

FLOOR TILE REMOVAL OPERATING PROCEDURE

APPLICATION

Removal of floor tiles containing asbestos. This procedure must be followed to ensure that safety and legal requirements are met when employees remove and replace floor tiles in LBNL buildings. It is extremely difficult to predict how much asbestos fiber (Asbestos-Containing Material, or ACM) will be released during the removal of vinyl tiles.

SPECIAL INSTRUCTIONS

- All-purpose Tyvek protective clothing, a half-mask respirator that meets NIOSH/MSHA standards (such as 3M 7255), 6-mil plastic sheets and bags, HEPA vacuum, hand sprayer with amended water, lock-down encapsulant product, absorbent towels/rags, duct/poly tape, 1-inch putty knife.
- Maintenance and Operations employees must receive the 16 hours of training required by the EPA's AHERA regulations (which call for an initial 32 hours of training for asbestos workers and 8 hours of refresher training annually).
- Each job must be reviewed by accredited EPA AHERA-trained personnel or equivalent.
- Work will be performed within OSHA's asbestos standards in accordance with Regulation 29 CFR 1926.1101.
- The EH&S Industrial Hygiene Group (IH) must be notified of each LBNL job.
- The supervisor will develop the Task Hazard Analysis (THA) for review by the EH&S Department's IH.
- The quantity of the material to be abated must be no more than the amount that can fit within a 60-inch by 60-inch asbestos waste bag.

WORK STEPS

1. Notify the appropriate Building Manager and the Industrial Hygiene Group.
2. Post the area with proper warning signs.
3. Wear all-purpose Tyvek protective clothing, cotton or leather gloves, and a half-mask respirator with HEPA filter cartridge. The respirator shall meet NIOSH/MSHA standards, as required by the OSHA respirator standard (29 CFR 1910.134), such as 3M 7255.
4. Vacuum any area where tiles are loose with a HEPA vacuum.
5. Remove loose tiles.
6. Place floor tiles in a box lined with 6-mil polyethylene. Do not attempt to break vinyl floor tile after it has been placed in a storage container or bag. Do not grind, sand, or sandblast adhesive or mastic. Do not dry-scrape.
7. If adhesive has high spots that must be removed from the floor, the following steps apply:
 - a. Scrape with a sharp chisel while vacuuming with a HEPA vacuum.
 - b. Vacuum the area with a HEPA vacuum.

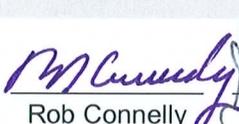
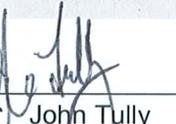
- c. Leave the floor dry in order to install new non-ACM tile.
8. Contact EH&S Waste Management (Facilities liaison) for disposal requirements. If hazardous waste disposal is required:
 - a. Mark the box with the name of the generator of the waste material, and the building and room numbers.
 - b. Attach an asbestos warning label, and double-bag boxes with two layers of 6-mil polyethylene.
 - c. Intact floor tiles are exempt from BAAQMD 11-2-304, 29 CFR 1926.58(k)(2), 40 CFR 61.145(a)(iv) and (v), and Title 22 CCR, but may be subject to local disposal-site requirements.
 - d. Contaminated materials and equipment (e.g., clothing) must be handled and labeled as hazardous asbestos-containing waste.
9. Vacuum off Tyvek suit and work gloves. Dispose of properly as asbestos-containing waste material.
10. Leave product at the site. Contact EH&S Waste Management (Facilities liaison) for disposal requirements.
11. Validate that EH&S IH has released the site based on sample test results.
12. Remove all signs and notify the Building Manager and EH&S Division.

REFERENCES

1. 29 CFR 1910.134
2. 29 CFR 1926.58(k)(2)
3. 40 CFR 61.145(a), (iv) and (v)
4. BAAQMD 11-2-304
5. 22 CCR
6. 29 CFR 1926.1101

RESPONSIBILITIES AND CONTROLS

Provide signature lines as follows:

REV NO.	SME/Title	REV/Title	APPROVED/Title	DATE	EFFECTIVE DATE
1	 Rob Connelly EH&S Industrial Hygiene Management Group	 John Tully Facilities Scheduled Work Center Structural Services Supervisor	 Dennis Nielsen Facilities Small Projects Department Head		
	 Jim Murphy Facilities Immediate Maintenance Supervisor				