

INSTRUCTIONS:

- Type or print all information clearly.
- **Submit 1 original plus 5 copies of the application form and all attachments so there are 6 complete sets.**
- The signature in the box after Item 10 on the **original** application **must be in ink (NOT black ink please)**.
- Call the Standards Board at (916) 274-5721 if any assistance is needed in completing the application.
- Submit the completed application to:

Occupational Safety and Health Standards Board
2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833

1. **Applicant's name and address (the applicant is the employer or conveyance owner—NOT a consultant, agent, contractor, employee, or other such person).**

University of California, Irvine
c/o Environmental Health & Safety
Name

4600 Health Sciences Road
Street address

Irvine, CA 92697
City/state/zip code

2. **State the safety orders that are the subject of the proposed variance. List all sections of California Code of Regulations, Title 8, that apply, PLUS applicable ANSI, ASME, NFPA, API or other national consensus standards that are included in the applicable Title 8 sections.**

California Code of Regulations, Title 8, Section 5141.1 "Ventilation Requirements for Laboratory-Type Hood Operations" (c)(1)

3. **State all addresses or locations where the variance will be in effect.**

University of California, Irvine – School of Engineering Buildings: Engineering Tower, Engineering Gateway, Engineering Hall (three buildings)

4. **Has the applicant filed an appeal, or is one pending, before the Occupational Safety and Health Appeals Board (OSHAB) regarding the safety orders listed in Item 2? Yes No**
If "Yes," the OSHAB Docket No. is _____.

5. **State the number of witnesses that the applicant expects to call : 3.**
State the estimated time needed to present the applicant's case: 2 hours.

RECEIVED FEB 15 2011 OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
Docket No. <u>11-V-030</u>

NOTICE TO AFFECTED EMPLOYEES

You have a right to party status and to participate in the variance proceeding.

You have a right to inspect and copy all pleadings at a reasonable time.

You have the right to petition the Occupational Safety and Health Standards Board for a hearing.

6. The applicant certifies that the applicant will comply with the notification and posting requirements contained in California Code of Regulations, Title 8, Sections 411.2 and 411.3. More information about Sections 411.2 and 411.3 is found on Page 3 of this application form.
7. Describe the conditions, practices, means, methods, operations or processes that the applicant will use to provide health and safety equal or superior to that provided by the safety orders that are the subject of the proposed variance (attach additional pages as Attachment 7 if more space is needed).

The University of California, Irvine wishes to install and operate low flow (high performance) fume hoods at a face velocity of 70 feet per minute at an 18 inch sash height, at the locations listed in Section 2 above.

The specific fume hoods to be used at UCI will include all four fume hoods that were part of the 2008 study. Namely (all fume hoods listed below are 6 foot models):

- 1) Lab Crafters® Air Sentry
- 2) Thermo Scientific® Hamilton Concept
- 3) Labconco® Protector XStream
- 4) Kewaunee® Supreme Air LV

The manufacturer's specifications for each of these fume hoods is included in Attachment 7.

8. Describe how the conditions, practices, means, methods, operations or processes referred to in Item 7 would provide health and safety equal or superior to that provided by the safety orders that are the subject of the proposed variance (attach additional pages as Attachment 8 if more space is needed).

In the summer of 2008, the University of California, Irvine (UCI) commissioned an independent study by Exposure Control Technologies, Inc. (ECT) to compare the performance of 4 low flow fume hoods to that of a traditional fume hood. All 4 low flow models demonstrated good containment at 60, 70, 80 and 100 feet per minute face velocities at 18 inch sash heights, with ASHRAE 110 tracer gas test results well below the 0.1 ppm threshold. Additionally, all 4 of the low flow hoods performed better than the standard hood at both 80 and 100 feet per minute face velocities, with the sash fully open.

At Cal-OSHA's request, in the summer of 2010, UCI conducted an exposure study on employees using two of the fume hoods from the 2008 study. Once again, these hoods showed good containment at 70, 80 and 100 feet per minute face velocities, with ASHRAE 110 testing results well below the 0.1 ppm threshold at an 18 inch sash height. Additionally, the results of the samples that were collected during the study were below published Cal-OSHA exposure limits. Further, the ASHRAE 110 test results for these hoods were similar to the results found in the 2008 study.

In light of the data collected from these two studies, UCI is confident that when used properly, the selected low flow fume hoods provide protection that is equal to or better than that provided by traditional fume hoods.

These fume hoods will be equipped with low flow alarms and any deviations from established face velocity parameters will be corrected as soon as possible. Additionally, these fume hoods will be incorporated into UCI's fume hood inspection program, which includes face velocity measurements and smoke visualization testing.

Please refer to the reports that are included in Attachment 8 (previously submitted to the Division of Occupational Safety and Health) and the charts included in Attachment 9 for more information.

9. If the applicant is submitting photographs, blueprints or other illustrative materials to document or clarify this application, and those materials are not part of Attachments 7 or 8, those materials are attached as Attachment 9.

Photos and charts are included in Attachment 9.

10. (Optional) If this application is about conveyances covered by the Elevator Safety Orders, do ALL of the following apply: the building is under construction or otherwise unoccupied, AND neither a maintenance provider for the conveyance nor a building maintenance provider has been retained or designated? ___ Yes ___ No

Other Information (Optional)

- A. Applicant's telephone: (949) 824-6200 fax: (949) 824-3383 e-mail: magomez@uci.edu
B. Applicant's mailing address (if different from the address in Item 1 of this application):

- C. The applicant's preferred hearing location is: ___ Sacramento Southern California.

- D. If this application is about conveyances covered by the Elevator Safety Orders, please state:
(a) the number of conveyances: _____; (b) number of landings: _____; (c) whether the installation contract was signed before, on or after May 1, 2008: _____;
(d) the nature of the development: _____

- E. If the applicant wants a representative, such as a consultant or elevator company, to receive communications and act on the applicant's behalf in this variance proceeding, please state:

Name of Representative: _____ Name of Contact Person: _____

Mailing Address: _____

Telephone: () _____ fax: () _____ e-mail: _____

MORE INFORMATION ABOUT CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 8, SECTIONS 411.2 AND 411.3 (referred to in Item 6 of this application).

All applicants should carefully review Sections 411.2 and 411.3, because all applicants must provide the certification stated in Item 6 of this application. Sections 411.2, 411.3 and other CCR provisions about variances may be accessed via <http://www.oal.ca.gov>. Here is a summary of SOME of the requirements of Sections 411.2 and 411.3:

- If this application **IS NOT** about conveyances covered by the elevator safety orders, and if there are "affected employees," copies of documents specified in Section 411.3 must be posted at the place(s) where notices to employees are usually posted. If this application **IS** about conveyances covered by the elevator safety orders, those documents need not be posted in this fashion.

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- If this application IS about conveyances covered by the elevator safety orders, copies of the documents must be given to the building maintenance provider AND to the maintenance provider for the conveyance—UNLESS certain conditions are met (they are met if “Yes” is checked in Item 10 of this application and if all the facts stated in Item 10 are true).
- ALL applicants must give copies of the documents to any “authorized employee representative.”

SOME requirements of Sections 411.2 and 411.3 may be met by distributing, in accordance with these bullet points, copies of the docketed application. This application form contains the notice of affected employees’ rights referred to in Section 411.3(a)(2).

“Affected employee,” “authorized employee representative” and some other important terms are defined at CCR, Title 8, Section 403.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.



Date: 2-2-11

Applicant’s signature—IN INK—NOT black ink please

Type or print signer’s name: Marc A. Gomez

(Optional) Signer’s title: _____