Commonwealth of Pennsylvania
Department of Environmental Protection
Bureau of Air Quality

Ambient Air Monitoring Network Plan - 2011
Notice of Public Inspection
40 Pa. B. 2491 (May 8, 2010)

Comment/Response Document

June 25, 2010

Commonwealth of Pennsylvania
PA Department of Environmental Protection
Bureau of Air Quality

Comment and Response Document concerning
Pennsylvania's 2011 Annual Air Monitoring Network Plan

On May 8, 2010, the Pennsylvania Department of Environmental Protection (Department or PA DEP) published a notice in the *Pennsylvania Bulletin* concerning public inspection of Pennsylvania's 2011 Annual Air Monitoring Network Plan. (40 Pa.B. 2491). This plan describes ongoing activities to continue conversion of manual $PM_{2.5}$ fine particulate samplers to continuous equivalent methods, locate new $PM_{2.5}$ fine particulate matter sites, install source-oriented ambient lead particulate samplers, and add additional Volatile Organic Compound (VOC) air toxic samplers. The public comment period closed on June 8, 2010.

This document summarizes the written comments received during the 30-day public comment period from the two commentators, Mr. Jeff Borroni of Ellwood, PA, and from Thomas Y. Au, President of the Clean Air Board of Central Pennsylvania based in Carlisle.

COMMENTS FROM MR. JEFF BORRONI, ELLWOOD, PA

COMMENT: Why is the lead sampler in Ellwood City located on a monitoring site that is upwind of the facility being tested? This just seemed wrong. I've heard about the models used, but it doesn't make good sense to me.

RESPONSE: The Department appreciates the commenter's suggestions as to the relocation of this lead monitor. However, this sampler is sited to comply with the lead National Ambient Air Quality Standard (NAAQS) which requires the sampler to be located within the modeled area of a facility's maximum source concentration. After a thorough and intensive modeling process that involved the input of meteorological data and many other factors, the location chosen met the siting criteria referenced in the lead NAAQS final rule. The site selected by PADEP was approved by the U.S. Environmental Protection Agency (EPA) for maximum concentration, not population exposure.

COMMENT: How can future testing be determined from the current information being gathered if all the necessary input isn't being collected? If something is found to be wrong, will anyone take into consideration the potential increase in severity if the test location was downwind?

REPONSE: Data collected from the lead sampler in Ellwood City from January 1, 2010 to March 31, 2010 will be submitted to the EPA's Air Quality System Database by July 1, 2010. Subsequently, the Department will conduct a review of the data to determine what further action, including additional monitoring, is necessary.

COMMENT: Why test only for lead when there are many other dangerous air toxics being emitted by the INMETCO facility? We know INMETCO recycles many other dangerous chemicals, like cadmium. If you are doing the testing anyway, why not get the most bang for your buck?

RESPONSE: As part of the laboratory analysis by PA DEP's Bureau of Laboratories, all lead filters are screened for Cadmium, Nickel, Manganese, Chromium, and Zinc at this site. It is also important to note that the type of filter used for lead sampling is not necessarily the best filter for the other toxic metals. However, the sampling results provide a reasonable measure of other toxic metal concentrations.

COMMENT: The lead sampler installed at the Ellwood City monitoring site has experienced problems in functioning. Upon conversation with an operator, was told the machine had low flow and was out of calibration. Will these malfunctions be taken into consideration as to the overall validity of the data? Also, it seems that the machine is never running. The tech said it runs every six days, but he can barely hear it running.

RESPONSE: While there were initial issues with the lead sampler at the Ellwood City site, including equipment reliability and the retirement of the site operator, these issues have been addressed and the site is operating normally. The sampler, the HI-Q HVP-4300 AFC-TEMPPRES, used by the Department produces very little noise so one could mistakenly believe the sampler is not running correctly when, in fact, it is running on the EPA required schedule. As the sampler runs every six days, there might be a few weeks that go by where someone that is present only during the week would not hear the sampler when it's operating during the weekend. At this point, the Department feels that a sampling period of every six days, as required by EPA, is adequate and is not contemplating increasing the sampling frequency.

COMMENT: From looking on the website, what does it mean that a new HI-Q sampler was installed on 1-1-10?

RESPONSE: The Department employs a number of the HI-Q HVP-4300 AFC-TEMPPRES lead samplers across the state to comply with the lead NAAQS sampling requirements. These HI-Q samplers are a modern upgrade of the lead samplers the Department has used in the past. To comply with the lead NAAQS, the Department began installing these new samplers at identified locations in the fall of 2009. The sampler in Ellwood City, PA was installed on January 1, 2010.

COMMENTS FROM MR. THOMAS AU, CLEAN AIR BOARD OF CENTRAL PA, CARLISLE, PA

COMMENT: The Department has no monitoring stations for ozone either in Cumberland or Lebanon counties. The data submitted to support designation of the metropolitan planning area are from ozone monitors located in Harrisburg and Hershey (Dauphin County) and at Little Buffalo State Park (Perry County). These monitoring stations are located at least 20 miles from Carlisle. Since the EPA has extended the deadline for designation of nonattainment areas for one year, until March 10, 2011, it would be prudent for DEP to collect more data on ozone levels in the Commonwealth, especially in areas where monitoring data are not currently available. No monitoring data for ozone has been submitted for Cumberland County or for Lebanon County. Ozone concentrations for Carlisle or Lebanon could be higher or lower than the measurements obtained for the three monitors used by DEP to represent the entire metropolitan planning area.

RESPONSE: The Department appreciates the commenter's concern about ozone pollution in the Carlisle Region, and the desire for a sampler in Carlisle. However, the present requirements for ozone monitoring within the Harrisburg-Carlisle Metropolitan Statistical Area (MSA) are met by the current complement of two ozone samplers in the Harrisburg-Carlisle Metropolitan Statistical Area, one in Harrisburg and one in Hershey. As provided in 40 CFR Part 58, Appendix D, a minimum of two sites in this MSA is required because the present MSA ozone design value is greater than 85% of the NAAQS. Secondly, it must be remembered that ozone is a secondary pollutant formed by primary pollutants such as nitrogen oxides and volatile organics. These primary pollutants react photochemically and are transported, making ozone a regional pollutant. Therefore, based on all current evidence, the Department and EPA concur that ozone monitoring requirements in the MSA are being met without the need for a third ozone monitor in the Harrisburg-Carlisle MSA.

This year, PA DEP will establish an ozone monitoring site in the City of Lebanon (Lebanon County) in accordance with the requirements of 40 CFR Part 58 Appendix D for the recently established Lebanon MSA. This installation, which is required by January 2012, will be completed by September 2010.