

# FIRE PREVENTION PROCEDURE

## I. PURPOSE

The purpose for this Fire Prevention Procedure is to clearly define the EH&S Fire Prevention division's submittal requirements in order to facilitate review of plans and specifications for 1.) preliminary design review, and for 2.) final review and stamping, on new construction and renovation projects on the UCSB campus. This procedure also outlines which types of field inspections the Fire Prevention division shall conduct relating to construction projects here on campus.

Existing non-compliant building will be treated on case by case basis still falling under the plan review and inspection parameters established in this Fire Prevention Policy.

## II. SCOPE

This procedure is intended to be followed by all EH&S Fire Prevention personnel. This procedure shall also serve as a guidance document for outside vendors, contractors, as well as internal campus personnel and staff.

## III. PLAN and/or SPECIFICATION SUBMITTAL REQUIREMENTS

### A. Preliminary Design Review

1. Basic site plan (drawn to scale) identifying emergency vehicle site access
2. Site plans identifying emergency vehicle access during construction
3. Building/s footprint locations
4. Occupancy use
5. Square footage of building/s
6. Type of construction
7. Hydrant locations
8. Fencing if applicable
9. Should be drawn to engineer's scale.

### B. Design Development Review

Submit complete sets of DD's including: identifying complete code analysis, footprint of building/s and site plan.

### C. Construction Document Review

Submit sets of 50% and 100% CD's including completed civil drawings.

### D. Final Review and Stamp

If plans are submitted to our offices that don't comply with this new procedure, they will forward back to the submitter without review. At any phase we will be available to meet with DCS staff and discuss specific issues for the project.

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## **Fire Suppression Systems**

1. Fire Alarm System installations, alterations or modifications.
2. Fire Sprinkler System installations, alterations or modifications.
3. Underground fire service mains and associated equipment connecting to buildings or special structures.
4. Kitchen fire suppression equipment installation, UL 300.
5. Special engineered fire suppression systems, i.e. Halon 1301, FM 200 systems.
6. All system components shall be listed from a nationally recognized testing agency.

## **Building Construction (All plans drawn to scale)**

1. Site plans identifying setbacks to property lines and other buildings.
2. Emergency access speed bumps, bollards, traffic calming devices.
3. Construction fencing/gate plans.
4. Building exiting plans, i.e. door schedules, exit hardware, direction of exit travel.
5. Illuminated exit signage & exit path illumination.
6. High-rise: Emergency communication systems, breathing air systems, emergency equipment storage rooms, emergency generators, etc.
7. Tenant improvements affecting exits, change of use.
8. Drawing set should include a code summary sheet that lists all applicable codes, give the construction type and occupancy for the project, shows the number of occupants per space and when applicable how the space was classified (e.g. conference room with 3 sf per person or 10 sf per person) and should show exit paths with the number of occupants on each path. When project are renovated it is really important to have this information as part of the drawing set.)
9. Plans should also depict sprinkler hazard rating, anchoring details for sprinkler pipe, seismic joint locations, heat rating for sprinkler heads, know box locations. All this information is needed when projects are renovated.

## **Lab Construction and Modifications**

1. Mechanical equipment, fume hoods, lasers, etc.
2. Room or area modifications which include, exiting, evacuation, occupancy load.
3. Flammable/combustible gas cabinet storage installation and arrangements.
4. NFPA 704 placarding.
5. Chemical use list (includes gases, flammable liquids and chemicals)

## **Special Processes**

1. Welding/cutting.
2. Asphalt kettles.
3. Hot-work.

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## **Special access issues**

1. Road Closures.
2. Road obstructions, i.e. trenching, paving etc.

## **E. DCFM Stamp Required**

1. All construction plans (except structural)
2. Fire protection and detection system plans and submittals
3. Fire and Life Safety product listing submittals

## **IV. FIELD INSPECTION REQUIREMENTS**

### **Building Construction**

1. Construction site emergency access and fencing
2. Exit door assemblies and egress systems
3. Exit path illumination and illuminated exit signage.
4. Site emergency vehicle access, stripping and signage.
5. Safe place of refuge.
6. Knox Box location
7. Final life safety walkthrough to ensure the above items were adhered to.

### **Fire Suppression and Detection Systems**

1. Fire alarm system new installations, alterations, or modifications.
2. Fire sprinkler system installations, alterations, or modifications.
3. Overhead hydro visual of sprinkler system, bracing/hanger assemblies.
4. Underground fire service mains leading to buildings or special structures.
5. Smoke control systems.
6. Special fire suppression or detection systems.
7. Fire extinguisher placement.
8. Gas detection systems
9. What are testing requirements for these systems?

### **Special Processes**

1. Welding/cutting.
2. Asphalt kettles.
3. Hot-work.

## **V. Commentary**

1. **EH&S encourages informal submittals for discussion purposes at interim stages in design such as 100% Schematic Design, 50% Design Development, and 50% Construction documents.**
2. **EH&S is prepared to attend design reviews and value engineering sessions and offer suggestions and advice.**

## **FIRE PREVENTION PROCEDURE**

- 3. EH&S will be the intermediary with County Fire for reviews of access and related information that County Fire is concerned with.**
- 4. EH&S will coordinate with D&CS to develop design standards for fire protection systems which will be posted on the D&CS web site.**