Air Quality Analysis for Lead

The following information is for the ambient air monitors operated by the state, and it is uploaded to EPA's Air Quality System database. The monitoring information provided in the charts below highlights air pollutant levels that are in violation of the National Ambient Air Quality Standards, or NAAQS.

On October 15, 2008, the EPA revised the primary National Ambient Air Quality Standard for airborne lead from 1.5 micrograms per cubic meter, or $\mu g/m^3$, to 0.15 $\mu g/m^3$, calculated as three-month rolling averages.

With the lead standard revision, EPA has required states to install and start operating source-oriented monitors, particularly near sources that annually have more than one ton of lead emissions. These monitors were installed and operating by January 1, 2010. There are now a total of 13 state-operated lead monitoring sites in Missouri.

The following table shows three-month rolling average airborne lead concentrations for the last twelve months, measured at both state and contractor sites. Ambient concentrations that exceed the standard are highlighted in yellow in the table. Lead concentrations in excess of the standard have been measured near the Herculaneum primary lead smelter, near the Buick secondary smelter and near the Forest City secondary smelter. The Air Pollution Control Program is working with the operators of these facilities to reduce lead emissions and bring each of these three areas into compliance with the lead standard. Recent exceedance of the standard at Glover is the result of temporary demolition activity at the Glover facility, which is no longer in operation. Demolition procedures at Glover have been revised to reduce lead emissions.

Preliminary 3-Month Average Lead Concentrations, December 2015-January 2017, micrograms per cubic meter (µg/m^3)

Updated 3/10/2017

Site numbers correspond to map legend. Number (9) not listed corresponds to a discontinued site.

Blue highlight indicates non-ambient sites, i.e., sites within a facility fenceline.
Yellow highlight indicates exceedance of the NAAQS (3-month average greater than 0.15 µg/m^3).

Samples are collected for 24 hours every sixth day except as noted below.
EPA's Air Quality System (AQS) does not have a report that will calculate and provide three-month rolling averages for each month.
The values in this table are calculated from data reported to AQS by the department. These values may differ slightly from subsequent AQS averages if reports of averages become available or from design values (maximum 3-month average in a 3-year period).

