

Clean Air Program

Responsible Administrator: Environmental Compliance Assistant Director

Revised: August 2023

Summary: The University of California, Irvine (UC Irvine) Clean Air Program assists the campus with air pollution prevention and provides compliance assistance on South Coast Air Quality Management District (SCAQMD) and other Clean Air Act laws and regulations.

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1. Program Description

Program activities include implementing a federal operating permit program, which meets federal Environmental Protection Agency (EPA) regulations adopted pursuant to Title V of the 1990 amendments of the Clean Air Act. Title V Program activities include:

- Assisting with SCAQMD Permit to Operate administration.
- Refrigerant Management Program.
- Monitoring, record keeping, and reporting activities.
- Developing regulatory programs and informational guidelines to comply with Federal, State, and local laws and regulations.

2. Scope

This program details the elements of the Clean Air Program to comply with all Federal, State, and local laws and regulations.

3. Definitions

- **Air Pollution Control Program Organization** – The state’s implementation of the federal Clean Air Act and organization of the air pollution control program are codified in the Health and Safety Code Section 39000 – 44384. The Air Resources Board (ARB) is the agency responsible for the statewide program and direct oversight of the local and regional districts. The ARB has been incorporated as a department within the California Environmental Protection Agency (Cal/EPA).

As described above, California’s air pollution control programs are designed to meet requirements of the federal Clean Air Act. In addition, the state’s air pollution control program is authorized by statute to adopt ambient air quality standards more stringent than federal standards and implement other specific statutory programs.

AB32 Assembly Bill 32 requires emitters of more than 25,000 metric tons carbon dioxide to report greenhouse gas (GHG) emissions.

- **California Clean Air Act of 1988** – Enacted a wide range of significant changes in California’s air pollution prevention regulatory program, such as: vehicle fuel specification and adding additional types of vehicles; consumer products with respect to Volatile Organic Compounds (VOCs) content; local districts may regulate indirect sources of air pollution (ridesharing, van pooling, flexible work hours and other vehicle use by businesses, government and commuters); designating air basins as attainment or non-attainment for state standards and identify basins affected by transported pollutants; a 5 percent per year reduction of non-attainment pollutants must be achieved; and based on non-attainment districts, a specific classification will be assigned whereby additional requirements to achieve improvement in its status.
- **Certified Technician** – Any person, including contractors, who performs maintenance, service, or repair must have a current, valid, applicable U.S. Environmental Protection Agency technician certificate issued in accordance with Title 40 of the Code of Federal Regulations, Part 82, §82.40 or §82.161.
- **District Rules Limiting Emissions** – Are the principal method for reducing emissions from specific types of sources. Such rules are designed to meet the district’s ambient air quality objectives for pollutants of concern. These rules are district-specific and usually are organized by the nature of the industry, type of equipment or source. Such rules require the installation of best available control technology on significant new sources or retrofit of certain control technology on existing sources based on both technology and economic considerations or may regulate material usage.
- **Federal Clean Air Act** – A national program for air pollution control. States are required to develop state implementation plans (SIPs), which are approved by EPA. The basic objectives of the Clean Air Act are specified in the form of primary and secondary Ambient Air Quality Standards established by EPA.

Primary standards are set based on protecting public health and must be met within three years after a state’s plan is approved.

Secondary standards are to protect public welfare (visibility, aesthetics, property and crop protection) and must be met within a reasonable time.

- **National Emission Standards for Hazardous Air Pollutants (NESHAPS)** – Are established by EPA and must be implemented by the states. State air pollution control districts must consider any applicable federal standards to assure proper regulation of permitted sources. EPA has established emissions standards for certain hazardous substances under Section 112 of the Clean Air Act.
- **New Source Review** – Requirements address federal specifications for control technology, emissions limitations and assure no net increase of pollutant in a non-attainment area. New source review is conducted during the permitting process for a new source or modified source. New sources or modified sources are usually subject to best available control requirements if they exceed criteria for significance based on local district rules.
- **Permitting Authority** – Health and Safety Code Sections 42300-42301 require an air pollution control district 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. The federal Title V permitting program under the 1990 Clean Air Act amendments, implements current permitting authority and federal enforceability of district-issued permits for covered facilities.

- **Public Health and Nuisance** – Prohibition allows districts to regulate emissions that cause annoyance to members of the public, endangerment of health or property damage. Agricultural operations are largely exempt, but most other nuisances and sources of potentially toxic emissions may be curtailed under Health and Safety Code Section 41700.
- **State Implementation Plan** - The State needs to demonstrate compliance with the federal ambient air quality standards, which designates regions for effective air quality management and contains enforceable provisions to attain compliance with ambient air quality standards and other federal emissions limitations.

Non-attainment areas are areas of the state that do not meet ambient air quality standards. Prevention of significant deterioration (PSD) are areas that exceed ambient air quality standards and are not allowed to deteriorate in state implementation plans. Such areas are classified by environmental objectives.

- **Title V Operating Permit** – A national operating permit program for air pollution sources. The permit is a single air permit for a facility, which consolidates and replaces all the previously issued air permits for individual pieces of equipment.

4. Responsibilities

Department Chairs / Directors / Principal Investigators (PI)

- Report new air emission sources to Environmental Health and Safety (EHS).
- In the event there are air emission sources, recordkeeping records should be maintained and submitted to the EHS annually, or as needed.
- If PI's are using toxic air contaminants (TACs) in their laboratories, they will need to minimize the usage, so the usage rates are below the TAC Screening Emission Levels.

