

Facility and Property Decommissioning Should Be Part of Your Real Estate Management Plan

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Most everyone in the commercial and industrial real estate industry realizes the need to perform an environmental due diligence on property they intend to purchase or lease. ASTM transaction screening, Phase I environmental site assessment, and a 21E (in Massachusetts) or Property Transfer Act assessment (in Connecticut) are widely recognized as activities performed on a property at the front end of a real estate transaction, usually by the buyer or lessee.

But what about when it's time to sell property or leave leased space? You may have established a baseline before occupying the property, but until recently, the condition of the property and, more importantly, the condition of the building upon leaving the premises had been overlooked. The risk to future building occupants posed by mold and contaminated building surfaces from past hazardous material use are of equal concern to prospective purchasers and tenants, landlords, and financing institutions. Landlords quickly recognized the need to preserve unrestricted re-use of their property so property that may currently be used by an industrial tenant can subsequently be used for research and development, offices, or even housing, if zoning allows. Many companies who are leaving property now more formally "decommission" the

facility and perform an exit assessment on the property to satisfy a landlord, if leasing; to get the facility market-ready, if selling; or simply to manage their environmental risk.

Problems From A "Dirty" Building?

Problems from a facility not decommissioned come in a variety of forms. Equipment left behind, such as tanks, process piping and ventilation, laboratory hoods, and wastewater treatment equipment must be either decontaminated, if re-used, or disposed of. Chemicals, petroleum, and hazardous waste, no matter how small the quantity, must be properly packaged, labeled and disposed of.

Flooring, walls, and even ceiling surfaces that were subject to chemical or petroleum use may be contaminated and, if not cleaned, can emit pollutants to indoor air or damage material with which it may come into contact. Air pollutants can pose a health risk to future occupants and a risk to those future industrial activities that may be sensitive air quality. Contact with contaminated surfaces can also damage newly installed building materials.

What Is Decommissioning?

Decommissioning a facility and property includes 1) removal of hazardous materials and waste, 2) cleaning and removal of equipment, 3) decontamination

and remediation, and 4) termination of environmental operating permits. Each aspect is explained in more detail below.

1. **Hazardous material and waste:**

Removal and proper off-site management of hazardous material and petroleum products is necessary and may include solvents, compressed gas cylinders, water and wastewater treatment chemicals, medical waste, lubricants, and wastewater. This activity requires retaining a licensed contractor to over-pack and lab-pack material, properly labeled containers, and manifest for shipment and disposal.

2. **Equipment:** Equipment that cannot be re-used at a facility is typically cleaned and shipped to another facility within the corporation or sold. This usually includes components to water and wastewater pretreatment systems, laboratory hoods and benches, process piping, and industry-specialized equipment. Decontamination involves removal, purging, and proper disposal of liquids, solids, and gases contained in equipment, and rinsing or high pressure

washing with water and detergent. Chemical analysis of wipe samples taken from washed equipment surfaces should be performed to document that residual hazardous substances have been removed.

3. **Decontamination and remediation:**

Identify building surfaces (floors, walls, ceiling, and equipment that stays) that may be contaminated and require decontamination. This typically includes maintenance rooms, water and wastewater treatment rooms, chemical storage rooms, hazardous waste storage rooms, flammable storage rooms, manufacturing areas, and others locations that had been subject to spills. Generally, concrete surfaces subject to acid and caustic spills, and wastewater spills can be easily decontaminated by high-pressure washing, especially if protected with an epoxy coating. Finished surfaces (i.e., tile) damaged by spills may require replacement. Wipe or chip samples are collected and chemically tested to verify that sufficient cleaning has been performed.

Releases of petroleum products or other products that stain building surfaces cannot usually be decontaminated by washing alone. Stained floor typically must be replaced. Stain concrete floor can be physically milled to remove the stained layer, and repaired. Visual inspection for the removal of stained surfaces is generally sufficient to verify adequate decontamination. Analysis of chip or wipe samples of decontaminated surfaces is conducted on surfaces that cannot be milled and where staining remains.

4. **Termination of environmental operating permits:** Notice of permit termination to appropriate regulatory authorities must be conducted. Permits to terminate include RCRA hazardous waste generator identification, air emission permit, industrial sewer use permit, NPDES point source and storm water discharge permit or conditional no exposure exclusion status, and flammable storage permit. A concise letter to the regulator indicating that the activity has been terminated is all that is required. The notice should be sent certified mail return receipt requested. There is generally no acknowledgement from the agency, so be sure to keep a copy of your notice.

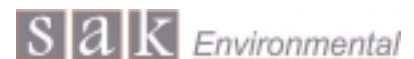
It's important to note that although facility operations may have ended mid-year, you will still be required to report certain environmental activities for a reporting year in some programs, such as SARA/TURA, air emissions, and biennial hazardous waste reports.

Documentation is Key
Documenting a facility closure is very important. It is evidence to the performing company that the facility was vacated correctly to manage risks and demonstrates to interested outside parties that proper decommissioning was actually performed. The closure or decommissioning report should include a summary of facility operations, description of hazardous materials used, inventory of hazardous waste generated, and identification of known releases. Chemical inventory lists and data from Material Safety Data Sheets are used to establish a chemical analysis plan. A pre-closure inspection should be documented with photographs to develop and justify post-decontamination

sampling locations. The report should include photographs of contractor activities – equipment removal, decontamination/milling and sampling, and copies of daily work logs, hazardous waste manifests, and laboratory reports. Include notices of permit termination and a summary of a post closure final inspection with photographs.

Wipe and chip samples may indicate that residual contamination on/in building surfaces remains. The risk posed by residual contaminants must be evaluated. They cannot be compared to thresholds listed by Occupational Safety and Health Administration (OSHA). OSHA standards apply only to workers exposed to contaminants related to their occupation. Because risk to human health is being evaluated for any occupant to the building, lifetime human health risk must be evaluated consistent with CERCLA, RCRA, or applicable state waste site clean up program. OSHA standards can be identified as a suitably analogous standard, but not relied upon as a measure of risk. ■

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