

**Commonwealth of Pennsylvania
 Comment and Response Document for the
 Proposed Lead Attainment/Nonattainment Area Recommendations to EPA
 February 2010**

On October 3, 2009, the Pennsylvania Department of Environmental Protection (DEP or Department) published a *Pennsylvania Bulletin* notice of public meetings and a written comment period on the proposed designation recommendations for the 2008 lead National Ambient Air Quality Standard (NAAQS). (39 Pa.B. 5785). The two public meetings were held simultaneously on Wednesday, October 21st, 2009, at 1:00 PM at the DEP’s Southwest Region Office, 400 Waterfront Drive, Pittsburgh, PA and the Berks County Courthouse and Services Center, 633 Court Street, 13th Floor, Reading, PA. The comment period was extended by notice on the Department’s website from October 23, 2009 and closed on October 30, 2009. This document also addresses comments submitted on November 10, 2009.

The list of commentators is set forth below:

List of Commentators:

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| 1 | Honorable Michael O’Pake Pennsylvania Senator – 11 th District 1940 North 13 th Street, Suite 232 Reading, PA 19604 |
| 2 | Mr. Christian Leinbach Berks County Commissioner Services Center, 13 th floor 633 Court Street Reading, PA 19601-4310 |
| 3 | Mr. Gavin Biebuyck on behalf of Berks County Commissioners Submissions dated: 10/21/09, 10/30/09 and 11/10/09 Principal Consultant, Liberty Environmental, Inc. 50 North Fifth Street, 5 th floor Reading, PA 19601 NOTE: Mr. Biebuyck has indicated that specific recommendations for nonattainment boundaries should be those contained in the 11/10/09 comments rather than either of the other submissions. |
| 4 | T. Sean McGowan Manager, Environmental Affairs Carpenter Specialty Alloys - Carpenter Technology Corporation PO Box 14662 Reading, PA 19612-4662 |
| 5 | Troy Greiss Director, EHS East Penn Manufacturing Company PO Box 147 (Deka Road) Lyon Station, PA 19536-0147 |

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| 6 | Skip Barnes Plant Manager Exide Technologies |
| 7 | Peter Manousos First Energy Senior Scientist |
| 8 | John Shimshock Sr. Air Environmental Specialist RRI Energy |

Comments and Responses

BERKS COUNTY

| | | Nonattainment Boundaries |
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| 1. | Comment: | Commentators support DEP's recommendations for not designating all of Berks County as nonattainment for the 2008 lead National Ambient Air Quality Standard (NAAQS). (1, 3, 4, 5) |
| | <i>Response:</i> | <i>The Pennsylvania Department of Environmental Protection (Department or DEP) appreciates the support. In the Federal Register notice of November 12, 2008 concerning the 2008 lead NAAQS, the United States Environmental Protection Agency (EPA) presumptively defines a nonattainment area as a full county associated with the air quality monitor recording a violation, unless analyses indicate another boundary should be defined (73FR 66964). Other states recommending nonattainment areas for the new lead NAAQS have also recommended partial counties.</i> |
| 2. | Comment: | DEP should consider the Exide area as nonattainment and the balance of the county as unclassified based on East Penn being a good neighbor and Exide having historical violations. (2) |
| | <i>Response:</i> | <i>The Department is unable to recommend that the balance of the county other than the Exide area be "unclassified." The Department used data from monitors, facility-reported emissions and air quality modeling to determine the nonattainment areas, as directed by EPA. In the final rule for the 2008 lead NAAQS, EPA states that an area with an existing violating monitor must be designated as nonattainment, as follows: "For each monitor or group of monitors that exceed a standard, nonattainment boundaries must be set that include a sufficiently large enough area to include both the area judged to be violating the standard as well as the source areas that are determined to be contributing to these violations." (National Ambient Air Quality Standards for Lead; Final Rule, 73 Fed. Reg. 66,964, at p. 67,032, November 12, 2008.)</i> |
| 3. | Comment | The Lyons area should be designated as "unclassifiable" with the lead NAAQS to allow DEP time to collect ambient lead monitoring data in accordance with the revised lead monitoring reference methods, and to collect ambient lead data that are representative of "ambient air." (5) |
| | <i>Response:</i> | <i>Based on current data, the Department is unable at this time to recommend the area around East Penn in Lyons be "unclassified." See response to comment #2 above and also response to comment #30.</i> |

