

Air Quality: Construction Project Air Permit Requirements

Department: Chemical and General Safety

Program: Air Quality

Owner: Program Manager

Authority: ES&H Manual, Chapter 30, Air Quality¹

All construction and demolition projects, whether performed by SLAC employees or subcontractors, must be evaluated for both potential emissions and reporting and recordkeeping requirements, based on the hazardous materials and equipment involved. This exhibit provides an overview of requirements and points to additional information to help meet them.

Note Examples of construction projects include demolishing or constructing buildings as well as installing or replacing boilers, chillers, generators, or transformers.

New Source Permitting – Prior to Starting Work

Construction activities per se constitute an emissions source, regardless of the type of project. To evaluate potential new emissions sources, documentation, if applicable, is required for hazardous materials, asbestos, and portable equipment.

Pre-work HazMat List

The pre-work HazMat list is the first of a set of three forms that tracks hazardous materials emissions. The construction project manager or operator must submit the completed form to the air quality program manager before the project starts so that the materials list can be reviewed and evaluated. The pre-work HazMat list is included in Air Quality: Monthly Hazardous Material Use, Fuel Consumption, and Equipment Operation Forms.²

Asbestos Notification

The Bay Area Air Quality Management District (BAAQMD) requires 10-working day advance formal notification of any project that involves demolition or major renovation. For information on how to prepare the notification, see Air Quality: Asbestos Notification Procedure.³

Note If the project involves ACM, be sure to also see Chapter 27, “Asbestos”.⁴

1 SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001), Chapter 30, “Air Quality”, http://www-group.slac.stanford.edu/esh/environment/air_quality/policies.htm

2 Air Quality: Monthly Hazardous Material Use, Fuel Consumption, and Equipment Operation Forms (SLAC-I-730-0A16J-001), <http://www-group.slac.stanford.edu/esh/forms/>

3 Air Quality: Asbestos Notification Procedure (SLAC-I-730-0A16C-001), <http://www-group.slac.stanford.edu/esh/eshmanual/references/airProcedAsbestosNotify.pdf>

4 SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001), Chapter 27, “Asbestos”, http://www-group.slac.stanford.edu/esh/hazardous_substances/asbestos/policies.htm

Demolition versus Renovation

Demolition of older buildings often involves *asbestos-containing material (ACM)* removal, although its presence is not always apparent at the outset. According to BAAQMD regulations, the definition of demolition hinges primarily on the removal of load-bearing structural members.

In contrast to demolition, *renovation* consists of the removal of ACM from a structural member. Small renovations, even if ACM is present, may be exempt from the notification requirement if the quantity of ACM is below one of the applicable thresholds as delineated in the instructions for the form. If notification is required, the same rules apply as those for demolition.

Portable Equipment Registration

Any *portable equipment* (defined as any emission source that, by itself or in or on a piece of equipment, is designed to be or capable of being transported from one location to another, including non-propulsion engines such as generator sets) transported onto the SLAC site must first be registered with the statewide portable equipment registration program, which is administered by the California Air Resources Board (CARB). Such equipment must meet all state and regional requirements for efficiency and compliance with air quality standards. (The most current regulations for portable equipment, including definitions and details about the application process, are available on the CARB web site.⁵)

Dust Control

Dust generation is an inherent aspect of many construction activities. Dust control measures must be implemented to minimize airborne particulates. Typically, this involves spraying the substrate with just enough moisture to keep the dust down without creating runoff, which becomes a stormwater management problem.

Recordkeeping Requirements – Once the Project Is Underway

Monthly recordkeeping and reporting requirements must be met for all hazardous materials and equipment, including materials and equipment brought on site by subcontractors. Required forms include

- HazMat use log, which is a follow-up form for the pre-work HazMat list
- Fuel consumption log, which records the amount of all types of fuel used
- Equipment operation log, which records the number of hours the equipment was operated

Forms to record this information are included in Air Quality: Monthly Hazardous Material Use, Fuel Consumption, and Equipment Operation Forms.⁶

5 Regulation to Establish a Statewide Portable Equipment Registration Program, <http://www.arb.ca.gov/portable/perp/newreg.pdf>

6 Air Quality: Monthly Hazardous Material Use, Fuel Consumption, and Equipment Operation Forms (SLAC-I-730-0A16J-001), <http://www-group.slac.stanford.edu/esh/forms/>

HazMat Use Report – When the Project Is Complete

A HazMat use report completes the set of three required HazMat forms, and a completed report must be submitted within 10 working days after work is completed. The form is included in Air Quality: Monthly Hazardous Material Use, Fuel Consumption, and Equipment Operation Forms.⁷

⁷ Air Quality: Monthly Hazardous Material Use, Fuel Consumption, and Equipment Operation Forms (SLAC-I-730-0A16J-001), <http://www-group.slac.stanford.edu/esh/forms/>