

DRILLING TRANSITE OPERATING PROCEDURE

APPLICATION

The following safety and legal requirements must be observed during operations that involve drilling or cutting transite at Lawrence Berkeley National Laboratory. Transite contains asbestos, which can become airborne during drilling.

SPECIAL INSTRUCTIONS

- **Equipment required:** All-purpose Tyvek protective clothing, a half-mask respirator that meets NIOSH/MSHA standards (such as 3M No. 7255), 6-mil plastic sheets and bags, a HEPA vacuum, hand sprayer, lock-down encapsulant product, absorbent towels/rags, and duct/poly tape.
- Applies to Operations employees who have received 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).
- Drilling and disposing of transite in small quantities, converting no more than one square foot into friable material.
- Work will be performed in accordance with the OSHA's Asbestos Standard Construction regulation 29 CFR 1926.1101.
- EH&S Industrial Hygiene (IH) will be notified of each LBNL job.
- The supervisor will develop the Task Hazard Analysis (THA) for EH&S IH to review.
- The quantity of the material to be abated in accordance with the work must fit within a 60-inch by 60-inch asbestos waste bag.

WORK STEPS

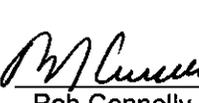
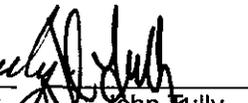
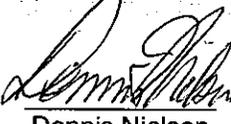
1. Notify the appropriate Building Manager and the EH&S Industrial Hygiene Group that the work will be performed.
2. Post the area with the proper warning signs.
3. Wear all-purpose Tyvek protective clothing and a half-mask protective respirator that meets NIOSH/MSHA standards, such as 3M No. 7255.
4. Lay down 6-mil plastic on the floor.
5. Pre-wet area with a hand sprayer, using a lock-down/encapsulant product (e.g., Serpiflex Shield).
6. Use the hand sprayer to keep the drilling surface area saturated while drilling.
7. Vacuum the area while drilling. Place all product removed into a 6-mil plastic bag.
8. Wipe down all tools with a damp towel or rag. Be sure to keep all materials in the bag wet (i.e., damp but with little or no free water).
9. Vacuum the area again with a HEPA vacuum.
10. Put plastic matter from the floor surface into the bag with the removed product and used towels or rags. Keep materials wet.
11. Remove protective clothing and place in a 6-mil plastic bag with the product and the

towel/rag. Keep materials wet.

12. Close **off** the opening of the bag around the hose on a HEPA vacuum.
13. Turn **on** the vacuum until the excess air is removed from the bag.
14. Twist the bag below the hose before removing the bag from the hose on the vacuum.
15. Secure the bag opening with duct tape.
16. Mark the bag with the room and the building numbers. Completely fill out the hazardous waste label and asbestos warning label. Apply the labels to the bag.
17. Put this bag into the 6-mil plastic bag.
18. Leave the bagged product at the site. Contact EH&S Waste Management for disposal requirements.
19. Remove all signs and notify the Building Manager and EH&S.

RESPONSIBILITIES AND CONTROLS

Provide signature lines as follows:

REV NO.	SME/Title	REV/Title	APPROVED/Title	DATE	EFFECTIVE DATE
2	 Rob Connelly EH&S Industrial Hygiene	 John Fully Facilities Scheduled Work Center Structural Services Supervisor	 Dennis Nielsen Facilities Small Projects Department Head	3/3/09	3/3/09
	 Michael C. Dong Facilities Operations Utility Manager	 Jim Murphy Facilities Immediate Maintenance Supervisor			