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| 4. | Comment: | DEP's proposed designation of lead nonattainment areas based on political subdivision boundaries rather than on defined areas of projected impacts may overstate the extent of the proposed lead nonattainment areas. DEP should refine the boundaries of the two Berks County nonattainment areas to areas more reflective of the actual lead extent as determined by air quality modeling or ambient concentrations. Commentators suggested other ways to draw boundaries such as township and range, areas within a radius, roads or latitude and longitude. (3, 4, 5, 6) |
| | Response: | <i>The Department's use of existing municipal boundaries for the nonattainment area factored in a margin of safety. The Department intends to work with EPA during the 120-day consultation period prior to the publication of the proposed lead NAAQS designations. The Department will submit comments in response to EPA's "120-day letter," if EPA's proposed designation boundaries differ from DEP's recommendations; additional modeling will be conducted, if necessary, in support of the DEP response to EPA's "120-day letter." Upon publication of the proposed attainment, nonattainment and unclassifiable areas in the Federal Register, comments may be submitted directly to EPA by the general public.</i> |
| 5. | Comment: | We recommend that DEP define the Berks County lead nonattainment areas using roads and/or latitude/longitude coordinates to bound the areas instead of defining entire municipalities. There is ample precedent for EPA to use roads or other techniques to define partial county lead nonattainment areas, as can be seen in their list of Lead Maintenance Areas in the EPA "Green Book." (3, 6) |
| | Response: | <i>See response to comment #4 above.</i> |
| 6. | Comment: | We disagree that the DEP's partial county lead nonattainment recommendations must be based on municipal jurisdictional boundaries. We believe that air dispersion modeling and the lead ambient monitoring conducted for the Reading Airport and Kutztown University sites support the identification of only portions of municipalities as lead nonattainment. (3) |
| | Response: | <i>See response to comment #4 above and response to #28 below.</i> |
| 7. | Comment: | We request that the DEP make public the results of the dispersion modeling used to determine the location of the maximum 3-month average lead concentrations associated with lead sources in the Laureldale and Lyons areas. (3) |
| | Response: | <i>The modeling results were provided to the public at the public meeting held by the Department in Berks County on October 21, 2009, and the receipt of this information was acknowledged by the commentator. In addition, under a Right-To-Know request, the commentator received data that the Department used in conducting its modeling.</i> |
| 8. | Comment: | DEP dispersion modeling should be further utilized to refine the extent of the proposed North Reading Nonattainment Area to be less than the full area comprised by the municipal boundaries proposed. A smaller area can be identified. For the North Reading Nonattainment Area, DEP modeling does not show ambient lead levels exceeding the standard in Alsace |

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| | | Township and requests that municipality be unclassifiable, not nonattainment. If municipal boundaries are used, the nonattainment area should include only Laureldale Borough and Muhlenberg Township. (6) |
| | <i>Response:</i> | <i>The Department disagrees. The Department's modeling showed lead concentrations that are greater than 0.075 micrograms per cubic meter (1/2 the lead NAAQS) over portions of Alsace Township. The Department used this threshold to account for potential model error. See also the response to comment #4 above.</i> |
| 9. | <i>Comment:</i> | The Department's geographic designation of the North Reading Nonattainment area is excessive due to the generic inclusion of the entire land area of Muhlenberg Township. Air quality concentrations at the Reading Airport are well below the 2008 NAAQS. DEP modeling indicates that a significant portion of the township is less than half the standard. The commentator suggests a very specific area around Laureldale utilizing roads as the boundary, noting that EPA has approved nonattainment areas using roads in the past. (4) |
| | <i>Response:</i> | <i>The sample media used to collect particulate matter at the Reading Airport is not acceptable under the conditions of a Federal Equivalent Method (FEM) so that data cannot be used by the Department to demonstrate attainment. Therefore, it was not relied upon other than as a general indicator of the local nature of lead and support for a smaller nonattainment area.</i> |
| 10. | <i>Comment:</i> | DEP's modeling assumed that lead dispersion is similar in nature to gas dispersion from a source, a conservative approach that is normal practice. The commentator believes that given the density of lead relative to air or other gases, it is expected that the projected modeled dispersion zones would in actuality be smaller. (4) |
| | <i>Response:</i> | <i>The Department agrees that a conservative approach was used in making its recommendations for the lead NAAQS designations. The Department will work with EPA during the 120-day consultation period and will also submit comments, in response to EPA's "120-day letter." If the proposed designations differ from DEP's designation recommendations, additional modeling will be conducted, if necessary, in support of the DEP response to EPA's "120-day letter." To this end, the Department will evaluate the feasibility of including source-specific particle emissions parameters in the model that could account for particle deposition. Upon publication of the proposed attainment, nonattainment and unclassifiable areas in the Federal Register, comments may be submitted directly to EPA by the general public.</i> |
| 11. | <i>Comment:</i> | The commentator is concerned about the stigma of being located in a lead nonattainment area and subject to unnecessary burden in responding to State Implementation Plan (SIP) requirements, since the information demonstrates the facility should not be included in the area. (4) |

