

APR 19 2013

Ms. Susan Hedman
Regional Administrator
U.S. EPA Region 5
77 W. Jackson Blvd.
Chicago, IL 60604

Re: Revised Clean Data Showing Attainment of the Lead National Ambient Air Quality Standard for the Logan County Nonattainment Area in the State of Ohio

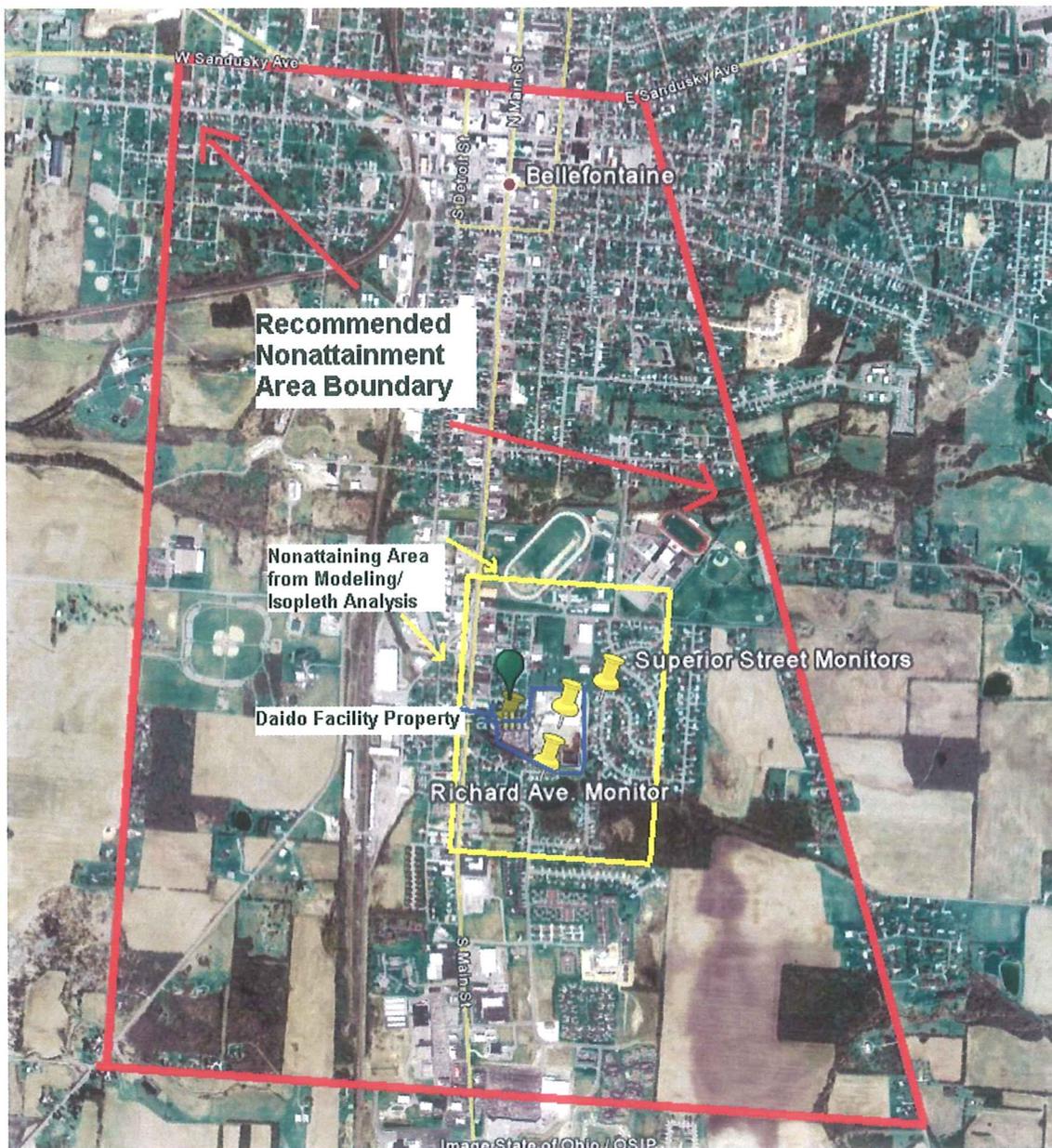
Dear Administrator Hedman:

On May 14, 2012, Ohio EPA submitted a clean data request for the above referenced nonattainment area. That request was based upon 2009 to 2011 lead monitoring data certified in U.S. EPA's Air Quality System (AQS). Today, Ohio EPA is submitting a revised clean data request based upon 2010 to 2012 lead monitoring data certified in U.S. EPA's Air Quality System (AQS). The Logan County nonattainment area is continuing to attain the 2008 lead standard of $0.15 \mu\text{g}/\text{m}^3$.

