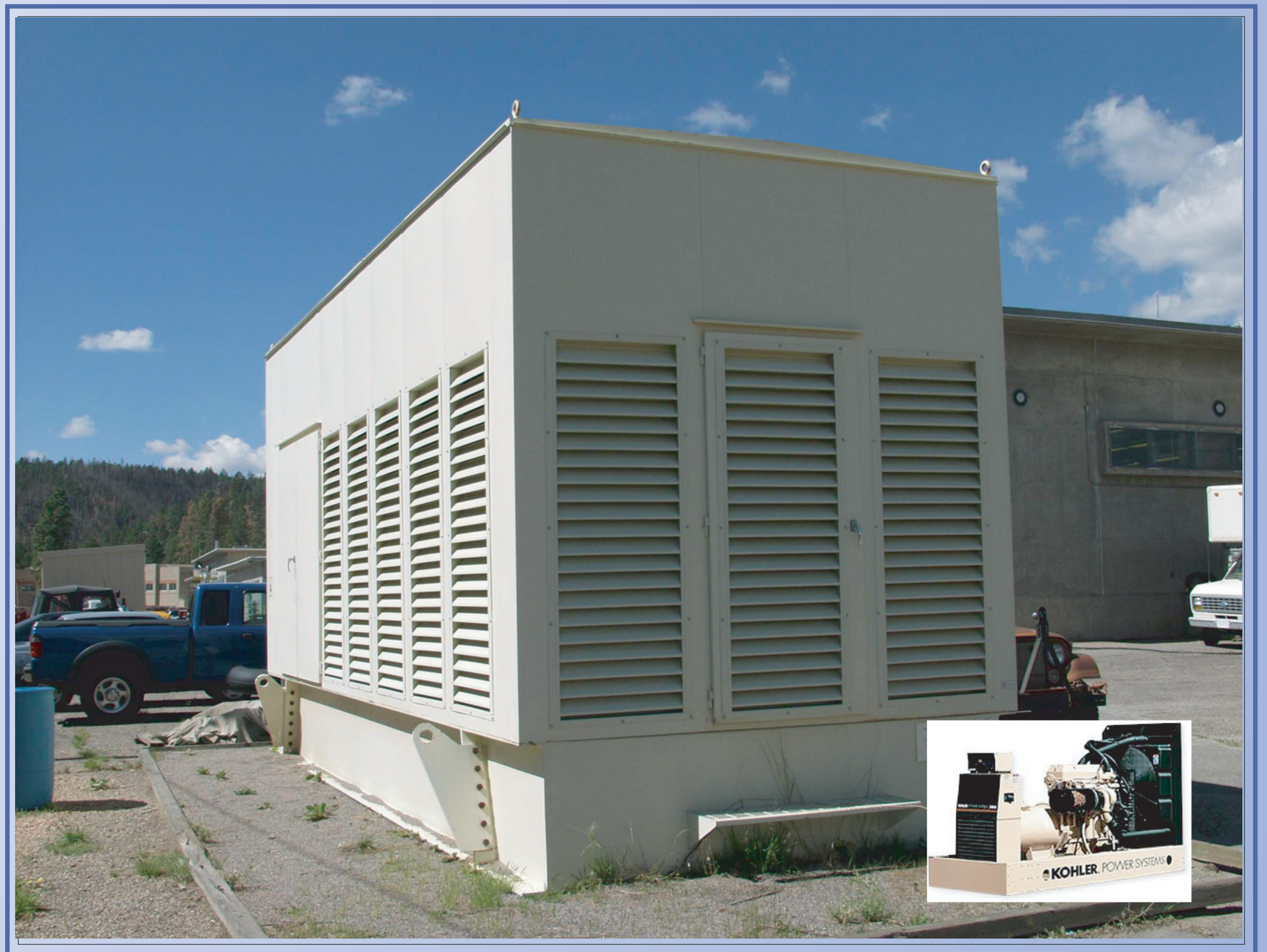


Internal Combustion

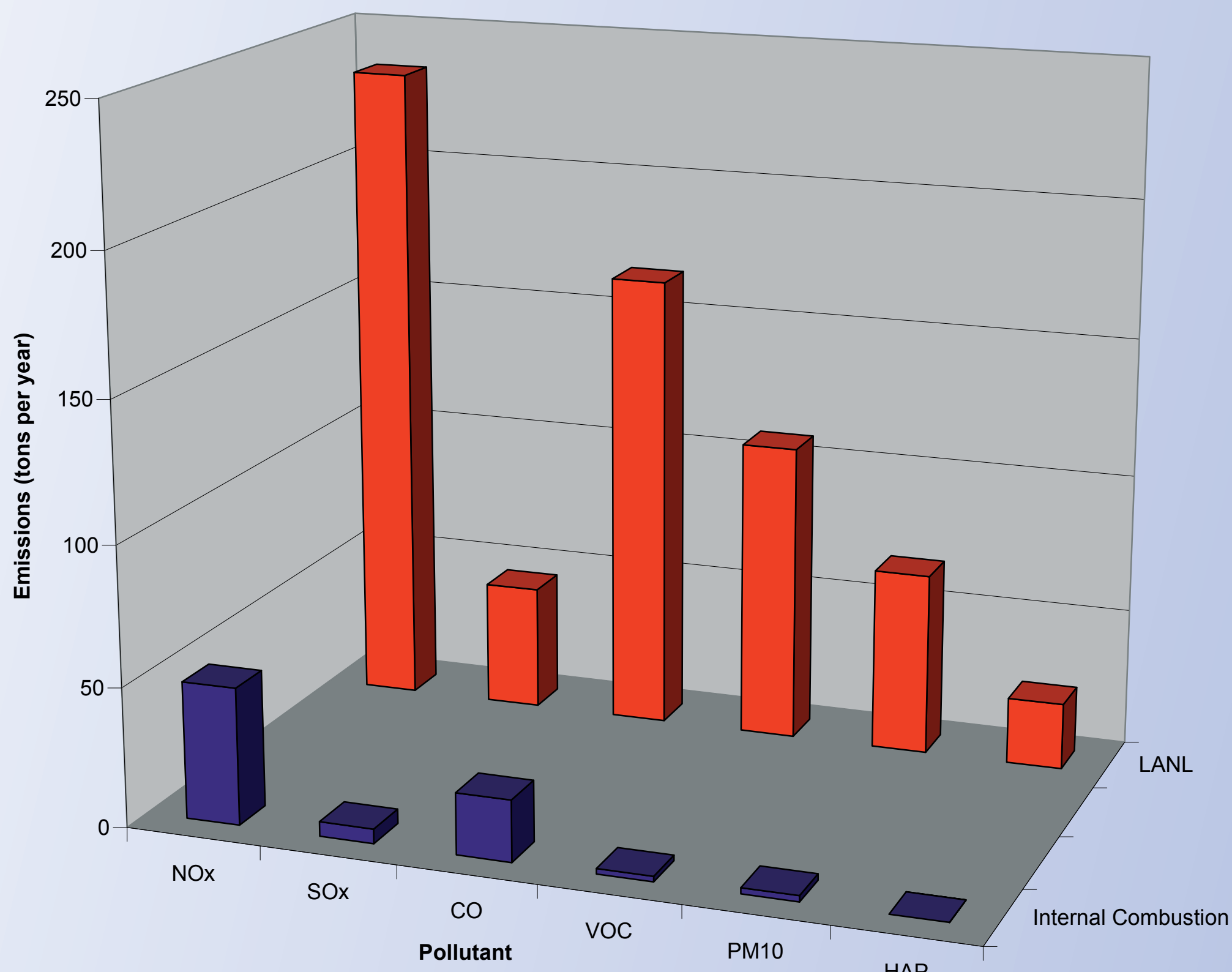
General Description

- ❖ The Laboratory maintains and operates more than 200 stationary and portable electrical generators. Stationary generators are used on standby (emergency) basis to provide power to critical systems during power outages. Stationary generators are fueled by natural gas, propane, gasoline, or diesel. Portable generators are used for temporary operations requiring remote power or for emergency backup power during outages. Portable generators are fueled by gasoline and diesel. One 1500-kilowatt stationary generator is used to support process-related activities at TA-33.
- ❖ All generators qualify as either insignificant or trivial activities under NMED guidance except for the process generator at TA-33.



Internal Combustion Generator

Comparison of Internal Combustion and LANL Emissions



Applicable Requirements

- ❖ The TA-33 generator is subject to the opacity limit of 20.2.61 NMAC and the conditions of air-quality construction permit No. 2195-F.
- ❖ Emission limits: Visible emissions shall not equal or exceed an opacity of 20%. Pound-per-hour and ton-per-year emission limits are established for NO₂, CO, VOC, SO₂, and PM in permit No. 2195-F.
- ❖ Operational requirements: The TA-33 generator is limited to 12,000 kilowatt hours per day and 1,350,000 kilowatt hours per year. It is also limited to eight hours of operation per day between the hours of 7:00 am and 5:00 pm at full capacity. Each stationary standby generator in the Laboratory's pool is limited to an average of 168 hr/year.

Proposed Monitoring, Recordkeeping, and Reporting

- ❖ Monitoring/Recordkeeping: For the TA-33 generator, track hourly and annual kWh, and record hours of operation and the time operation begins and ends each day. For the stationary standby generators, track and record hours of operation.
- ❖ Reporting: Submit a semi-annual emissions report and monitoring report to the NMED.

Process Flow Diagram for Internal Combustion Sources

