Asphalt Roofing Projects
Some Things You Should Know

Construction projects involving asphalt roof installations present many challenges for faculty, staff, students, the public accessing our buildings and the construction team. Construction activities during this process generate volatile organic compounds (VOCs), odors, dust and noise disturbances. These disruptions can create difficulties for building occupants attempting to maintain normal operations. The following information is being provided by the University of California Indoor Air Quality Committee (UCIAQC) to assist faculty, staff, facility managers and construction teams in completing asphalt roofing projects in a safe and efficient manner. The overall key to success of these projects is timely communication between the facilities staff, construction team, building occupants and other affected people,

BUILDING OCCUPANTS...*BE PREPARED & KNOWLEDGEABLE OF THE PROCESS*

- Be aware that transient asphalt odors may be introduced into or near the building as part of this construction activity. Asphalt odors are very recognizable and can be difficult to control. Exposure to asphalt fumes and dusts can cause headache and nausea in addition to skin, eye and upper respiratory tract irritation. Individuals will vary in their level of sensitivity to these odors. Under typical re-roofing conditions, occupant exposures to concentrations above recommended occupational permissible exposure limits and Cal-OSHA regulatory limits would not be anticipated. ***Individuals with asthma, allergies, or pre-existing respiratory conditions should consider alternate work locations as exposure to asphalt fumes can trigger or aggravate these conditions. If exposure to the odors and fumes results in adverse health effects, remove yourself from the area, notify your supervisor and seek treatment if necessary.***

- Understand that the existing roofing materials may contain non-friable asbestos. Removal of asbestos-containing roofing must be performed by licensed and certified asbestos abatement contractors using proper controls (trained workers, safe work procedures, shut down or isolation of HVAC system, proper handling and disposal of old roof material). This activity does not present a hazard to building occupants when performed according to Cal-OSHA regulations.

- Occupants should request detailed schedule information in order to best plan daily activities. Points to consider include:
    - Activities that may generate noise (demolition and removal of old roofing material, removal of large equipment from roof, etc)
    - Activities that may generate asphalt odors (placement of hot asphalt "kettle", will this disrupt public access? Is the kettle near my window or a primary entry door where odors could enter?)
    - Situations that may disrupt normal traffic patterns (entry door or loading dock closed to allow staging area for the contractor)

- Be prepared for the HVAC system to be shut down to prevent entrainment and distribution of asphalt odors throughout the building.

- Bring clothing appropriate for the weather as the building heating and cooling system may need to be shut down. Have a coat if temperatures are cold or wear lightweight clothing during hot periods.

- Have fans available to improve airflow in work areas. This can decrease problems associated with odors and hot, uncomfortable temperatures.

- COMMUNICATE!
    - Contact Campus EH&S for questions related to health and safety matters.

- Contact your Facilities Manager for details related to schedules and scope of work.

FACILITY MANAGER / SUPERVISORS…*COORDINATE LOGISTICS & DISTRIBUTE INFORMATION*

- Act as a liaison for receipt, distribution and dissemination of information from the contractor, EH&S and staff.
- Communicate information regarding logistics, schedules, staging areas and timing to the building occupants and other affected buildings.
- Update building occupants when changes to the schedule occur.
- Post necessary signage or direct staff to do so in order for the building occupants and the public to be made aware of safe entry and exit points for the building.
- Be prepared to relocate individuals that express concerns due to allergies, asthma or pre-existing respiratory conditions. This may involve relocation to another area of the building or to an entirely different facility.
- Have fans available to be distributed to areas with poor airflow or to use when the HVAC system is temporarily shut down.
- COMMUNICATE!
  - Contact Campus EH&S for questions related to health and safety matters.
  - Update building occupants, the contractor and EH&S regarding project status on a regular basis.

CONSTRUCTION TEAM…*WORK SAFELY and PREVENT INDOOR AIR QUALITY PROBLEMS*

- Be aware this is a non-routine event for the occupants. They are not used to these odors or noises and may be more concerned and possibly sensitive to these conditions than you or your employees.
- Communicate information regarding schedules, logistics and staging areas to the project manager(s).
- Update the project manager as soon as possible about significant changes to the process or schedule.
- Follow recommended practices for applying asphalt roofing systems.
  - Isolate or protect the HVAC system from odor entrainment
  - Ensure kettles have tight fitting lids and are used in well ventilated areas
  - Locate kettles down wind from air intakes, doors and windows
  - Control kettle temperatures to reduce risk of fire
  - Shut down the HVAC system and seal off air intakes during critical work near these areas
- COMMUNICATE!
  - Contact Campus EH&S for questions related to health and safety matters.
  - Update facility managers and supervisors regarding project status on a regular basis.