

Equipment That Needs A Permit From The SCAQMD

In general, SCAQMD Permits to Construct and/or Operate are required to operate, build, erect, install, alter or replace any equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce or control the issuance of air contaminants. The major exception to this is for self-propelled mobile sources. SCAQMD Rule 219 lists the exemptions from permitting requirements. The following equipment items would require a permit from the SCAQMD. These equipment items might be used in the various schools at UCI, so Environmental Health and Safety has broken them out into these various categories.

1. Combustion and Heat Transfer Equipment

- Any internal combustion engines greater than 50 brake horsepower or turbines with greater than 2,975,000 British thermal units (Btu) per hour.
- Boilers, process heaters or any combustion equipment that has a heat input rate of 2,000,000 Btu per hour or greater or is fired with a fuel other than Natural gas or LPG.
- Test cells and test stands used for testing internal combustion engines that use more than 800 gallons of diesel fuel or 3,500 gallons of gasoline fuel per year.

2. Utility Equipment

- Refrigeration units used in conjunction with a control device.
- Equipment used for steam cleaning provided such equipment is greater than 2,000,000 BTU per hour or is equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas. Units that burn diesel fuel of any rating require permits.
- Equipment used for space heating provided such equipment is greater than 2,000,000 BTU per hour or is equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas. Units that burn diesel fuel of any rating require permits.
- Refrigerant reclaiming facilities.

3. Glass, Ceramic, Metallurgical Processing, and Fabrication Equipment

- Crucible-type or pot-type furnaces with a brimful capacity of greater than 7400 cubic centimeters (452 cubic inches) of any molten metal
- Crucible furnaces provided such equipment is greater than 2,000,000 BTU per hour or is equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas. Units that burn diesel fuel of any rating require permits.
- Ovens used exclusively for curing potting materials or castings made with epoxy resins, provided such equipment is greater than 2,000,000 BTU per hour or is equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas. Units that burn diesel fuel of any rating require permits.
- Hot oil, hot air, or vapor phase solder leveling equipment and related control equipment.
- Plasma arc-cutting equipment that is used to cut stainless steel or rated 30 KW or more.
- Heat treatment equipment used for heat treating glass or metals where volatile organic compounds materials are present, or equipment used for case hardening, carburizing, cyaniding, nitriding, carbonitriding, siliconizing or diffusion treating of metal objects, provided the combustion equipment involved is greater than 2,000,000 BTU per hour or is equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas.
- Furnaces or ovens used for the curing or drying of porcelain enameling, or vitreous enameling provided such furnaces or ovens involved are greater than 2,000,000 BTU per hour or are equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas.
- Wax burnout kilns where the total internal volume is greater than 0.2 cubic meter (7.0 cubic feet) or kilns used for firing ceramic ware, provided such kilns involved are greater than 2,000,000 BTU per hour or are equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas.
- Furnaces used exclusively for melting titanium materials in a closed evacuated chamber where no sweating or distilling is conducted, provided such furnaces involved are greater than 2,000,000 BTU per hour or are equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas. Units that burn diesel fuel of any rating require permits.

4. Abrasive Blasting Equipment

- Manually operated abrasive blast cabinet, vented to a dust-filter where the total internal volume of the blast section is greater than 1.5 cubic meters (53 cubic feet), and any dust filter venting such equipment.
- Shot peening operations, provided that the surface material is not removed, and control equipment venting such equipment.

5. Machining Equipment

- Equipment used for buffing, polishing, carving, mechanical cutting, drilling, machining, pressing, routing, sanding, surface grinding or turning if any lubricants used have 50 grams or more of VOC per liter of material, or a VOC composite partial pressure of 20 mm Hg or greater at 20°C (68°F), and control equipment exclusively venting such equipment.

6. Food Processing and Preparation Equipment

- Smokehouses for preparing food in which the maximum horizontal inside cross-sectional area exceeds 2 square meters (21.5 square feet).
- Commercial charbroilers and control equipment venting such equipment (subject to Rule 222).

7. Plastics, Composite, and Rubber Processing Equipment

- Presses or molds used for curing, post curing or forming composite products and plastic products where VOC or chlorinated blowing agent is present, and control equipment venting these presses or molds.
- Ovens used for the forming of plastics or composite products, where foam forming or expanding process is involved, provided such equipment involved are greater than 2,000,000 BTU per hour or is equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas.
- Equipment used for softening or annealing plastics, provided such equipment involved is greater than 2,000,000 BTU per hour or is equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas.
- Ovens used for the curing of vinyl plastisols by the closed-mold curing process, provided such ovens involved are greater than 2,000,000 BTU per hour or are equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas.
- Equipment used exclusively for conveying and storing plastic materials, provided they are in powder form.
- Laser sintering equipment used exclusively for the sintering of nylon or plastic powders and control equipment exclusively venting such equipment, if equipment involved has a heat input greater than 2,000,000 BTU per hour or is equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas.

