

# Guidelines for Protecting Indoor Environmental Quality During Construction and Renovation

EOSMS403B

Effective Date:



- x Incorporate IEQ goals and control strategies into the bid and project documents.
- x Brief affected parties before and during construction and renovation activities of potential impacts they may have on IEQ and steps to be taken to reduce these impacts.
- x

- Protection of the HVAC system
- Control of the pollutant source
- Interruption of the pollutant pathway (plastic sheeting barriers, etc.)
- Housekeeping
- Scheduling considerations

## B. Occupant Notification

Notifying area occupants of the proposed work, work schedule, and a description of the type of inconvenience it may cause is critical to the success of most projects. Specifically, occupants should be advised of potential odors, noise, dust generation, etc., well in advance of work so that individuals with pre-existing medical conditions can make alternate arrangements or go on a modified work schedule.

## C. Pollution Control

Prior to commencement of work, project personnel should be made familiar with KSU's emergency procedures, and other safety regulations. Project personnel should wear appropriate PPE

### 1. HVAC Protection

Where feasible, the HVAC system should be shut down for the duration of the demolition project. All return air openings within the designated work area should be sealed with 6-mil polyethylene sheeting and secured with duct tape.

When total HVAC isolation is not feasible, filter media with MERV of 8 should be used at each return grill. The filters should be frequently inspected during the project and replaced as needed.

The mechanical room must not be used to store construction or waste materials.

### 2. Source Control

All surfaces to be disturbed should be misted with water to minimize airborne dust. When possible, products emitting lower amounts of odor or volatile organic compounds (VOC's) should be used. If feasible, electric powered equipment should be used in lieu of gasoline powered equipment.

### 3. Pollutant Pathway Interruption

All return air openings within the designated work area should be sealed with 6-mil fire resistant polyethylene sheeting and duct t

As far as practicable, negative pressure ventilation units should be exhausted to the outside of the building. Careful installation and daily inspections should be performed to ensure exhausted contaminants do not reenter the building through open windows or the air intake of the HVAC system and the ducts do not release construction debris into uncontaminated areas of the building.

The negative pressure systems should continuously operate while work is in progress. Damage and defects in the enclosure system are to be repaired immediately upon discovery.

Maintain the occupied spaces under positive pressure relative to the outside.

#### 4. Housekeeping

After completion of the work, the entire work area (including walls, ceilings, floors, and other work surfaces) should be cleaned and vacuumed. All surfaces should be free from visible construction debris and dust.

#### 5. Scheduling

Depending on the expected impact, some projects should be scheduled ~~hours~~. If this is not feasible, a buffer zone should be established around the work area where no building occupants are permitted. Building occupants should not be allowed to remain in the area where construction activities are in progress.

#### 6. Re-Occupancy Criteria/Commissioning

Prior to reoccupation of the project area, the worksite should be cleaned until there is no visible haze in the air and no settled dust is found on surfaces there should be low to no detectable odors upon re-occupancy.

The HVAC system should be restored to good operating conditions ~~when~~ odors and visible emissions have dissipated or otherwise been eliminated.