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| | <i>Response:</i> | <i>The Department appreciates these concerns. If a source is not an actual or potential source of lead emissions, the operation of the source in a lead nonattainment area would not likely add additional SIP requirements.</i> |
| 12. | Comment: | We also request that the DEP review the company-provided meteorological data to ensure it is of acceptable quality for use in air dispersion analyses or in wind rose qualitative analyses. In particular we request that the DEP review the data to ensure it has been audited and that the wind direction/wind speed data is accurate. (3) |
| | <i>Response:</i> | <i>The Department will request that the owners of Exide and East Penn provide appropriate documentation to verify that proper quality assurance/quality control procedures were performed during the meteorological measurement period. The Department used existing meteorological data because it was the best available data for modeling. The meteorological data at the Reading Airport is not representative of the facilities due to the terrain.</i> |
| 13. | Comment: | We recommend that the DEP revise the extent of the proposed lead nonattainment areas in Berks County based on the results of additional dispersion modeling and based on a spatial interpolation analysis of the lead ambient sampling data collected by Exide and East Penn in the vicinity of their Laureldale and Lyons operations. We recommend that DEP use the methodology described in the EPA document “ <i>Guideline on Procedures for Constructing Air Pollution Isopleth Profiles and Population Exposure Analysis</i> ” (EPA-450/2-77-024a). This is the EPA document referenced in “ <i>Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or PM10 Data</i> ”, which DEP cited on page 5 of the proposed lead attainment designation recommendation report. (3) |
| | <i>Response:</i> | <i>Monitoring data collected by the owners/operators of facilities is not under the control of the Department and is not considered part of the EPA-approved monitoring plan. The data will not be used by EPA in determining attainment of the lead NAAQS or in making designation decisions. Since these monitoring points cannot be used, this makes spatial interpolation an inappropriate methodology for recommending nonattainment areas boundaries.</i> |
| 14. | Comment: | Liberty Environmental has conducted lead air dispersion modeling to assess the extent of elevated lead concentrations in the vicinity of the large lead sources in Berks County. This modeling was done using the on-site meteorological datasets, allowable emission rates, but not fugitive emissions from truck traffic, roadways or smelter process fugitive emissions. Based on the air dispersion modeling results presented on 11/10/09, we suggest that DEP include the following municipalities in the 2008 Lead NAAQS Designation Recommendations to the EPA: (1) Lyons Nonattainment Area – Borough of Lyons; Richmond Township; Maxatawny Township; Rockland Township; Longswamp |

