would not be prudent to just include non-EGUs into this regulatory action without a very comprehensive assessment of the environmental and economic implications.

Information about coke Industry

Richard R. Waddell; Vice President, General Manager, Jewell Coke Company, LP provided the following information:

The facility emits 340 lbs mercury/annually; began producing coke in 1960. EPA used this facility to establish the 1993 MACT for new coking facilities in the country. The facility provides 400 direct jobs (which include 242 Jewell employees and approximately 160 contractors) and support approximately 3,000 indirect jobs in an area with very high unemployment. Jewell Coke Company is an affiliate of Sun Coke Company in Knoxville, Tennessee.

The coke making process involves heating coal in ovens to temperature ranges of 2000 to 2,700 degrees under negative pressure. Volatile gases are combusted as they circulate around the oven. Combustion residence time for these gases is approximately 7 seconds, compared to 1/2 to 3 seconds in industrial incinerators. The carbon content in the coal is approx. 72%; the carbon content in the coke at the end of the heating process is approx. 93%; the rest is ash.

In a previous meeting, maps were distributed that indicated plants located within 60 miles of a waterway having a health advisor for mercury contamination. Jewell was listed as impacting the North Fork of the Holston River. Mr. Mueller (Chesapeake Bay Foundation) invited members to provide information which would indicate a previous industry had caused the contamination. EPA has concluded that the contamination was the result of Olin Chemical Corp., which operated between 1895 to 1972 and is currently listed as a superfund site. Federal clean-up has been completed. Mercury was removed from the site; what remains continues to be monitored and is reported to be stable. DEQ has sampled several waterways in near proximity of Jewell. Fish tissue collected indicate that none of the waterway's mercury levels approach the trigger requiring an advisory.

To control the mercury from the ovens would require cooling the waste heat steam which in turn could create discharge into the river. Jewell currently is a net user of

water and has only permitted storm water discharge points. One hundred thirty-three ovens are operating which vent into 15 stacks. Stacks are approximately 75 ft. high. The mountainous terrain that the facility is located in makes installing additional control equipment extremely difficult; limited space to locate equipment. Additional control requirements would force the operation to consider other options which could lead to closure of the facility due to cost and space limitations to site additional equipment. This has the potential to cause a severe economic impact to an already depressed area.

Several utility representatives indicated that non-EGUs should not be regulated under this regulation indicating;

- The focus of federal research had been conducted on the utility industry,
- The federal limits were based on EGU data
- Concern of jeopardizing SIP approval if non-EGUs are included,
- Mercury emissions data for non-EGUs is considered to be incomplete as many non-EGU sources are not required to report it, and
- Other non-EGU sources of mercury need to be at the table if controls are going to apply to them. Other non-EGUs may not have requested to participate in this process thinking the federal rule specifically addressed EGUs and assumed the state regulation would be limited to the same category of sources.

Others suggested that several non-EGUs were large emitters of mercury and that those emissions needed to be reduced, especially the sources near slow running or sluggish waters since there was a greater likely-hood of having the mercury converted to methylmercury and concentrated in fish tissue. It was suggested that any source emitting more than 10 lbs. must reduce emissions to some limit. The standard could be base on deposition and measured in lbs/hectare. Any source emitting greater than 10 lbs would be required to model to determine the amount and extent of deposition of mercury. Modeling is expensive; the cost to human health from mercury contamination is also very high.

DEQ distributed the definitions of "Hot Spot" received from members.

The group will meet Wednesday, October 12 to discuss the issue of trading mercury. The meeting will be at 9:30 a.m., Seventh Floor Conference Room, Department of Environmental Quality, 629 East Main Street, Richmond, Virginia.

INFORMATION TO BE DISCUSSED AT THE NEXT MEETING, SEPTEMBER 29, 2005

The group did agree that additional discussion was necessary on the following issues:

- Additional discussion on the possible alternative of a deposition standard (lbs/hectare)

Discussion of hot spots

Role of Non-EGUs

Discuss whether the State Air Pollution Control Board has the authority to issue a regulation that requires pollution prevention, i.e. whether the board could require the auto industry to remove mercury switches from scrap vehicles

Need to identify core issues and also identify which issues are not negotiable

TEMPLATES\PROPOSED\AH08
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Attachments