

## Operation and Maintenance Manuals for Sub-Slab Depressurization Systems

Vapor mitigation systems including passive or active sub-slab depressurization systems (SSDs) to mitigate the intrusion of contaminated vapors into on-site buildings are a common requirement for the issuance of No Further Action letters and Certificates of Completion under DOEE programs. If continued operation of an SSDS is a condition of site closure, an Operation and Maintenance (O&M) Manual must be approved by DOEE prior to issuance of the closure letter. The O&M Manual must contain the following components:

### Site and System Description

- Property description including site address, lot, and parcel number
- Overview of system design goals and locations of system components within building
  - Passive systems: locations of sub-slab piping, vapor barriers (if present), exhaust stacks, etc.
  - Active systems: same as passive systems plus locations of electric connections, fuses, control panels, manometers, pressure gauges, fans, etc.
- For passive systems, conditions which may trigger conversion to an active system

### Inspection and Maintenance

- Schedules describing frequency of inspection and maintenance intervals for fans/vents/blowers
- List of components to be inspected and inspection log components (including verification of floor integrity if sub-slab concentrations exceed applicable criteria)
- Process for corrective action if components are not operating within specification and documentation process for maintenance log
- On-site location for inspection logs
- List of persons and/or position responsible for maintenance of the O&M log
- Provision for notification of DOEE regarding system failures that interrupted effective operation of SSDS

### System Monitoring

- Frequency and documentation of pressure readings from gauges and/or manometers
- If continued sub-slab and/or indoor air sampling is required, describe:
  - Frequency and duration of sampling
  - Sampling methods
  - Documentation of sampling activities and reporting frequency to DOEE
- Action levels that trigger reevaluation of the system

### Contacts and Notifications

- Name and contact information for property owner, consultant, and DOEE project manager
- Process for notifying DOEE of any change in property use, ownership, or system changes
- Process for mitigating risk of damage to the system by future construction activities

### Attachments

- Plan-view figures illustrating site location, locations of residual contamination (if applicable), and system layout within building
- Cross-section figures illustrating SSDS extraction point through floor (indicate depth of slab, diameter of slab penetration, etc.) and location of vapor barrier
- Representative images of installation activities and key components

DOEE may impose additional requirements for the O&M Manual based on site-specific factors. Additional guidance on O&M of vapor mitigation systems can be found [here](#).