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| | | <p>Township; Borough of Topton; and, Upper Macungie Township (Lehigh County).</p> <p>(2) North Reading Nonattainment Area – Borough of Laureldale; Muhlenberg Township; Alsace Township; Lower Alsace Township; and, City of Reading.</p> <p>We recommend excluding Ruscombmanor Township, Exeter Township, Bern Township, Borough of Kutztown, and Borough of Fleetwood based on the modeling results showing very limited impacts in these areas of Berks County. We also recommend that DEP consider including only those portions of Maxatawny and Richmond Townships that are east of Route 222 (excluding the Borough of Kutztown) in the Lyons Nonattainment area. (3)</p> |
| | <i>Response:</i> | <i>The Department appreciates the modeling work done by the commentator on behalf of the Berks County Commissioners. The Department will submit comments on EPA's proposed designations in response to EPA's "120-day letter," and will conduct additional modeling, if necessary, in support of its response to the "120-day letter." During the public comment period on EPA's proposed designations, the commentator's dispersion modeling could be submitted directly to EPA for consideration.</i> |
| | | Modeling and Emission Factors |
| 15. | Comment: | We recommend that the DEP conduct air dispersion modeling to assess lead impacts associated with Berks lead sources operating at permitted levels (allowable or potential emissions) in addition to modeling actual lead emission rates. (3) |
| | <i>Response:</i> | <i>The Department's modeling used actual lead emission rates as provided by the facilities; no additional modeling will be conducted prior to the receipt of EPA's "120-day letter." The Department will submit comments in response to EPA's proposed lead NAAQS designations and will conduct additional modeling, if necessary, in support of its response to the letter.</i> |
| 16. | Comment: | We recommend that fugitive lead emissions from truck traffic on plant roadways and uncaptured secondary lead smelter furnace fugitive emissions be evaluated via modeling. We suggest that DEP use reasonable estimates of fugitive dust emissions based on AP-42 silt sampling of the Exide and East Penn roadways, analysis of the dust for lead content, and estimates of truck traffic volumes. We recommend that DEP include reasonable estimates of fugitive lead dust emissions for Exide and East Penn operations in the modeling. The fact that the secondary lead smelter National Emission Standard for Hazardous Air Pollutants (NESHAP) (40 CFR 63 Subpart X) and the 1980's PA Lead SIP addresses fugitive lead dust emissions from truck traffic on plant roadways indicates that lead dust emissions should be estimated and included in the modeling analysis. (3) |
| | <i>Response:</i> | <i>The Department believes that fugitive emissions impact areas are very close to the facilities and are not likely to contribute significantly to the modeled lead concentrations that ultimately determine the nonattainment area boundaries. DEP will not conduct any additional modeling prior to the</i> |

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| | | <i>receipt of EPA’s “120-day letter.” Additional modeling will be conducted, if necessary, in support of the DEP response to the “120-day letter.” During the public comment period on EPA’s proposed designations, the commentator’s dispersion modeling could be submitted directly to EPA for consideration.</i> |
| 17. | Comment: | We also recommend that the DEP include in the modeling analysis elevated lead emissions associated with reported startup, shutdown, and malfunction events at the secondary lead smelters. (3) |
| | Response: | <i>The lead NAAQS is a long-term standard based on rolling 3-month average concentrations. Startups, shutdowns, and malfunctions are short-term events that are not likely to significantly affect a long-term average concentration.</i> |
| 18. | Comment: | No discussion is provided regarding the Maximum Achievable Control Technology (MACT) Startup, Shutdown and Malfunction (SSM) provisions that have been vacated by the Courts. It is our understanding that this Court decision potentially invalidates source claims of exemption from MACT standards during SSM events. (3) |
| | Response: | <i>See the response to comment #17 above in regard to MACT SSM impact on recommendations for designations. The court decision will be reflected in any revision to the permits for the Berks lead smelters, and will be addressed in the development of any State Implementation Plan required for lead attainment. Irrespective of permit revisions, the permittee is obligated to comply with applicable requirements.</i> |
| 19. | Comment: | We recommend that DEP require the lead smelter sources to conduct capture efficiency testing using EPA Method 204 to measure the lead fume capture efficiencies or to demonstrate that all lead sources are located in areas that meet EPA criteria for total enclosures. We do not believe that the periodic exhaust hood velocity checks required under the secondary lead smelter NESHAP (40 CFR 63 Subpart X) are adequate to demonstrate 100% capture of lead fumes and these annual checks are clearly not adequate to demonstrate continuous compliance with total enclosure criteria. Pending demonstration of 100% capture by the companies we recommend that DEP use a conservative assumption regarding fugitive lead emissions from lead smelter operations – we used an assumption of 1% uncaptured lead emissions (or 99% capture efficiency by lead air pollution control devices) which effectively doubled the overall smelter lead emissions estimated based on stack emissions alone. (3) |
| | Response: | <i>As stated in response # 15, the Department modeling used actual emission rates as provided by the facilities. The testing comments are not related to the lead NAAQS designation recommendations. However, this comment has been shared with DEP’s Southcentral Regional Office (SCRO) who is charged with action on this request. SCRO will consider the commentator’s suggestions as part of the review process for permit renewals at the two Berks lead smelters. See response to comment #16 on fugitive emissions.</i> |
| 20. | Comment | We request that DEP conduct dispersion modeling for other lead emissions sources in Berks County including: Lehigh Cement; Carpenter |

