

Rock Crusher

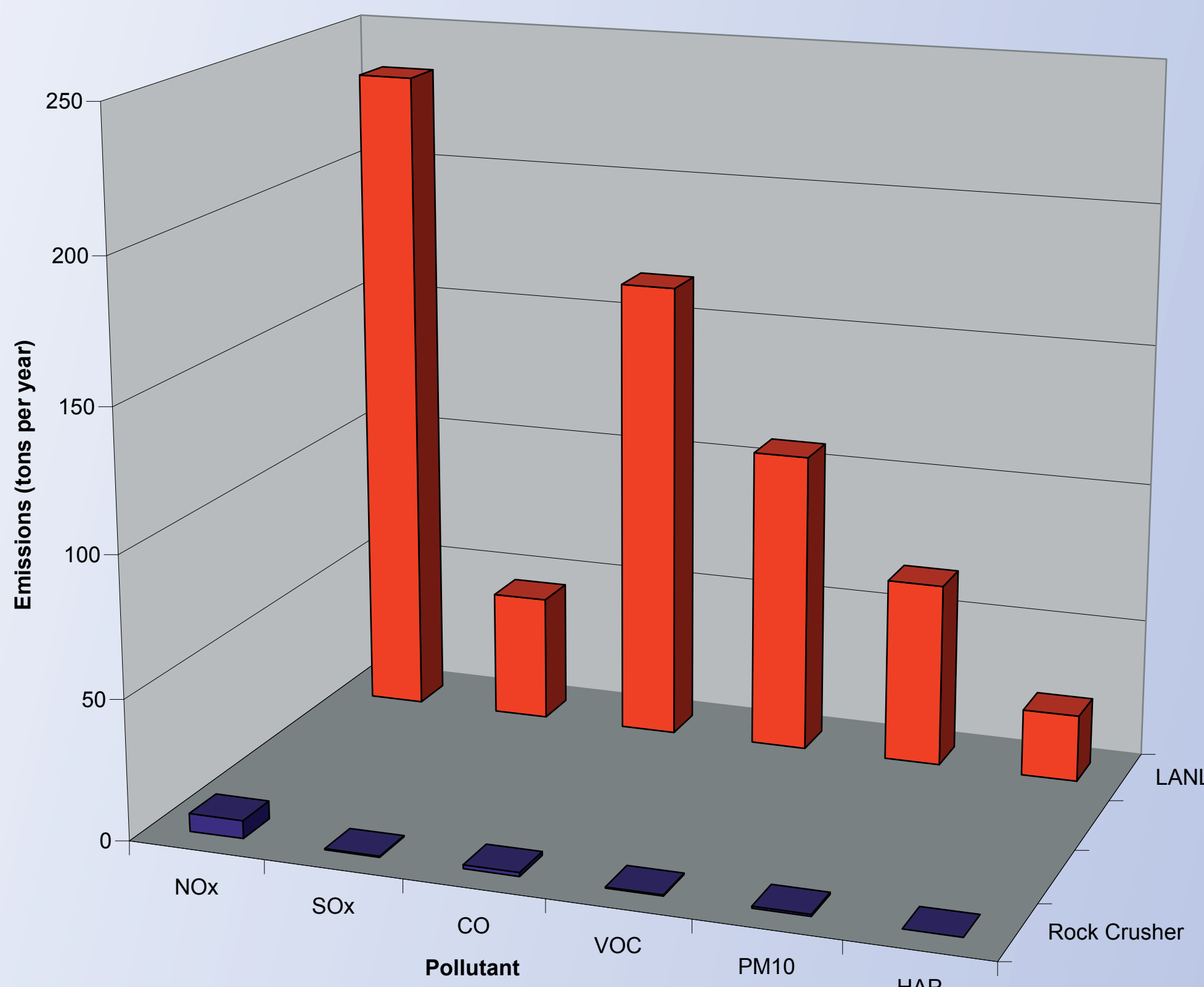
General Description

- ❖ □ The Laboratory intends to use a 150-ton-per-hour rock crusher to crush concrete and rock removed from buildings as part of decontamination and decommissioning (D&D) efforts. The crusher is portable and can be moved as needed to various D&D sites within the Laboratory's boundaries.
- ❖ □ The crusher will be used when needed and will aid in reducing the volume of construction debris. Crushed material will be used as fill at the sites where the D&D activities occur, thereby eliminating transportation and disposal issues.
- ❖ □ The crusher is powered by a 200-horsepower Detroit Diesel engine.
- ❖ □ Control equipment: The rock crusher is equipped with a water spray system to control particulate-matter emissions during loading, conveying, and crushing.
- ❖ □ The hours of operation of the rock crusher are limited to 2080 hours per year.



Rock Crusher

Comparison of Rock Crusher and LANL Emissions



Applicable Requirements

- ❖ □ The rock crusher is subject to the conditions of air-quality construction permit No. 2195 and the opacity limit in 20.2.61 NMAC.
- ❖ □ Emission limits: Permit No. 2195 specifies pound per hour and ton per year emission limits for NO_x, CO, VOC, and SO₂ from the diesel engine. Visible emissions from the engine must not equal or exceed an opacity of 20%. Visible emissions from crushing operations must not exceed 15% opacity or 10% opacity from transfer points, conveyors, screens, feedbins, and stockpiles.
- ❖ □ Operational requirements: The hours of operation shall not exceed 2080 hours per year. Truck-traffic areas must be watered to minimize dust emissions when operations are located 200 meters or less from the Laboratory boundary. The crusher must be operated at least 150 meters from the Laboratory boundary. Operation is restricted to daylight hours, not to exceed 8 hours per day and 6 days per week.

Proposed Monitoring, Recordkeeping, and Reporting

- ❖ □ Monitoring: Conduct a compliance test to measure particulate matter emissions within 60 days of initial startup.
- ❖ □ Recordkeeping: Keep daily records of hours and days of operation, production rates, horsepower, and frequency of water application.
- ❖ □ Reporting: Notify the NMED of the anticipated date of initial startup no less than 30 days before startup. Notify the NMED of the actual date of initial startup within 15 days after the startup date. Submit to the NMED a compliance test protocol for review and two copies of the test results. Submit to the NMED a semi-annual emissions report and monitoring report.

Process Flow Diagram for Rock Crusher

