

AIR QUALITY PROGRAM

I. PURPOSE:

Air toxins are regulated by the San Luis Obispo County Air Pollution Control District (APCD) and California Air Resources Board (CARB). Air toxins are considered to be any air pollutant that negatively affects human health or the environment.

Refer to the sections below for a general description of the permitting process and permitting thresholds for various types of emissions sources.

II. SCOPE and APPLICATION

This program applies to Facilities Management and Development for the operation of boilers, diesel engines and refrigeration equipment.

III. ROLES and RESPONSIBILITIES:

A. Environmental Health & Safety (EHS)

1. Provide good customer service to meet campus needs in the form of providing technical advice and regulatory updates.
2. Provide training resources/consultative services.
3. Prepare and submit all the necessary permit applications for all air emission sources located throughout campus. Departments will be required to pay for initial permit fees and EHS will pay for annual fees; however, if there are any changes to existing permitted sources, then the same aforementioned fee structure applies.
4. Conduct comprehensive inventory of air emissions of the campus.
5. Prepare and submit the operation permit applications.
6. Prepare and submit annual emissions reports to CARB and APCD.

B. Facilities Management and Development (FMD)

1. Provide information to EHS for APCD applications
2. Report any new air emission sources to EHS.
3. Ensure all Heating, Ventilation, and Air Conditioning (HVAC) mechanics have current EPA Certification
4. Maintain/test equipment
 - Transportation – diesel engine quarterly maintenance
 - Transportation – diesel vehicle opacity testing and miles tracked
 - Electric Shop – diesel engine quarterly load testing

- Central Plant – quarterly refrigeration testing
 - Central Plant – annual leak detection system audit/calibration
 - Central Plant – quarterly emissions testing
 - Engineering Services – quarterly emissions testing (Poly Canyon Village and dairy)
5. By Feb 1 of each year, provide maintenance and test records to EHS.
 - For refrigeration reporting, use the [ARB Leak Check Report Form](#)
 - When recording the hours for the emergency generators and portable diesel equipment, refer to tables 1 and 2 below for the hour limitations.
 - Notify EHS if equipment has exceeded the operating hours
 6. When an outage is planned (not an emergency), ensure that the back-up equipment has hours available to operate during the outage. If equipment does not have enough hours, FMD must find alternative equipment (United Rentals).

IV. REQUIREMENTS

A. Permits

- Health and Safety Code require San Luis Obispo County Air Pollution Control District (APCD) to issue a permit before any person “builds, erects, alters, replaces, operates, or uses any article, machine, equipment or contrivance that may cause the emission of air contaminations.” Air pollution control districts have adopted specific rules for permitting facilities and/or sources within their area of jurisdiction.
- All permit applications must be submitted by Environmental Health & Safety (EHS). Contact EHS at least seven months before an intended project. The APCD requires 30 days to deem an application complete, and an additional 180 days to issue a permit. An Authority to Construct (ATC) permit must be received before a piece of equipment is installed.
- After construction, installation, or modifications, the startup process allows for testing, calibrating and demonstrating compliance with permit conditions included in the ATC. Following a successful startup inspection, a Permit to Operate (PTO) is issued to allow the continued operation of the equipment. The PTO is reevaluated and updated as necessary to ensure compliance and to reflect any changes in local, state, or federal requirements.

B. Boilers

- The APCD requires a permit for any natural gas boiler greater than two MMBTU, or two or more “stacked” boilers with a combined heat input of greater than two MMBTU. “Stacked” boilers are defined as two or more boilers that serve a common purpose or have a combined header.
- If there is any uncertainty about whether a boiler requires a permit, contact EHS for a consultation.

C. Diesel Engines

- Diesel engines consist of emergency generators, portable diesel equipment and diesel vehicles.
- The APCD requires a permit for any diesel generator greater than or equal to 50 horsepower.

D. Emergency Generators

- Each emergency generator is permitted to run for a limited number of hours. See Table 1 for a list of permitted generators.

Table 1: Permitted Emergency Generators

GENERATOR	LOCATION	HOURS PERMITTED (NON- EMERGENCY)
230	DINING	20
601	DAIRY MILKING BARN	20
603	LIBRARY	20
605	ADMINISTRATION	20
613	COMPUTER SCIENCE	20
618	DPTC	20
619	PAC	20
622	SPORTS COMPLEX	20
631	FACILITY SERVICES	20
661	AVILA PIER	30
663	SPANOS STADIUM	40
1091	CENTER FOR SCIENCE	40

E. Portable Diesel Equipment

- Portable diesel equipment is required to be permitted through the APCD. The threshold for permitting for is greater than or equal to 50 horsepower. Each portable equipment is permitted to run for a limited number of hours. See Table 2 for a list of the permitted portable equipment.

Table 2: Permitted Portable Equipment

EQUIPMENT #	TYPE	HOURS PERMITTED (NON- EMERGENCY)
345	PORTABLE AIR COMPRESSOR	
859	SEWER JETTER	80
624	WOOD CHIPPER	20
712	FARM OPS PORTABLE GENERATOR	20
302	ELECTRIC SHOP PORTABLE GENERATOR	20

F. On-Road Diesel Vehicles (Fleet Regulation for Public Agencies and Utilities)

- CARB requires on-road diesel-fueled heavy-duty vehicles with 1960 model year or newer heavy-duty engine to be certified to greater than 0.01 grams per brake horsepower-hour (g/bhp-hr) particulate emission standard (does not come equipped with OEM filter).

G. Refrigerant Management Program

- Refrigerant gas is a powerful greenhouse gas and contributes to ozone depletion when released into the atmosphere. Because of this, the management of refrigerant gas is regulated on the federal level by the Environmental Protection Agency (EPA) and on the state level by the California Air Resources Board's (CARB). The sections below detail the training, and inventory requirements.
- Training Requirements
All Heating, Ventilation, and Air Conditioning (HVAC) mechanics that perform maintenance, repair, or recovery services on refrigerant equipment are required to maintain an EPA certification. A copy of the EPA certification for all Cal Poly employees or contractors working on refrigerant conditioning must be provided to EHS.
- Inventory Requirements
Cal Poly is required to assign an identification number and maintain an inventory of each piece of refrigeration equipment with a capacity greater than 50 lbs. of refrigerant gas, recovery cylinders and refrigerant gas cylinders.

- Reporting Requirements
Cal Poly is required to maintain refrigerant related records for a minimum of three years. Required records include refrigerant purchase records, refrigerant disposal records, refrigerant cylinder inventory records, refrigerant equipment inventory records, and refrigerant service records. These records are kept at the EHS office.

V. FORMS/CHECKLISTS

[Diesel Generator Reporting Form](#)

[ARB Leak Check Report Form](#)

APPENDIX A: REFERENCES

SLO APCD www.slocleanair.org

CARB <https://www.arb.ca.gov/diesel/statporthome.htm>

CARB Stationary Compression Ignition
<https://www.arb.ca.gov/diesel/documents/FinalReg2011.pdf>

Portable Equipment Registration Program
<http://www.arb.ca.gov/portable/portable.htm>

Fleet Regulation for Public Agencies and Utilities
<https://www.arb.ca.gov/msprog/publicfleets/publicfleets.htm>