8. Mixing and Blending Equipment

- Batch mixers which have a brimful capacity of 55 gallons or greater (7.35 cubic feet).

- Equipment used for mixing and blending of materials where organic solvents are used and the materials added are in powder form.
- Equipment used for mixing and blending of materials to make water emulsions of asphalt, grease, oils or waxes where the materials added are in either powder or fiber form.
- Equipment used to blend, grind, mix, or thin liquids to which powders may be added, with a capacity of 950 liters (251 gallons) or greater, or where supplemental heat is added or the ingredient charged (excluding water) exceeds 135°F.
- Concrete mixers, with a rated working capacity of one cubic yard or more.

9. Miscellaneous Process Equipment

- Equipment, including dryers, used exclusively for dyeing, stripping, or bleaching of textiles where organic solvents, diluents or thinners are used, or provided such equipment involved are greater than 2,000,000 BTU per hour or is equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas.
- Equipment used for surface preparation, passivation, deoxidation, and/or stripping which uses materials containing fifty (50) grams of VOC per liter of material or more, or containing chemicals besides the following: formic acid, acetic acid, phosphoric acid, sulfuric acid, 12 percent or less hydrochloric acid, alkaline oxidizing agents, hydrogen peroxide, salt solutions, sodium hydroxide and/or water and associated rinse tanks and waste storage tanks used exclusively to store the solutions drained from this equipment.
- Equipment used for any type of anodizing, hard anodizing, chemical milling, circuit board etching using ammonia-based etchant, electrocleaning, or the stripping of chromium, except sulfuric acid and/or boric acid anodizing with a total bath concentration of 20 percent or more by weight or using 10,000 amp-hours per day or more of electricity or phosphoric acid anodizing with a bath concentration of 15 percent or more by weight of phosphoric acid or using 20,000 amp-hours per day or more of electricity.
- Equipment used for coating objects with oils, melted waxes, or greases that contain organic solvents, diluents, or thinners.
- Equipment used for coating objects by dipping in waxes or natural or synthetic resins which contain organic solvents, diluents, or thinners.
- Vapor degreasers with an air/vapor interface surface area of 1.0 square foot or more, provided such degreasers have an organic solvent loss of 3 gallons per day or more excluding water or 66 gallons per calendar month or more excluding water.
 - any equipment with a capacity of more than 7.6 liters (2 gallons) using solvents that are greater than 5 percent by weight of perchloroethylene, methylene chloride,

carbon tetrachloride, chloroform, 1,1,1-trichloroethane, trichloroethylene, or any combination thereof; or

- equipment regardless of size, which was designed as a solvent cleaning and drying machine, using solvents that are greater than 5 percent by weight of perchloroethylene, methylene chloride, carbon tetrachloride, chloroform, 1,1,1-trichloroethane, trichloroethylene,.
- Ovens used to cure 30 pounds per day or more or 660 pounds per calendar month or more of powder coatings, or have a heat input rating greater than 2,000,000 BTU per hour or are equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas.
- Equipment used for the washing or subsequent drying of materials and air pollution control equipment exclusively venting such equipment, provided that volatile organic materials are emitted or the equipment involved has a heat input rating greater than 2,000,000 BTU per hour or is equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas.
- Control enclosures with an internal volume of 27 cubic feet or more unless aerosol cans, airbrushes, or handwork are used exclusively.
- Chemical vapor type sterilization equipment where ethylene oxide is used, or with a chamber volume of two (2) cubic feet or more.
- Industrial wastewater treatment equipment where VOC and/or toxic materials are emitted, or where the inlet concentration of cyanide salts through the wastewater treatment process prior to pH adjustment exceeds 200 mg/liter.
- Rental equipment operated by a lessee or which is located more than twelve consecutive months at any one facility in the District provided that the owner of the equipment does not have a permit to operate issued by the District.
- Industrial wastewater evaporators treating water generated from on-site processes only, where VOC and/or toxic materials are emitted or the equipment involved has a heat input rating greater than 2,000,000 BTU per hour or is equipped to be heated with a fuel other than natural gas, methanol or liquefied petroleum gas.