

Changes to AQS based on the 2008 Lead NAAQS Standard – Software Release Notes for July 15, 2010

The 2008 Lead NAAQS requirements have now been fully implemented in the Air Quality System (AQS).

The AQS changes are a result of the revision to the National Ambient Air Quality Standards (NAAQS) for lead that became effective November 12, 2008. The standards are defined in *40 CFR Parts 50, 51, 53, and 58* and the enhancements to AQS are based on the analysis of *40 CFR Part 50, Appendix R Interpretation of the National Ambient Air Quality Standards for Lead*.

Changes are as follows:

- The 2008 Lead NAAQS established the reporting of lead at local conditions, which correspond to the following parameters in AQS: 14129 (Lead (Tsp) at local conditions FRM/FEM) and 85129 (Lead Pm10 at local conditions FRM/FEM.) (These parameters were made available to AQS users in 2009. See 5/1/2009 memo and *Technical Note - Lead Data Reporting to AQS* at <http://www.epa.gov/ttn/airs/airsaqs/memos/>.)
- Site-level combination of daily lead data
The 2008 Lead NAAQS calculations are based on site-level summaries, similar to the PM2.5 NAAQS standard. This allows samples missing from the primary monitor to be replaced by a sample reported by a collocated monitor, ie, the site-level combination of daily data. Therefore, when creating a new lead monitor using the parameter codes for reference or equivalent methods (ie, 14129 or 85129), there is an additional site-level requirement: a primary monitor must be designated for every lead monitor using "Maintain Site" within AQS, even though there may not be a collocated sampler.
- New summary statistics
The 1978 lead NAAQS was based on calendar quarters; the 2008 lead NAAQS is based on "rolling" 3-month averages. AQS now computes the summary statistics, including monthly means and 3-month means, at the combined site-level for the new lead parameters.
- The Data Completeness Report (AMP430) now includes the lead parameters 14129 and 85129.
- The Combined Daily Value Report (AMP355) now includes the lead parameters 14129 and 85129.
- Based on the 1978 Lead NAAQS, the summary records for parameter 12128 have had a count of the number of quarterly means (count of values greater than primary and secondary standard) that are greater than 1.5 µg/m³ and meet the quarterly summary criteria. This count is no longer performed for new data and the count will be removed if previously submitted data is updated. The Quick Look Criteria Parameters Report (AMP450) had displayed this count, but this field will now be blank.
- Exceptional event processing will apply to parameters 14129 and 85129.
- The current standard for lead parameter 12128 (Lead (Tsp) at standard temperature and pressure) was retained, and the current raw data/summaries for 12128, 82128, and 85128 do not perform the substitution of ½ MDL.