Design and Construction Service

- Provide building and renovation plans to EHS for review and comment.
- Report any new air emission sources to EHS.
- Use certified technicians to service refrigerant equipment.

Campus Technician / Contractor

- Campus technicians must enter data from refrigerant work performed on campus into the refrigerant management program database. Contractors must provide written records to the project/building manager.
- Responsible for compliance with the SCAQMD and EPA requirements.

EHS Environmental Management Division

- Provide good customer service to meet campus needs in the form of providing technical advice and regulatory updates.
- Provide training resources/consultative services.
- 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 fee structure applies.
- Review all construction and renovation plans to identify any new emission sources.
- Conduct comprehensive inventory of air emissions of the campus.

- Perform air quality compliance audit to ensure proper monitoring and recordkeeping requirements (MRRs) are being performed.
- Develop enhanced monitoring and compliance certification protocols.
- Maintain refrigerant inventory list.
- Prepare and submit the operation permit applications.
- Prepare and submit annual emissions report to the SCAQMD.
- Prepare and submit semi-annual & annual compliance certifications.
- Prepare and submit Carbon AB32 Greenhouse Gas Reporting.
- Prepare and submit Annual Refrigerant Report.

Facilities Management

- Provide building and renovation plans to EHS for review and comment.
- Report any new air emission sources to EHS.
- Use certified technicians to service refrigerant equipment.

5. Reporting Requirements

Annual Emissions Report

- The SCAQMD requires facilities to file Annual Emissions Report. UC Irvine must use either the SCAQMD reporting software for calculating and reporting annual air emissions of its equipment for the period from January 1 through December 30. The data collected and reported is used to update the comprehensive emissions inventory for the SCAQMD, which includes Orange County, the non-desert portions of Los Angeles and San Bernardino counties, and the Riverside county areas west of the Palo Verde Valley.

Semi-Annual/Annual Compliance Certifications

- Semi-Annual – UC Irvine is required to submit a monitoring report to the SCAQMD Compliance Team every six months. The report includes a statement indicating if all monitoring required by the permit was conducted. Monitoring may include observations, measurements, calculations, sampling and anything else involved with the operation of equipment that is required by the permit to be monitored. Also, the monitoring report must identify all instances of deviations from permit requirements. Furthermore, SCAQMD requires that the first monitoring report be submitted by August 31st for the first six calendar months and the second report for the last six calendar months be submitted by February 28th. The Semi-Annual Monitoring report need not be submitted to EPA.
- Annual – EHS Department is required to certify annually that UC Irvine follows the conditions of the Title V permit. EHS will review pertinent records each year to determine if the UC Irvine complied with all permit requirements including emission limits, work practice standards, and monitoring, recordkeeping, and reporting requirements. The certification must be submitted to the SCAQMD Compliance Team and EPA by March 1st.

Toxic Emissions Inventory Reporting (Updates)

- Under Health and Safety Code Section 44344, UC Irvine is subject to the AB2588 Program and is required to submit a quadrennial update of the campus Air Toxics Emissions Inventory to the SCAQMD once every four years.

6. Internal References

- [Guidelines for Minimizing Toxic Air Contaminant Emissions from Laboratories](#)
- [Equipment Requiring An Operating Permit From The SCAQMD](#) - This document details the types of equipment for which you would typically need to submit a Permit To Construct application (in order to obtain a Permit To Operate), as part of SCAQMD Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II.

7. References

Laws and Regulations on Stationary Source Air Emissions and Pollution Control, State Laws, Authority, Permits and New Source Requirements

- Air Resources Board Powers, Duties, And Requirements - Health and Safety Code §§39608-39650
- Local Air Pollution Control District or Local Air Quality Management District Powers, Duties, and Requirements - Health and Safety Code §§40150-43020
- New Source Requirements - Health and Safety Code §§40918-40926
- Permitting Requirements and Fees - Health and Safety Code §§40501.2-40719
- Toxic Air Contaminants
 - Identification of Toxic Air Contaminants - Health and Safety Code §§39660.5-39664
 - Control of Toxic Air Contaminants - Health and Safety Code §§39668-39912
- Air Toxic Hot Spots
 - Facilities Subject to Rules and Emission Inventories - Health and Safety Code §§44300-44346
 - Risk Assessment - Health and Safety Code §§44360-44384

Federal Laws

- Clean Air Act - 42 USC §§7401-7642

State Regulations

- Authority, Permits and New Source Requirements
 - Air Resources Board Powers, Duties, And Requirements - 17 CCR §§60000-60053
 - Local Air Pollution Control District or Local Air Quality Management District Powers, Duties, and Requirements - 17 CCR §§80100-90623
 - New Source Requirements - Local District Rules
 - Permitting Requirements and Fees - 17 CCR §§60030-60053; 90600-90623, as well as local district regulations
- Toxic Air Contaminants
 - Identification of Toxic Air Contaminants – Identification Procedures - 17 CCR §§91200-91220; 94100-94145
 - Control of Toxic Air Contaminants - 17 CCR §§93100-93103
- Air Toxic Hot Spots
 - Facilities Subject to Rules and Emission Inventories - 17 CCR §§90700-90704. [§93300 et seq. were repealed 9/96 and replaced with non-regulatory “Emissions Inventory Criteria and Guidelines”

Federal Regulations

- Air Programs, Generally - 40 CFR §§50-99
- Title V Federal Operating Permits - 40 CFR §§70 et seq.

- New Source Performance Standards - 40 CFR §§60
- Hazardous Air Pollutant Standards - 40 CFR §§61