

INTRODUCTION TO MAY 2019 AIR SAMPLING REPORTS

The following reports are from a sampling event in May 2019 where air samples were collected at representative interior locations throughout the Goodfellow Federal Center. A total of 174 air samples, plus 24 blanks, were collected from within 17 buildings. Samples were analyzed for seven target metals: arsenic, barium, cadmium, chromium (Total), lead, selenium, and silver. The testing was part of GSA's continual check for airborne levels of heavy metals by taking air samples inside tenant spaces at least twice a year.

One sample for lead resulted in a level of 1.1 micrograms per cubic meter of air. The World Health Organization's (WHO) guidance on air quality for lead is 0.7 micrograms per cubic meter of air for a 24-hour period, and 1.0 micrograms per cubic meter of air for an annual average. OSHA's action level for lead is 30 micrograms per cubic meter of air and the permissible exposure limit is 50. Although this sample slightly exceeded the WHO's guideline, it is well below the OSHA action level. The sample was from an area that tenants do not occupy on a continual basis. GSA is working with the housekeeping and industrial hygiene contractors to clean the area and continue monitoring.

The World Health Organization's (WHO) guidance for cadmium in outside air of industrial geographical areas is 0.015 to 0.150 micrograms per cubic meter of air. Of the air samples collected at the complex in May 2019, all results were within the guideline. One sample resulted in a detectable level of silver. The WHO does not provide guidance on airborne levels for silver. OSHA's permissible exposure limit for silver is 10 micrograms per cubic meter of air. The detectable level of silver was well below OSHA's PEL.

Sampling media historically can have inherent background barium and chromium contamination, according to the lab that analyzes the samples. Multiple sampling media were found to have this inherent background chromium contamination in the results from May 2019, so the sampling results were deemed inconclusive. Going forward, GSA's industrial hygiene contractor will use a treated sampling media to achieve conclusive data for chromium. Of the 174 samples taken, 25 resulted in detectable levels of barium. The WHO does not provide guidance on airborne levels for barium. OSHA's permissible exposure limit for barium is 500 micrograms per cubic meter of air. The detectable levels of barium were well below OSHA's PEL.

If you have any questions concerning these data, please email r6environmental@gsa.gov and GSA will provide responses from the appropriate experts.