In October 2009 Ohio EPA submitted our "2008 Revised Lead Standard Recommended Designations and Nonattainment Boundaries" recommendation. At that time Ohio recommended that partial areas of Cuyahoga, Fulton and Logan Counties be designated as nonattainment for the lead standard. U.S. EPA approved our recommendation on November 22, 2010 (75 FR 71033) with an effective date of December 31, 2010.

The partial nonattainment boundary for Logan County includes sections 27, 28, 33 and 34 of Lake Township near the Daido facility located in the City of Bellefontaine (Figure 1). In June of 2009, the Daido facility permanently shut down all lead operations and since that time there has been a clear downward trend in lead emissions.

Figure 1. Logan County Partial Nonattainment Area



The Daido facility, through a contractor, historically operated four monitors recording lead levels and reporting monthly composite sampling results to Ohio EPA. When the 2008 lead standard was promulgated, 24-hour average monitoring was required beginning in January of 2010 in accordance with 40 CFR Part 50, Appendix R. The site used monthly composite samples before January 2010.

Beginning January 1, 2010 the Ohio EPA Southwest District Office monitoring staff took over operation of site 39-091-0006 in Bellefontaine in Logan County in accordance with Appendix R (approved via the 2010 monitoring plan). For the reasons discussed below,

Ohio EPA believes it is appropriate to treat the operation of the monitor as of January 1, 2010, as the operation of a new monitor.

The previous operator was an environmental contractor for Daido. Support for the lead sampling site then became the role of the Ohio EPA Division of Air Pollution Control - Groveport Field Office. Ohio EPA purchased material and constructed a new ground sampler platform that was delivered and installed at the site. That platform was set on a slightly different location from the previously used elevated platform. A new TSP sampler was purchased and installed at the site. New calibration requirements became effective in January 2010 and were employed for the new sampler. A new laboratory for analysis of the lead concentrations and a new analytical lead method became effective in January 2010.

A new PQAQO site agreement was signed between Ohio EPA’s Northwest District Office (NWDO) and Southwest District Office so that the site would share a collocated site with NWDO located in Delta, Ohio (in Fulton County) as per the PQAQO guidance. That agreement was expected to become effective January 1, 2010. Subsequently, Ohio EPA signed a new lease and Occupancy Agreement with the landowner of the site.

Monitoring data for the 2010 to 2012 period now demonstrates attainment. The 2008 lead NAAQS are considered met when the identified design value is both valid and less than 0.15 ug/m³.

Table 1. Air Quality Data: 2010 to 2012

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2010	2011	2012
39-091-0006 Richard Ave. – Daido Facility Bellefontaine	Nov -Jan	0.005	0.004	0.004
	Dec -Feb	0.005	0.003	0.003
	Jan -Mar	0.006	0.004	0.003
	Feb-Apr	0.006	0.003	0.003
	Mar-May	0.006	0.003	0.003
	Apr-Jun	0.004	0.003	0.003
	May-July	0.004	0.003	0.004
	Jun-Aug	0.004	0.003	0.003
	July-Sept	0.004	0.003	0.003
	Aug-Oct	0.004	0.005	0.003
	Sept-Nov	0.004	0.005	0.003
	Oct-Dec	0.004	0.004	0.003

Sites with one or more months of a composite analysis missing in any three-month period.

A design value is considered valid only when minimum data-completeness requirements are met.

Data for the November to January and December to February three-month rolling periods is incomplete due to the lack of sampling in November and December of 2009. As noted above, Ohio EPA commenced monitoring at the site beginning January 1, 2010 in accordance with the requirements for 24-hour sampling. In accordance with 40 CFR Part 50, Appendix R, Section (4)(a), for sites that begin monitoring lead after this rule is effective but before January 15, 2010, a 2010 to 2012 lead design value that meets the NAAQS will be considered valid if it encompasses at least 34 consecutive valid 3-month means (specifically encompassing only the 3-year calendar period).

There is also incomplete data for the 3-month means for January to March 2012 and February to April 2012 periods. Data for these periods did not meet the 75% capture criteria because only three of five samples were collected in both February and March of 2012. In each case, the missed samples resulted in data capture of less than 75%, for the 3-month mean periods but greater than 50% of the required monthly collections. Therefore, Ohio EPA is performing a conservative substitution analysis in accordance with 40 CFR Part 50, Appendix R, Section (4)(c)(ii)(B).

Typically, Ohio EPA would perform an imputation and bootstrapping procedure to substitute missing monitor values with statistically valid calculated values. This procedure, however, is dependent on the availability of a more complete data set from a close proximity co-located monitor for which a high degree of correlation can be established. This is not the case for this Logan County monitor. Therefore, the imputation and bootstrap procedure was not used to substitute missing values.

