



Weekly Safety Meeting

Brownfield Sites

Brownfield sites, or “brownfields” are defined by the Small Business Liability Relief and Brownfields Revitalization Act as “real property, the expansion, redevelopment or reuse of which may be complicated by the presence of a hazardous substance, pollutant, or contaminant.”

THE EPA estimates there are about 425,000 of these sites in the US. A site is classified as a Brownfield site by having an assessment done to determine the level of contamination. These sites contrast with “greenfields” which are real property that is undeveloped, pristine rural land.

OSHA Standards

OSHA Standards for Brownfield hazards are addressed under the OSHA General Industry as well as Construction Industry standards. If a site is determined to be a “hazardous waste site” it must comply with the HAZWOPER standards (General Industry (29 CFR 1910.120) and Construction (1926.65)). Additionally, 29 states have OSHA-approved State Plans that may have further requirements.

Types of Hazards

The types and levels of contaminants on Brownfield sites vary greatly depending on the industry or commercial facility that previously operated on the site. Brownfield site examples include:

- Gas stations;
- Dry cleaners;
- Industrial facilities;
- Abandoned railroads;
- Vacant lots; and
- Residential or commercial buildings built before 1989.

Job Hazard Analysis

According to the EPA, 47.8% of the US population lives within 3 miles of a Brownfield site. Living or working around brownfields is not likely to cause immediate or serious health effects. Site workers, however, are exposed to the contaminants at higher levels and for longer periods of time, increasing their health and safety risk.

It is the employer’s job to conduct a site assessment with site cleanup jobs in mind. The employer should plan work tasks while anticipating the types of exposures that might occur to protect workers from the chemical and physical hazards. A job hazard analysis takes into consideration any hazards

that could result in employee exposure and then protect employees accordingly per OSHA standards. Contaminants might be found in the ground water, surface soil, buildings, containers, and dust on-site. It is important to know what these contaminants are through testing to be able to protect adequately against them.

Common hazards experiences during site assessment and cleanup work at Brownfield sites include:

- Chemical hazards from surface or subsurface soil contamination or from contaminants present in buildings or containers (e.g. Drums, underground storage tanks, confined spaces);
- Heat stress hazards;
- Fall hazards from elevated work surfaces;
- Slip, cave-in, and fall hazards from trenches and excavations;
- Noise hazards;
- Electrical hazards; and
- Hazards from heavy equipment, handheld tools, and other construction or demolition-related activities.

If OSHA's HAZWOPER standard applies, the employer must prepare a site-specific Health and Safety Plan (HASP) that addresses the health and safety, work tasks, control measures, and requirements and procedures for employee protection. It is always good to have a HASP in place, even for non-HAZWOPER remediation operations.

BE AWARE AND BE CAREFUL...WHEN CLEANING BROWNFIELDS!

Safety Meeting Sign-In Sheet

Supervisor:	Subject:
Location:	Date:
Conducted By:	Trainer Signature:

Name (print clearly)	Signature	Comments / Safety Concerns / Training Requests