

APPENDIX L

Laboratory Occupancies

L.1 HOW TO USE THIS APPENDIX

This appendix contains information related to laboratory uses classified as L occupancies. It does not pertain to laboratory uses classified as B, E, or H occupancies.

In addition to the generic information listed in the “Requirements” section in Guideline E-01, the information in the “Plan Requirements” section of this appendix must be provided on your plan.

L.2 SCOPE

Research and development facilities shall be classified as a B occupancy unless the aggregate quantity of hazardous materials in a control area exceeds maximum allowable quantities. Such facilities shall be classified as H occupancies, or they shall be designed to meet the requirements for L occupancies listed in CBC 453.

Chemistry and science labs located in a middle or high school setting shall be classified as an E occupancy unless the aggregate quantity of hazardous materials in a control area exceeds maximum allowable quantities, in which case they shall be classified as an H occupancy. They may be classified as L occupancies when designed in accordance with CBC 453.

L.3 PLAN REQUIREMENTS

L.3.1 SPECIAL REQUIREMENTS – CBC Section 453 contains requirements specific to L occupancies. In addition to the usual requirements of CBC Chapters 3, 5, and 10 that pertain to L occupancies, ensure that L occupancies also conform with CBC 453.

L.3.2 TECHNICAL REPORT – As a 3rd party technical report may be required for certain L occupancies, applicants are encouraged to contact OCFA at 714-573-6108 to set up a pre-submittal meeting to discuss the parameters of the project and the hazards and proposed mitigations involved.

L.3.3 CHEMICAL CLASSIFICATION – A chemical classification shall accompany the architectural plans in order to verify that classification as an H occupancy is necessary and, if so, which occupancy group the space or building falls under (e.g., H-1, H-2, H-3, etc.). All chemical classifications shall be in the OCFA standard format; use OCFA Guideline G-06 when preparing the chemical classification documentation. Refer to Guideline G-05 for specifications for hazardous materials signage that is required to be posted whenever hazardous materials quantities exceed the permit threshold listed in CFC Section 105.

L.3.4 PLAN INFORMATION – Show the location of all control areas; hazardous materials warning signs; no smoking signs; hazardous materials alarm pull stations; hazardous and flammable materials cabinets, hoods, and enclosures; and the location of all equipment utilizing hazardous materials.

L.3.5 EQUIPMENT – All equipment utilizing or storing hazardous materials shall be designed and listed for the intended purpose and include necessary safeguards against fire, over pressurization, explosion, and other potential dangers associated with the material or process. Provide manufacturer's specification sheets, detail drawings, and process diagrams for each piece of equipment or system to demonstrate this.

L.3.6 GENERAL REQUIREMENTS – Demonstrate compliance with all other general hazardous materials provisions contained in CBC Chapter 4 and CFC Chapter 50, such as spill control; classification of protected electrical installations; ventilation; separation from incompatible materials; and standby or emergency power.

L.3.7 HAZARD SPECIFIC REQUIREMENTS – Demonstrate compliance with hazard-specific requirements contained in CFC Chapters 51 through 67, as applicable to the types of hazardous materials stored or used in the facility.

L.3.8 SPRINKLERS – An automatic sprinkler system shall be installed throughout buildings housing a Group L occupancy.

L.3.8.1 Density – The sprinkler system shall be designed for a minimum of 0.20 gpm/sf over 2,500 sf.

L.3.9 ALARM SYSTEMS – An alarm system shall be installed throughout buildings housing a Group L occupancy.

L.3.9.1 Components – The notification devices for the alarm system shall be activated by means of manual pull stations in addition to being tied into the sprinkler water flow switch.

L.3.9.2.1 Mixed Use Buildings – At least one pull station shall be located within the L Occupancy area.

L.3.9.2.2 L occupancies above 10th story – Pull stations shall be provided on each side of the 2-hour fire-smoke barrier and at each exit where L occupancies are located on the 11th story and above.