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| | | Technologies; Reliant Titus Station; Boyertown Foundry; Yuasa Battery; McConway & Torley Kutztown foundry; East Penn Mfg. Kutztown operations; Glen Gery Corp. brick plant in Shoemakersville; and, PA DPW/Wernersville State Hospital.. (3) |
| | <i>Response:</i> | <i>The November 12, 2008 Federal Register notice concerning the 2008 lead NAAQS states the following: "... we are requiring monitoring agencies to conduct monitoring at sources which emit Pb at a rate of 1.0 or more tons per year. This emissions rate corresponds to two times the estimate of the lowest Pb emission rate that under reasonable worst-case conditions could lead to Pb concentrations exceeding the NAAQS." 73 Fed. Reg. 67,026. The Department utilized modeling primarily for siting of the required source-oriented monitors around sources which emit at least one ton per year; the installation of additional source-oriented lead samplers will be required in certain areas of the Commonwealth following final amendments to EPA's lead monitoring requirements. However, it should be noted that the next highest source of lead in Berks County in 2007 emitted 0.14 tons. Therefore; the Department did not consider the other sources' contribution significant enough to model for the purposes of recommending nonattainment boundaries.</i> |
| 21. | Comment: | No mention is made of lead emissions controls applicable to Yuasa Battery (located adjacent to Exide) or to permitted lead emission rates for Lehigh Cement or any other lead sources in Berks. (3) |
| | <i>Response:</i> | <i>See response to comment #20 above.</i> |
| 22. | Comment: | We recommend that DEP use allowable lead concentrations under the federal MACT and New Source Performance Standards (NSPS) for the Exide, Yuasa Battery, and East Penn sources instead of DEP imposed lead permit limits because the DEP permit limits do not appear to be enforceable as a practical matter and do not necessarily represent elevated lead emissions that can occur during SSM events (3) |
| | <i>Response:</i> | <i>The Department will not conduct any additional modeling prior to the receipt of EPA's "120-day letter." The Department will submit comments in response to EPA's proposed lead NAAQS designations and will conduct additional modeling, if necessary, in support of its response to the letter.</i> |
| 23. | Comment: | In reviewing the electronic dispersion modeling files provided October 27, 2009 by DEP in response to our Right-to-Know Law request, we see that DEP evaluated East Penn's allowable lead emissions at an emission rate of about 18.1 tons/year. We request that DEP conduct a similar evaluation of Exide and Yuasa allowable lead emissions. Our estimate of allowable lead emissions from the Exide sources, for example, resulted in stack lead emissions of approximately 8.0 tons/year using allowable MACT (40 CFR 63 Subpart X) and NSPS (40 CFR 60 Subpart KK) lead concentrations and stack volumetric flow rates. We recommend that fugitive emissions be included in addition to these stack emissions in the modeling analysis. (3) |
| | <i>Response:</i> | <i>The Department will evaluate whether or not to include fugitive and allowable emission levels if the Department conducts any additional modeling. See also response to comment #4 above.</i> |

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| 24. | Comment: | We agree that Geography/Topography and Meteorology factors may be important with regard to localized dispersion and concentrations of lead near large lead sources in Berks County. However, we disagree with the “semi-quantitative” methodology used by DEP to show “wind roses” generated from company-operated meteorological stations to support the assertions that the “driving source of the higher lead concentrations...” is from the directions of the lead smelters (pages 20 and 24 of the document). We request that the DEP provide air dispersion modeling results to support these assertions. (3) |
| | Response: | <i>Wind direction is only one factor that the Department used in recommending nonattainment boundaries. See response to comment #7 above regarding the request for air dispersion modeling results.</i> |
| 25. | Comment: | We request that the DEP provide the public with the results of the “preliminary dispersion modeling” that DEP conducted (referenced on page 12 of the Proposed Designation Recommendations” document) to support the following statement regarding the City of Reading: “The Department considered including the city in the nonattainment area in order to protect sensitive populations; however, meteorology, topography and preliminary modeling indicates that lead emissions from the contributing source are not likely to violate the standard in the city, even with a considerable margin of safety.” (page 26 of the document). (3) |
| | Response: | <i>See response to #7 above.</i> |
| 26. | Comment: | We request that the DEP provide justification for the use of 50% of the NAAQS in the lead dispersion modeling. (3) |
| | Response: | <i>The Department used the 50% of the NAAQS threshold to account for potential model error. This threshold is also consistent with the threshold established by the EPA for requesting a monitoring waiver.</i> |
| | | Monitoring |
| 27. | Comment: | Sampling stations established for attainment demonstrations in the nonattainment area should become permanent locations for on-going monitoring. (4) |
| | Response: | <i>To demonstrate attainment, data from the monitoring sites must be below the level of the NAAQS for three continuous years. The Department conducts network design assessments on a yearly basis and based on concentration readings and resource requirements makes decisions regarding whether sites will be continued. Any changes proposed in the monitoring network will be available for public comment and require EPA approval.</i> |
| 28. | Comment: | The air sampling sites at the Reading Airport and Kutztown University should be continued and evaluated in the attainment designation. (5) |
| | Response: | <i>The Department’s toxic monitoring site at the Reading Airport (which monitors for lead) will be operated and maintained for the foreseeable future. The toxic monitor at Kutztown University is part of a cooperative agreement with the Pennsylvania Institute for Children’s Health (PICEH) and is not operated by the Department. Historically, the sample media used to collect particulate matter from both locations was not acceptable under</i> |