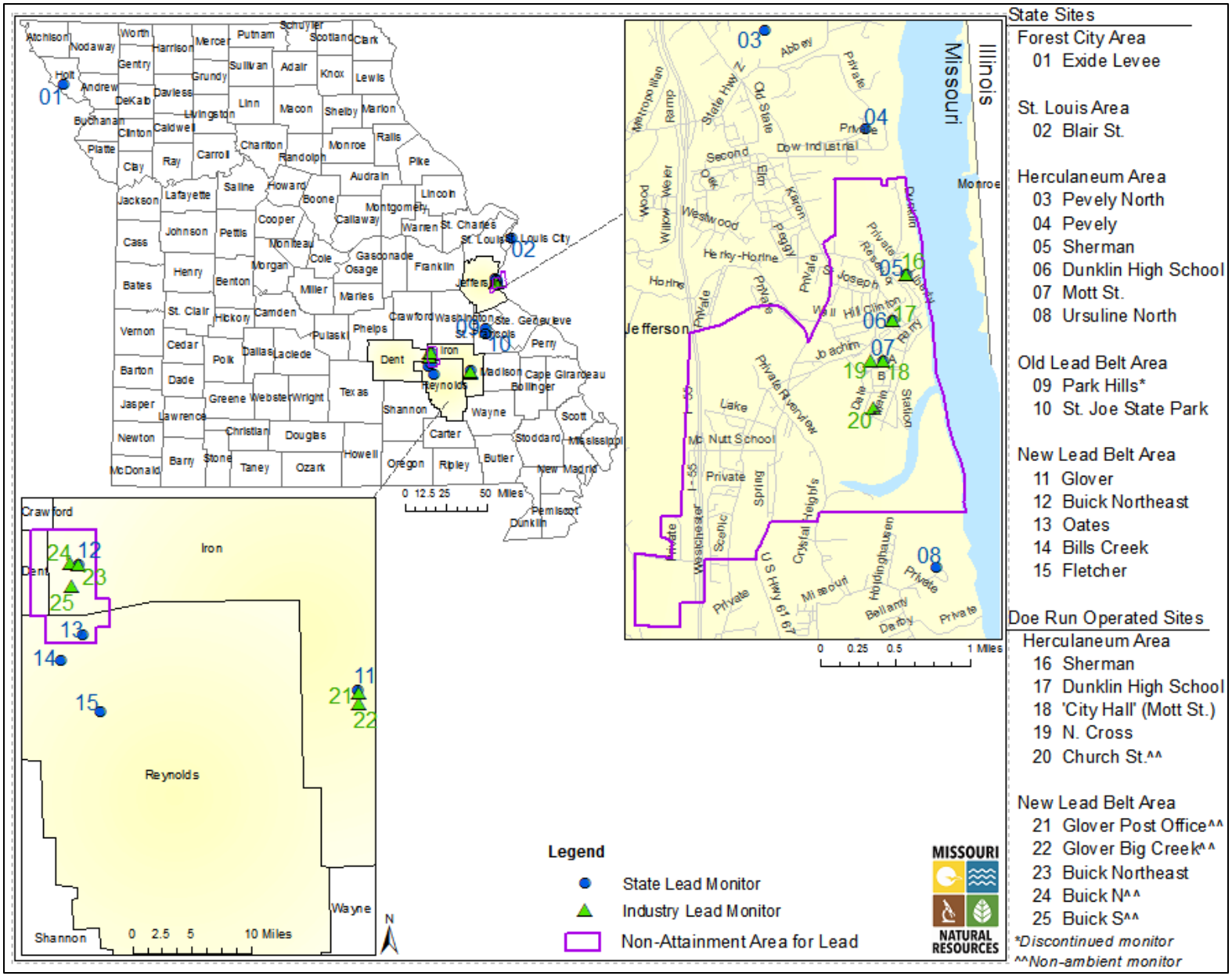
State Sites

Area/Site	Dec-Feb 2015-16	Jan-Mar 2016	Feb-Apr 2016	Mar-May 2016	Apr-Jun 2016	May-Jul 2016	Jun-Aug 2016	Jul-Sep 2016	Aug-Oct 2016	Sep-Nov 2016	Oct-Dec 2016	Nov-Jan 2016-17
Forest City Area												
1. Exide Levee	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.02
St. Louis Area												
2. Blair St.	0.01	0.01	0.01									
Herculaneum Area												
3. Pevely North	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01
4. Pevely	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
5. Sherman^	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
6. Dunklin High School^	0.06	0.04	0.03	0.04	0.05	0.05	0.04	0.04	0.04	0.05	0.05	0.04
7. Mott St.^^	0.14	0.14	0.10	0.07	0.06	0.04	0.06	0.07	0.08	0.07	0.07	0.12
8. Ursuline North	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01
Old Lead Belt Area												
10. St. Joe State Park^*	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.01
New Lead Belt Area												
11. Glover	0.07	0.03	0.03	0.02	0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.02
12. Buick Northeast	0.07	0.08	0.07	0.04	0.17	0.18	0.18	0.06	0.04	0.08	0.08	0.08
13. Oates	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02
14. Bills Creek	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
15. Fletcher	0.02	0.05	0.04	0.04	0.01	0.01	0.01	0.00	0.01	0.02	0.02	0.02

^Sherman and Dunklin High School sites sample every 3 days. St. Joe State Park site sampled every 3 days through March 2016, then every six days. Averages include all samples.
^^Mott St. site samples every day. Averages include all samples.
*St. Joe State Park collected valid samples on only 2 days out of 5 scheduled in October 2016. Preliminary 3-month averages above (shown in blue) are therefore based on incomplete data.
AQS will calculate final 3-month averages using substitution of earlier data; results may be slightly different.

Doe Run Operated Sites

Area/Site	Dec-Feb 2015-16	Jan-Mar 2016	Feb-Apr 2016	Mar-May 2016	Apr-Jun 2016	May-Jul 2016	Jun-Aug 2016	Jul-Sep 2016	Aug-Oct 2016	Sep-Nov 2016	Oct-Dec 2016	Nov-Jan 2016-17
Herculaneum Area												
16. Sherman	0.03	0.03	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.03	0.03	0.03
17. Dunklin High School*	0.05	0.04	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04
18. Mott St.**	0.11	0.11	0.08	0.07	0.06	0.05	0.07	0.08	0.10	0.08	0.11	0.12
19. N. Cross	0.11	0.11	0.07	0.02	0.03	0.03	0.06	0.07	0.08	0.06	0.05	0.05
20. Church St. (non-ambient)	0.04	0.03	0.02	0.02	0.05	0.04	0.05	0.03	0.03	0.05	0.04	0.06
New Lead Belt Area												
21. Glover Post Office (non-ambient)	0.03	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.07	0.07	0.08
22. Glover Big Creek (non-ambient)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
23. Buick Northeast	0.04	0.06	0.05	0.04	0.14	0.15	0.16	0.05	0.04	0.09	0.09	0.09
24. Buick N (non-ambient)	0.18	0.18	0.22	0.21	0.15	0.10	0.11	0.10	0.07	0.11	0.14	0.12
25. Buick S (non-ambient)	0.27	0.28	0.26	0.10	0.09	0.08	0.06	0.05	0.06	0.12	0.17	0.16

*Doe Run Dunklin High School site samples every 3 days. Averages include all samples.
**Doe Run Mott St. site samples every day. Averages include all samples.

Missouri Lead (Pb) Ambient Air Monitoring Network, 2015