**Land Use Controls (LUCs)**

While planning for the closure of contaminated sites, cleanup to residential or unlimited use/unlimited exposure (UU/UE) standards is not always financially feasible or possible within a short timeframe. Cue in land use controls (LUCs), which play an important role in short- and long-term protection of human health and the environment and can be incorporated into remedies for sites with residual contamination.

LUCs include engineering and physical barriers, such as fences, signage, capping, and security guards, as well as institutional controls (ICs). Categorized as a subset of LUCs, ICs are non-engineered instruments, such as administrative and legal controls, that help to minimize the potential for exposure to contamination and/or protect the integrity of a response action. ICs typically are designed to work by limiting land and/or resource use or by providing information that helps modify or guide human behavior at a site based on the concentration, type, and potential exposure pathways of remaining contamination.

Generally, there are four categories of ICs:
- Proprietary controls (e.g., easements that restrict use, restrictive covenants)
- Governmental controls (e.g., zoning, building codes, groundwater use regulations, fishing limits)
- Enforcement and permit tools with IC components (e.g., consent decrees, administrative orders, permits, Federal Facility Agreements (FFAs))
- Informational devices (e.g., state registries of contaminated areas, notices in deeds, seafood consumption advisories)

BB&E has supported the DoD to identify and maintain compliance for over 200 LUC sites nationwide following a comprehensive review of over 1,100 Installation Restoration Program (IRP) and Military Munitions Response Program (MMRP) sites. The effort follows the release of the DoD’s 17 January 2001 Policy on Land Use Controls Associated with Environmental Restoration Activities, which provides a DoD framework for implementing, documenting, and managing LUCs for real property being transferred out of Federal control and for active installations.

Long-term, to monitor and assess the effectiveness of selected site remedies where LUCs are included as a component, Five Year Review (FYRs) are conducted which are governed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended. BB&E has conducted FYRs at over 25 installations in accordance with CERCLA. BB&E is adept at reviewing site closure documents, organizing a FYR Team for each site/installation based on site complexity, identifying potential need for community involvement, conducting site inspections to determine LUC compliance, and preparing an assessment and recommendations to ensure future compliance.

Whether it be LUCs, ICs, or FYRs required as part of your site closure requirements, BB&E is prepared to help execute these site closure tools in concert with active remedial components to enable a realistic and cost effective site closure.

**SERVICES PROVIDED:**
- Managing LUCs/ICs
- LUC Implementation Plans
- Five Year Reviews
- Site Inspections
- Regulatory Support
- Compliance Strategy

For additional information or to speak to someone regarding BB&E’s environmental capabilities, please contact Mr. Aaron Etnyre at 248-489-9636 x303, or email aetnyre@bbande.com