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| | | <i>the conditions of a FEM, so that the data could not be used by the Department to demonstrate attainment. It was used in the nonattainment area designation recommendations only as a general indicator of the local nature of lead and as support for a smaller nonattainment area. However, the Department has entered into a one-year agreement with Kutztown University and a second Kutztown lead sampler was installed. This new sampler is considered an FEM device for lead, and, if operated in accordance with FEM guidelines, can be used for lead compliance purposes.</i> |
| 29. | Comment: | Ambient lead monitoring data collected by East Penn Manufacturing Company January 1, 2009 through August 31, 2009 indicates that the ambient lead concentrations are in attainment with the NAAQS, thereby supporting an unclassifiable designation. (5) |
| | Response: | <i>Monitoring data collected by facility owners/operators is not under the control of the Department and is not considered part of the EPA-approved monitoring plan. The data will not be used by EPA in determining attainment of the lead NAAQS or in making designation decisions.</i> |
| 30. | Comment: | The data that were relied upon by DEP to develop the design value for the Lyons East monitoring site were collected on property that is owned and does not represent ambient air. (5) |
| | Response: | <i>On December 11, 2009, EPA indicated that they did not concur with the Department's request to classify the data from the Lyons East site as ambient air quality data. The Department believes that the Lyons East site may still be representative of ambient air for the residential area located to the east of the monitor and that designating the area as nonattainment will provide an adequate level of public safety. A new monitor will be sited at the Lyons Borough Hall, which is located just to the east of the existing Lyons East monitor. The Lyons East monitor will be removed in 2010.</i> |
| 31. | Comment: | The data that were relied upon by DEP to develop the design value for the Lyons East monitoring site were collected using sampling methodology and laboratory analytical techniques that were developed and implemented for the previous lead NAAQS and should be considered in context of the enhanced monitoring procedures that DEP intends to implement moving forward. (5) |
| | Response: | <i>EPA has ruled that data collected using a currently approved FEM for determining ambient lead concentrations is valid under the revised lead NAAQS. The Department will continue to use the same sampling methodology, namely high-volume Total Suspended Particulate. As soon as EPA finalizes a generic laboratory analytical method for lead that will provide a lower detection limit, the Department will submit documentation requesting FEM approval.</i> |
| 32. | Comment: | The data that were relied upon by the Department to develop the design value for the DEP Lyons East ambient lead monitoring site include lead monitoring results that are significantly higher than ambient lead monitoring data collected by East Penn at the same lead monitoring site and should be re-evaluated. Any re-evaluation should be considered in context |

