

## INTRODUCTION TO 2019 AIR SAMPLING REPORTS

The following reports are from a sampling event in December 2018 and January 2019 where air samples were collected at representative occupied interior locations throughout the Goodfellow Federal Center. A total of 166 air samples, plus 22 blanks, were collected from within 18 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.

Samples from 13 of the 18 buildings resulted in levels less than the limits of detection of the analytical methods for the target metals. Results indicate that detectable levels of barium, lead, selenium, and silver were found in 5 buildings. However, these contaminants are at levels for acceptable indoor air quality and do not exceed recommended indoor air quality exposure limits (IAQELs). The recommended IAQELs are intended to establish prudent airborne concentrations to assess indoor air quality and establish action levels, which may be used to prompt corrective measures and/or additional exposure characterization or research.

Three air samples collected in Building 103 detected lead. One sample was from unoccupied space. The other two samples showed concentrations of 0.35 micrograms per cubic meter of air. One of the recommended IAQELs for lead is from the World Trade Center Indoor Air Task Force Working Group, which recommended a health-based level of 0.7 micrograms per cubic meter of air. The sampling results did not exceed this limit. The sampling from these areas within Building 103 has resulted in levels below the limits of detection for lead in the three years preceding this sampling and in the most-recent sampling in May 2019.

The laboratory reported trace amounts of total chromium above the laboratory detection limit on many samples, including field blanks. According to the lab, low levels of chromium can be found as a contaminant in varying levels on MCE filters for different manufacturers and lots. Therefore, the sampling data for chromium are not considered valid. It is difficult to separate the residual chromium contamination on the filters from the chromium sampled in the air. Subsequent air sampling will address this issue with the analytical laboratory to avoid the same issue.

If you have any questions concerning this data, please email [r6environmental@gsa.gov](mailto:r6environmental@gsa.gov) and GSA will provide responses from the appropriate experts.