

US EPA ARCHIVE DOCUMENT

SESSION 3

Corrective Measures Selection Process

INSTITUTIONAL CONTROLS IN THE RCRA CORRECTIVE ACTION PROCESS

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Agenda: Institutional Controls in Corrective Action

- ▶ What are Institutional Controls (ICs)?
- ▶ What is their function in Corrective Action?
- ▶ What types of ICs may be available?
- ▶ How are ICs selected and implemented?
- ▶ How can the effectiveness of an IC be maintained?



Definition of Institutional Controls (ICs)

- ▶ Non-engineered means, such as administrative or legal controls, imposed to:
 - Discourage human behavior and/or
 - Limit or prevent land or resource use

with the objective of minimizing the potential for harmful exposures to residual contamination

- ▶ One or more IC may be “layered” with structural or engineered site controls imposed to achieve the same objective



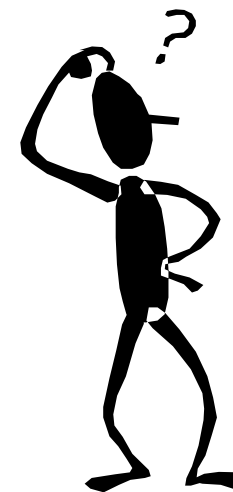
General Categories of ICs

- ▶ **Governmental** – state/local government using police power to impose restrictions
- ▶ **Proprietary** – legal tools based on private property law employed to limit or affect rights to use land
- ▶ **Enforcement and Permit Tools** – may include IC/LUC obligations
- ▶ **Informational** – non-enforceable notices and advisories warning of potential dangers in land uses or resource consumption



Risk Management and Institutional Controls

- ▶ Blackacre Farms is an industrial storage facility. A past release has resulted in soil contamination, but risk assessment has indicated that this contamination does not pose an unacceptable risk for industrial use. The reasonably anticipated future use of Blackacre Farms is industrial use.
- ▶ Is a remedy required for this site?



IC Evaluation in Corrective Action Remedy Selection Process

- ▶ Begin evaluation early (CMS)
 - Consider “reasonably anticipated land use”
 - Consider results anticipated from implementing active remedial alternatives
- ▶ Clearly define OBJECTIVES of imposing ICs
- ▶ Evaluate under remedy-selection criteria
- ▶ Assess effectiveness of “institutions” expected to control
- ▶ Involve (and perhaps enlist) stakeholders early in process



Typical Institutional Control Tools

▶ Proprietary Tools

- Easement
- Restrictive covenant
- Reversionary interest

▶ Informational Tools

- Deed notices
- Public communication notices (in library, newspaper, via Internet)
- Registries of hazardous waste sites



Typical Institutional Control Tools (cont.)

▶ **Governmental**

- Zoning classifications
- Fishing/swimming prohibitions

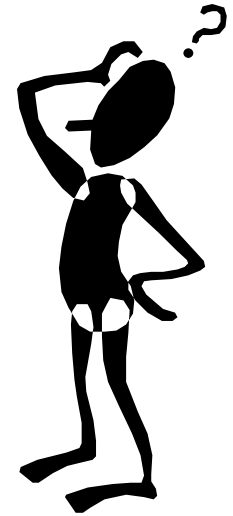
▶ **Enforcement and Permit Tools**

- IC provisions in Post-Closure Plan/Corrective Action Permit
- RCRA orders
- Additional IC requirements imposed by state law/local ordinance



Roll of ICs in Corrective Action

- ▶ A small portion of the Blackacre Farms facility is a closing RCRA Subtitle C landfill unit where waste will be left in place. RCRA regulations require the owner or operator of such a unit to record “a notation on the deed to the facility property” to notify any potential purchaser that the land has been used to manage hazardous wastes and that its use is restricted under the closure regulations. [40 CFR 264.119(b)(1).]
- ▶ Are any IC tools, in addition to this deed notice, worthy of consideration in this situation?



Maintaining Effectiveness of IC Remedies

- ▶ **“Layering” IC tools**

- ▶ **Document Specific, Comprehensive IC Implementation Plan**
 - Objective(s) of control
 - Description of required control tool(s)
 - Duration of control
 - Location of area(s) under control
 - Design/implementation details
 - Maintenance/monitoring plan
 - Accountability for implementation and maintenance
 - Periodic audit report to regulator(s)

Resources on IC Guidance and Developments

- ▶ *Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional controls at Superfund and RCRA Corrective Action Cleanups*, EPA OSWER 9355.0-74FS-P (September 2000).
- ▶ *Institutional Controls: A Guide to Implementing, Monitoring, and Enforcing Institutional Controls at Superfund, Federal Facility, UST, and RCRA Corrective Action Cleanups*, EPA OSWER (Draft, December 2002).
- ▶ *Institutional Controls: A Citizen's Guide to Understanding Institutional Controls at Superfund, Brownfields, Federal Facilities, Underground Storage Tank, and Resource Conservation and Recovery Act Cleanups*, EPA OSWER 9255.0-98 (February 2005).



Resources on IC Guidance and Developments

- ▶ *Final Guidance on Completion of Corrective Action Activities at RCRA Facilities*, EPA [68 Fed. Reg. 8757 (February 25, 2003)].
- ▶ *Land Use in the CERCLA Remedy Selection Process*, EPA OSWER 9355.7-04 (May 1995).
- ▶ <http://www.lucs.org> - International City/County Management Association Web site tracking developments in environmental land use controls (including ICs).