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| | | of the process used to propose the attainment status of the area. (5) |
| | <i>Response:</i> | <i>The lead data in question, from October 2008, was reviewed by the Department and re-analyzed by the Department's Bureau of Laboratories. The data was found to be valid data. Even if the data had been found to be invalid, other rolling 3-month averages existed in the historical dataset (2006-2008) used by the Department that exceeded the lead NAAQS level of 0.15 micrograms per cubic meter.</i> |
| 33. | Comment: | We request that DEP conduct an analysis of the lead air monitoring data that has been collected for many years in the vicinity of the Exide and East Penn smelter operations and compare this data with the lead monitoring data collected at the Reading Airport and at Kutztown University. Because the ambient monitoring data has been collected by the companies in accordance with the provisions of the Lead SIP it should be quality assured data. Ambient monitoring data is always more reliable than air dispersion modeling estimates because it does not rely on the accuracy of stack emission estimates and would capture any fugitive emissions sources or background lead concentrations that do not appear to have been included in the DEP's dispersion modeling analysis. We recommend that DEP conduct an analysis via "spatial interpolation of air monitoring data" of the extent of the likely lead nonattainment areas, as allowed by EPA guidance. (3) |
| | <i>Response:</i> | <i>The requirement for facility owners/operators in the area to monitor lead emissions was for purpose of demonstrating compliance with the conditions of a Consent Order & Agreement (CO&A) and the facilities' operating permits. Lead monitoring data collected by owners/operators of facilities or at the Kutztown site is not under the control of the Department and is not considered part of the EPA-approved monitoring plan. See response to comment #13 regarding spatial interpolation.</i> |
| | | General |
| 34. | Comment: | We encourage DEP to develop a better inventory of lead emissions as part of the development of the lead emissions reduction plans that will be necessary when EPA designates lead nonattainment areas. We recommend that the DEP develop lead emissions estimates for fugitive emissions at secondary lead smelters and lead-acid battery plants. We recommend that fugitive dust emissions from vehicle traffic on plant roadways be estimated by requiring lead sources to measure the lead content of roadway dust using EPA AP-42 analysis and emission factor methodologies. We recommend that DEP require Berks secondary lead smelters to conduct capture efficiency testing using EPA Method 204 to determine the capture efficiency of the pollution control devices that control lead emissions from furnaces, refining kettles, and other smelter operations. The uncaptured lead emissions should be accounted for in the emission inventories as fugitive lead emissions. We recommend that the DEP consider allowable lead emissions from Berks lead sources in addition to actual emissions. We suggest reviewing permits for allowable lead emission rates as well as reviewing the federal MACT and NSPS standards that apply to secondary lead smelters and lead-acid battery manufacturing plants. In addition to |

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| | | reviewing permit limits (which apply to stack sources only), we suggest including fugitive emissions in the allowable or potential emissions analysis. We suggest evaluating potential lead emissions from Berks County power plants (Reliant Titus Station, Ontelaunee Power, and Evergreen Energy – United Corrstacks) and from industrial sources like the Lehigh Cement Evansville plant in addition to the lead smelter and battery operations. (3) |
| | <i>Response:</i> | <i>These comments are not related to the lead NAAQS designation recommendations. However, the Department appreciates the recommendations and will certainly follow EPA guidance for the development of SIP inventories.</i> |
| 35. | Comment: | We agree with the PA DEP’s assessment that lead emissions are not influenced by population density or growth factors. (3) |
| | <i>Response:</i> | <i>The Department appreciates the support.</i> |
| 36. | Comment: | The PA DEP references the Lead SIP provisions that are applicable to East Penn Mfg. and Exide smelter operations in the Lyons and Laureldale areas. However, the DEP fails to describe the lead emissions controls that have been imposed by the DEP in numerous air permits issued since the Lead SIP and associated consent orders were finalized in the late 1980’s. In addition, the fact that Exide’s Title V permit has expired and not yet been reissued by the DEP is not mentioned. Finally, compliance and enforcement issues related to malodors (which can indicate the presence of fugitive emissions) are not mentioned. In light of these facts, it is difficult to accept the DEP’s statements that the sources “...are operated and controlled according to the most current federal and state regulations, as permitted and inspected by the Department.” (3) |
| | <i>Response:</i> | <i>The designation recommendation documents are not intended to describe control strategies in detail. In light of this comment, however, this statement was changed in the recommendation document to “...sources are regulated according to the current federal and state standards.”</i> |
| 37. | Comment: | Environmental regulatory and enforcement agencies, like DEP, should continue to recognize that East Penn Manufacturing has made a significant investment in enhanced air pollution control technologies and serves as a model for other businesses and industries in this regard. This company’s efforts have been successful this year in meeting the new NAAQS. (1) |
| | <i>Response:</i> | <i>The Department appreciates the investments of East Penn Manufacturing. However, lead levels during the 2006-2008 period used to determine the design value at the DEP monitors associated with this site did not meet the new lead NAAQS on which the Department based its designation recommendations.</i> |
| 38. | Comment: | The commentator encourages DEP to expedite approval of requests to install additional secondary HEPA filtration systems on existing sources at East Penn Manufacturing. (1) |
| | <i>Response:</i> | <i>These comments are not related to the lead NAAQS designation recommendations. However, this comment has been shared with the Southcentral Regional Office who is charged with action on this request.</i> |

