

Institutional Controls Featuring the Pinellas Site

Jack Craig
U.S. Department of Energy
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Institutional Controls

- Institutional controls (ICs) are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site.
- ICs are used when residual contamination remains on site at a level that does not allow for unrestricted use and unlimited exposure after cleanup. The National Contingency Plan (NCP) emphasizes that ICs are meant to supplement engineering controls and that ICs will rarely be the sole remedy at a site.



Institutional Controls (continued)

- Defined broadly as legal measures that limit human exposure by restricting activity, use, and access to properties with residual contamination.



Institutional Controls (continued)

- DOE Policy 430.1, *Land and Facility Use Planning*
- DOE Order 430.1B, *Real Property Asset Management*
- DOE Policy 454.1, *Use of Institutional Controls*
- DOE Guide 454.1-1, *Institutional Controls Implementation Guide for Use with DOE P 454.1, Use of Institutional Controls*
- DOE Policy 455.1, *Use of Risk-Based End States*



Types of Institutional Controls

- Easements
- Deed notifications
- Deed restrictions
- Permits
- Zoning



Pinellas Site



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Pinellas Site Institutional Controls **Issues**

- Answering the mail
- Cost
- Timing
- Comprehensive
- Stakeholder concerns



Pinellas Site Institutional Controls

Relevant Information Used for IC Determination

- Typical depth of groundwater contamination
- Depth of water bodies on the site
- Hawthorn formation and impact on groundwater
- Expected future use of the property
- Regulatory requirements



Institutional Controls

- Pinellas site transfer included requirements of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h)
- In simple terms: DOE retains a perpetual right of access necessary to perform any additional action necessary to protect human health and the environment
- This implies a control of any activities and use of the site, including restricting actions in a way that, if formalized, would be institutional controls



Pinellas Site Institutional Controls **Considerations**

- Consider the role of ICs early
- Communicate with public, regulators, and stakeholders
- Consider site-specific factors
- Define goals and objectives
- Evaluate as a response action



Pinellas Site Institutional Controls

Logical Choice of ICs

- No excavation greater than 10 feet deep
- No wells less than 100 feet deep
- Non-residential use only



Pinellas Site Institutional Controls

History of IC Development

- Active remediation – no ICs needed
- Closure request – ICs required
- Logical ICs defined, but not imposed
 - Legal and real estate in favor
 - Stakeholder concerns
 - Cost of implementation
- Useable defined ICs a better choice
 - Currently in development



Pinellas Site Institutional Controls

Current Status

- Using CERCLA 120(h)
- ICs designed and being discussed
- ICs not yet imposed



Conclusions

- ICs are often easy to define but hard to implement
- IC development and implementation should actively involve stakeholders
- IC definition may be “outside of the box”

