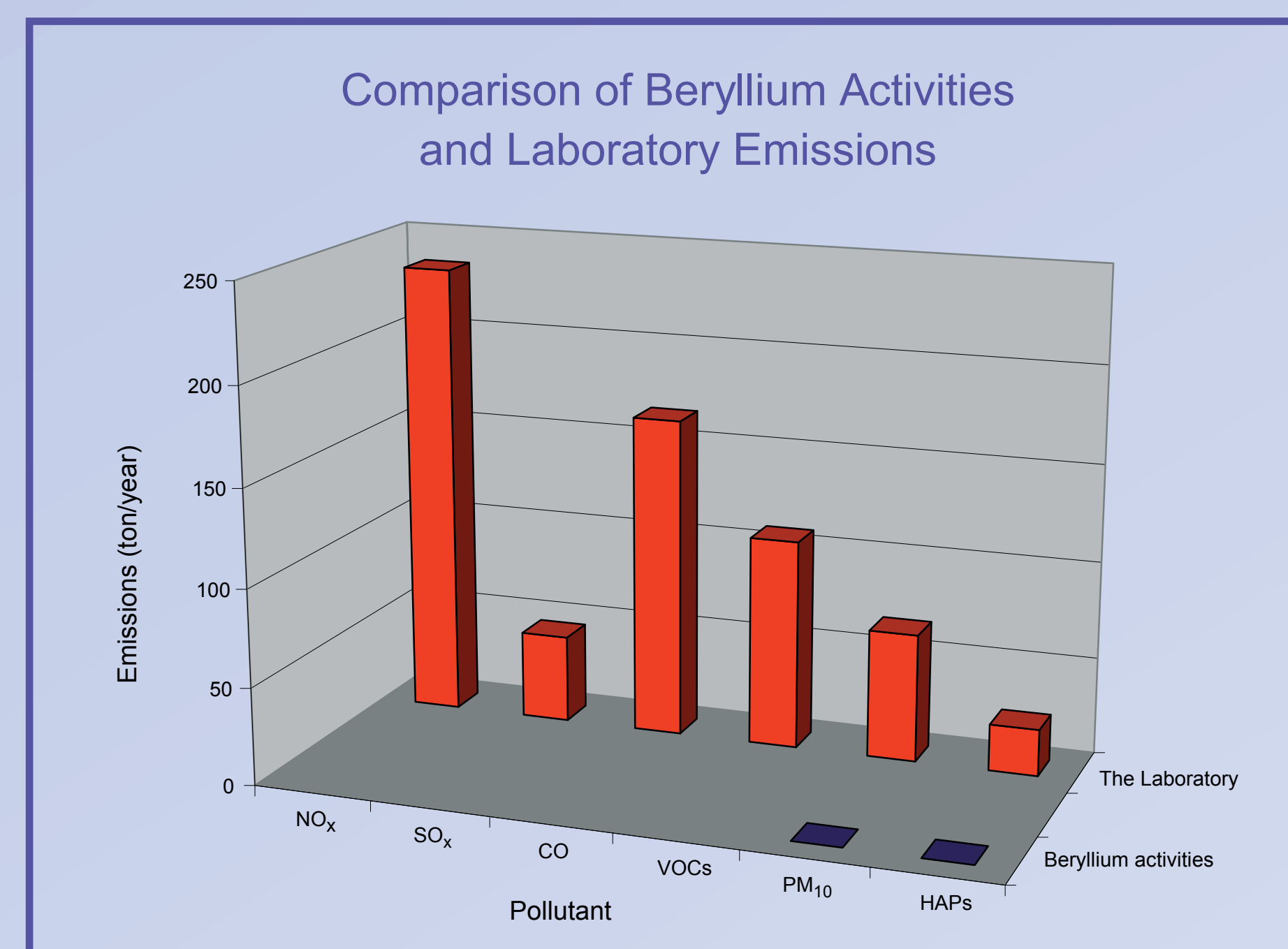


Beryllium Activities

General Description

- ❖ Several facilities at the Laboratory conduct operations involving beryllium.
- ❖ Beryllium process development and machining operations at the Laboratory are conducted to support ongoing research and development. The Laboratory also conducts beryllium operations to support its Stockpile Stewardship mission.
- ❖ Beryllium activities include machining parts, welding, furnace operations, powder operations, joining and coating operations, and research and development.
- ❖ Control equipment: All permitted activities are controlled by high-efficiency particulate air (HEPA) filtration, baghouses, or lubricating baths.



Applicable Requirements

- ❖ Beryllium activities are regulated under the EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) for beryllium at 40 CFR Part 61, Subpart C. In addition, the regulated activities are permitted under the construction permit requirements of 20.2.72 NMAC. Permits No. 632, 634, 636, and 1081 (and subsequent permit modifications or revisions) currently apply to operations at TA-3-102, TA-3-141, TA-35-213, and TA-55-PF4.
- ❖ Emissions limits: Each permitted operation has limits regulating beryllium emissions in terms of both grams per hour or 24 hours, and grams per year. Grams-per-hour and 24-hour limits are in terms of fractions of a gram. Gram-per-year limits range from 0.064 grams per year to 3.5 grams per year.
- ❖ Operational requirements: Limits are placed on the amount of beryllium that can be processed.

Proposed Monitoring, Recordkeeping, and Reporting

- ❖ Monitoring: Retain records of emissions test results and other data needed to determine total emissions. A continuous emissions monitor to measure beryllium emissions is required on the facility exhaust stack at TA-3-141. Differential pressure gauges are installed across the HEPA filtration systems at TA-3-141 and TA-55-PF4 to measure the differential pressure across the control system. At TA-55-PF4, control efficiency is verified by daily HEPA filter pressure-drop tests and annual HEPA filter-challenge tests of accessible filters.
- ❖ Recordkeeping: Maintain beryllium inventory records to demonstrate compliance with process limits. Records of pressure-drop readings and control equipment maintenance and repair must be kept.
- ❖ Reporting: Report the compliance status of the facility each calendar quarter based on data from the continuous monitoring system at T-A-3-141. Submit a semi-annual emissions report and monitoring report to the NMED.