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| 39. | Comment: | We request that the PA DEP consider identifying secondary HEPA filtration as Best Available Technology (BAT) for any new lead smelter or lead-acid battery manufacturing emissions sources in Pennsylvania and as Reasonably Available Control Measures (RACM) for existing lead sources located in lead nonattainment areas in Pennsylvania. (3) |
| | Response: | <i>These comments are not related to the lead NAAQS designation recommendations. Identification of RACM will be required for an attainment plan. The Department will consider these suggestions in the context of developing a plan for any area designated as nonattainment.</i> |
| 40. | Comment: | Concerted efforts must be made by the Department to ensure that any facility that may be contributing to the nonattainment (areas) employs technologies and procedures that reduce air pollution. (1) |
| | Response: | <i>The Department will work with the affected owners/operators of facilities during the development of emission reduction measures to demonstrate attainment and SIP revision processes to be sure that the lead NAAQS is attained and maintained expeditiously.</i> |
| 41. | Comment | Affected facilities indicated their willingness to work with the Department to attain the new lead NAAQS. (5, 6) |
| | Response: | <i>The Department appreciates the willingness of the owners/operators of the facilities to work with us.</i> |
| 42. | Comment: | We request that the DEP review with the EPA the Pennsylvania Lead SIP provisions and the CO&A between DEP and the Berks lead sources (East Penn Mfg. and General Battery, now Exide) to determine whether there are any ongoing obligations and applicable air quality requirements related to lead emission rates, stack parameters (e.g., minimum stack heights and exit velocities), work practice standards, and operation of meteorological towers and ambient lead networks. We request that any such requirements be incorporated into the Title V operating permits for these sources. We also request that any requirements stemming from the Lead SIP be addressed in the DEP's lead nonattainment recommendations. (3) |
| | Response: | <i>These comments are not related to the lead NAAQS designation recommendations. Requirements of this nature may be addressed in an attainment demonstration if EPA includes these lead sources in a nonattainment area.</i> |
| 43. | Comment: | We recommend that the DEP contact the EPA to review the results of the modeling analysis and to discuss the inadequacy of the federal MACT and NSPS standards for secondary lead smelters and for lead-acid battery plants to protect public health. In particular we request that the DEP petition the EPA to review ambient lead impacts at Pennsylvania lead sources against the 2008 lead NAAQS as part of the EPA's obligations to address residual risk under section 112(f) of the Clean Air Act. (3) |
| | Response: | <i>The Department has conveyed the commentator's modeling analysis along with the comments regarding residual risk to EPA and will be discussing modeling with EPA in the coming months. The other comments are not directly related to the lead NAAQS designation recommendations.</i> |

BEAVER COUNTY

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| 44. | Comment: | Due to independent modeling conducted, there is little contribution from the Bruce Mansfield plant to nonattainment in the Lower Beaver Valley area. Therefore, DEP should eliminate the discussion of Bruce Mansfield plant as a contributor to nonattainment in the Lower Beaver Valley area, or at least strongly de-emphasize the Bruce Mansfield plant in significantly contributing to the design value of .21 ug/m3 in the Lower Beaver Valley area. (7) |
| | <i>Response:</i> | <i>The Department agrees and considered these comments in reevaluating the contribution of Bruce Mansfield on the Vanport monitor. The recommendation for the Lower Beaver Valley nonattainment area was altered to remove Industry Borough, Shippingport Borough and Raccoon Township.</i> |

OTHER AREAS

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| 45. | Comment: | Indiana and Armstrong Counties should be classified as “unclassifiable/ attainment” due to better emission factors developed during stack testing at the Conemaugh and Keystone power plants. Furthermore, no monitoring would be necessary in these areas due to the facility emissions being less than 1 tpy of lead beginning in 2010 utilizing the new emission factors. (8) |
| | <i>Response:</i> | <i>The Department appreciates the efforts RRI Energy has made in stack testing to better quantify emissions at their Conemaugh and Keystone plants in Indiana and Armstrong counties. However, the decision to place monitors was based on 2007 emissions, and the Department was obligated under EPA’s lead monitoring rule to establish a compliant source-oriented lead monitoring network which commenced operation on January 1, 2010.</i> |