Institutional Controls Overview

EPA/State RCRA
Corrective Action Workshop
September 11, 2002



Presentation Objectives

- ◆Background
- **♦** Guidance
- ◆IC Tracking System
- ◆IC Data Collection Pilot
- ◆Workshops
- ◆"One-Call" Pilots
- ◆IC Privatization Pilot (Guardian Trust)



What Is An IC?

Non-engineered administrative or legal controls that limit land or resource use and/or protect the integrity of a remedy



When Are ICs Used?

- Used when contamination is first discovered to limit exposure
- Used during cleanups
- Used when residual contamination is left in place after site cleanup



What Are ICs Used For?

- ◆Two primary purposes:
 - » Minimize the potential for exposure to contaminants
 - » Protect the integrity of the remedy



How Do ICs Work?

- ◆Work by
 - » Limiting land or resource use
 - » Providing information to modify behavior



When are ICs Necessary

- ◆Threshold for ICs
 - » Unlimited use and unrestricted exposure
 - —Site-specific determination
 - —Residential v. UU/UE



Program Expectations

- Program expectations:
 - » Protect human health and the environment
 - » Treat principal threats
 - » Contain low-level threats
 - » Restore groundwater to beneficial use within a reasonable timeframe



Regulatory Framework

- Use a combination of methods (treatment, engineering and ICs)
- Use water, land and activity restrictions to supplement engineering controls
- Short-term and long-term management to prevent or limit exposure to hazardous waste constituents.
- ◆ICs not generally expected to be the sole remedial action



IC Categories

- ◆ Four general categories of ICs
 - » Governmental controls
 - Zoning and permits
 - » Proprietary controls
 - Easements and covenants
 - » Enforcement and permit tools with IC components
 - CDs, orders and permits
 - » Informational devices
 - Deed notice, State registries



Guidance

- A Site Managers Guide to Identifying, Evaluating and Selecting ICs
 - » Completed in September 2000
- Guide to Implementing, Monitoring and Enforcing ICs.
 - »Out for External Review September 02



Summary of Draft Implementation, Monitoring and Enforcement Guide

- ◆Cross-program guidance (cross-agency)
- ◆Larger cross-cutting issues with the implementation, monitoring and enforcement of ICs.
- Strongly advocates the team approach
- ◆Stresses importance of appropriate IC documents (easements, covenants, deed notices)
- ◆Guidance on vague or incomplete language in remedy decision/enforcement documents.



Summary of Draft Implementation, Monitoring and Enforcement Guide

- ◆Describes role of local and state governments
- ◆Advocates written agreements with States and Local agencies on roles and responsibilities.
- ◆Advocates a written IC Implementation/Assurance Plan (detailed guidance forthcoming)
- ◆Stresses annual inspection/monitoring and reporting as routine operation an maintenance requirements.



Summary of Draft Implementation, Monitoring and Enforcement Guide

- ◆Advocates annual certification from a responsible person at the site that ICs are in place and effective.
- ◆Describes the challenges and options for securing the appropriate enforcement of ICs.
- ◆ Advocates detailed roles and responsibilities for enforcement.



Guidance (Cont.)

- **♦ICs and Communities**
 - » Draft for Regional Review Winter 02
- Developing IC Implementation Plans
 - » Draft Spring 03
- Developing Full Life-Cycle Cost Estimates for ICs
 - » Draft Summer 03



IC Tracking System

- System to track entire life-cycle of ICs
 - » Selection
 - » Implementation
 - » Monitoring
 - » Reporting
 - » Enforcement
- ◆ GIS Map based
- Web-enabled for stakeholder access to information

IC Tracking System Objectives (Cont.)

- **◆Linked**:
 - » Other programs
 - » Other Federal Agencies
 - » States
 - » Tribes and
 - » Local Government



Developed a Data Collection Form

- ◆ Seven Categories
 - » Basic Site Information
 - » ICs Instrument Selection as Specified in the Decision Document(s)
 - » ICs Implementation
 - » ICs Monitoring
 - » ICs Enforcement
 - » IC Costs
 - » IC Trends, Additional Information



Data Collection Pilots

- Surveyed 72 sites in Regions 3 and 5
 - » Determine:
 - what IC information is available
 - where it is located
 - what form it is in
 - what it cost to get it
 - evaluate feasibility/methods of data gathering



Preliminary Results

- ◆ Data was not where we expected
- How deed notices are organized varies considerably
- ◆ Very few "tracking" systems mostly filing systems
- ◆ Very little information post selection
- ◆ ICs often assigned to the whole parcel
- ◆ Imprecise language problematic
- ◆ Little routine monitoring based on reported problems



Focused Workshops

- Conduct a series of focused workshops
 - » Invite multi-program/agency experts in tracking
 - » Obtain advanced copies of:
 - —Data elements
 - —Data dictionary
 - —Data entry/system approach
 - » Develop a matrix
 - —Areas of agreement/discussion/disagreement
- ◆ Encourage database exchange



Focus Groups

- ◆ EPA Headquarters Group
 - » June 2002
- ◆ States and Tribes
 - » June 18-19, 2002
- ◆ EPA Regions
 - » June 26-27, 2002
- ◆ Other Federal Agencies
 - » July 23-24



Focus Groups (cont.)

- **♦**Industry
 - » October 8
- **♦**Local Agencies
 - » October 10-11



National Workshop

- National Workshop on IC Tracking
 - » Co-hosted by EPA, DOD, DOE, ASTSWMO, ICMA and industry.
 - » Representatives from each focus group
 - » Objective is to advance national tracking concept
 - » Planned for October 28-30, 2002



One Call Pilots

- Coordinate with IC tracking system
 - » One-Call, Miss Utility, Dig Safe, Blue Stake
 - » Notify excavators of environmental contamination
 - » Pilots in Region 3/PA and 5/WI



Guardian Trust Pilot

- ◆EPA HQ, Region 3, State of Pennsylvania and MGP Partners
 - » Research the viability of a "private trust" for long-term stewardship of ICs
 - » Establish non-profit trust
 - —Trust inspects/monitors and reports on ICs
 - —Assumes liability for IC breaches



Status of Guardian Trust

- Received EPA approval for funding in June 01
- ◆ Final report includes:
 - » analysis of environmental law
 - » financial considerations and form of the Guardian Trust
 - » scope of services of the Guardian Trust and,
 - » legal rights of the Guardian Trust.
- Findings available on PA Web-site
 - » http://www.dep.state.pa.us/dep/deputate/airwaste/wm/l andrecy/guardian.html



Strengths

- Additional IC tool
- Standardized inspections and reporting
- Independent inspection and reporting
- Private market mechanism
- ◆ Addresses several CERCLA/RCRA limitations
 - » obtaining property interests
 - » State assurance requirements



Need More Information

- Don't know the cost
- Trust agreement language
- Enforcement relationship
- Focuses on proprietary controls



Next Steps

- Finalize summary report
- Expect an additional proposal for research
- State of PA is considering advancing pilot to implementation