Instead, following 40 CFR Part 50, Appendix R, the highest daily value for the months of February and March for the 2010 to 2012 time period recorded by monitor 39-091-0006 were selected as replacements for the missing data, bringing each of the three months with missing data to 100% capture. The highest daily lead concentration for the month of February, 0.006 ug/m^3 , occurred in 2010, and the highest monthly average concentration for the month of March, 0.018 ug/m^3 , was observed in 2010. Using these values as replacements for all missing data in the months in question, a passing value is identified for all 34 consecutive averages in the 2010 to 2012 time period. Thus, following 40 CFR Part 50, Appendix R (4)(c)(ii)(B), "below NAAQS level test" criteria, the recorded actual monitor values can be used to demonstrate attainment of the NAAQS.

Figure 2 shows the time series of monthly average values recorded at site 39-091-0006 from January of 2008 to December of 2012, as well as a nine-month moving average of this time series.

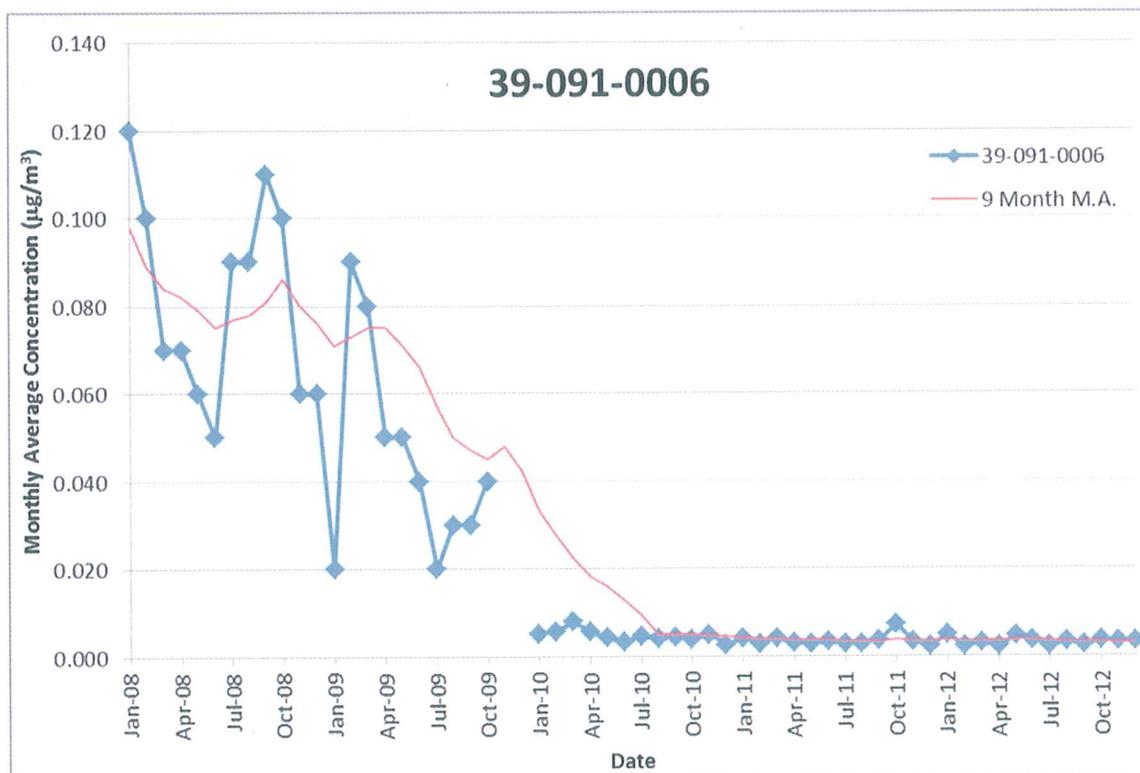


Figure 2: Monthly average lead concentrations, 2008 through 2012.

Examination of the moving average clearly demonstrates that the monthly average concentrations of lead recorded in this area have been declining steadily, and values above 0.100 $\mu\text{g}/\text{m}^3$ have not been observed in this area since September of 2008. Also clearly demonstrated is the rapid drop in lead concentrations following the shutdown of Daido Metals in June of 2009.

This analysis method is consistent with the method identified in 40 CFR Part 50, Appendix R, and the substituted value test confirms that the collected data is sufficient to demonstrate attainment of the NAAQS

Therefore, we request U.S. EPA to act in a timely manner to make a formal finding that the nonattainment area identified in Figure 1 above is attaining the 2008 lead standard. Ohio EPA plans to follow up this letter with requests for redesignation of this nonattainment area.

If you or your staff have any questions or would like additional information, please feel free to contact Jennifer Dines at (614) 644-3696.

Sincerely,



Scott J. Nally

Director, Ohio Environmental Protection Agency

cc: Bob Hodanbosi, DAPC
Jennifer Dines, DAPC