
Institutional Controls at Contaminated Sites: Best Practices for Counsel in Implementing, Maintaining and Enforcing ICs

TUESDAY, JULY 16, 2013

1pm Eastern | 12pm Central | 11am Mountain | 10am Pacific

Today's faculty features:

Amy L. Edwards, Partner, **Holland & Knight**, Washington, D.C.

James Miles, **EPA**, Washington, D.C.

J. Michael Sowinski, Jr., J.D., Vice President, **Terradex**, Palo Alto, Calif.

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Institutional Controls at Contaminated Sites

Best Practices for Implementing, Maintaining and Enforcing ICs

The Presenters

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Amy L. Edwards
Partner

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Washington, D.C.
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Amy L. Edwards is a partner in Holland & Knight's Public Policy & Regulation Group, where she serves as co-chair for the firm's national Environment Team, as well as its Military Installation Redevelopment Team. Ms. Edwards has been practicing environmental and energy law for more than 30 years. She routinely counsels developers, lenders and corporations about effective strategies for structuring real estate and corporate transactions to minimize environmental and financial risk. Ms. Edwards represents local governments, developers, and financial institutions on base closure and privatization of military housing issues. She has also represented companies in litigation and enforcement proceedings. Ms. Edwards was an observer/advisor to the National Conference of Commissioners on Uniform State Laws while it developed a model Uniform Environmental Covenants Act. She led the ASTM Task Group that developed E2091, *Standard Guide for Use of Activity and Use Limitations, Including Institutional and Engineering Controls*, and was the editor/lead author of the ABA's book, *Implementing Institutional Controls at Brownfields and Other Contaminated Sites* (2nd ed. 2011).

The Presenters

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James Miles

US EPA

Washington, D.C.

[Miles.james@Epa.gov.org](mailto:Miles.james@Epa.gov)

James Miles is an attorney in EPA's Office of Site Remediation Enforcement. Mr. Miles focuses on policy and guidance development relating to CERCLA and RCRA corrective action enforcement. He coordinates the work of a team of attorneys and oversees Superfund matters associated with enforcement cases and settlements, rulemakings, and policy guidance development. He also chairs a national EPA workgroup on institutional controls and other long-term stewardship practices employed at contaminated sites. Mr. Miles' experience also includes a career in environmental consulting during which he performed site inspections and investigations pertaining to soil, air, and water quality and wetlands. He has a Bachelor of Arts in biology from Cornell University and a Juris Doctorate from Temple Law School. He is a member of the Pennsylvania bar.

The Presenters

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**J. Michael
Sowinski Jr., JD**

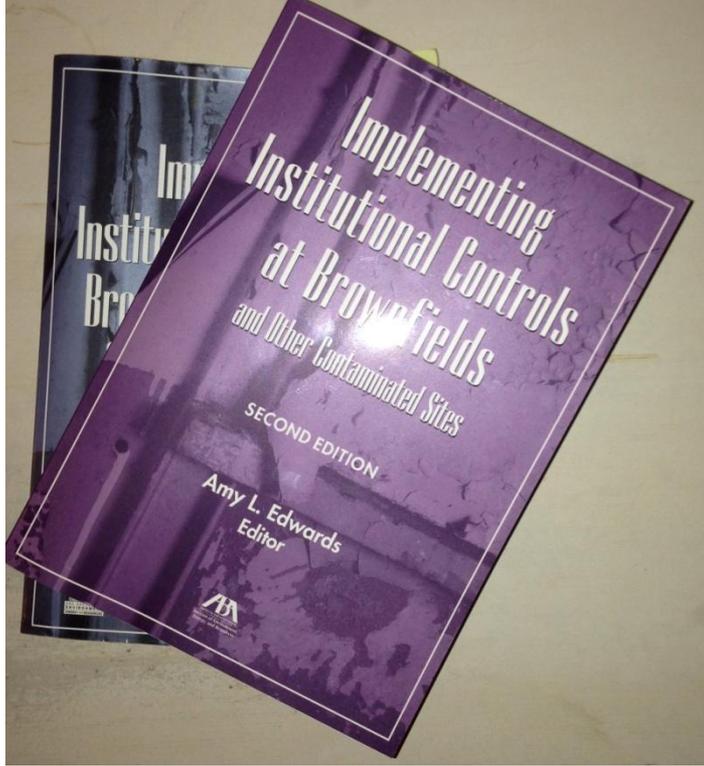
*Vice President,
Environmental
Protection Services*
mike@terradox.com

Mr. Sowinski brings nearly 20 years of engineering and legal experience on environmental cleanup, environmental compliance, property redevelopment, and pollution control (i.e., CWA, RCRA). Mr. Sowinski is an expert in the niche area of “institutional controls” and long term stewardship, which is his area of focus as a VP for Terradex, Inc. Prior to joining Terradex, Mr. Sowinski practiced environmental law where he advised and litigated on behalf of local governments and private clients on cleanup, institutional controls, brownfield, water pollution, land use and other environmental matters. Mr. Sowinski’s experience also includes a career in environmental consulting where he consulted to federal and state environmental agencies, as well as private clients, on environmental cleanup and compliance matters, ranging from broad-scale program advising on cleanup program and long term stewardship issues, to site specific brownfield redevelopment, cleanup, water pollution , and environmental compliance matters. He received a BS and MS in Engineering from the University of Maryland, and a Juris Doctorate from Vermont Law School. Among others, he is a leading member of ASTM’s “Continuing Obligations” task group.

Webinar Overview

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- ❑ IC Overview and Introduction
- ❑ EPA Guidance on ICs
- ❑ Trends in State and Industry Approaches to IC Management
- ❑ ICs As A Critical Element of CERCLA LLPs
- ❑ Emerging IC Issues



INSTITUTIONAL CONTROLS OVERVIEW AND INTRODUCTION

IC Overview: Definition of IC

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Any "**administrative or legal controls** that minimize the potential for human exposure to contamination and protect the integrity of remedies by limiting land or resource use, providing information to modify behavior, or both."

- ❑ Proprietary Controls
- ❑ Government Controls
- ❑ Informational Devices
- ❑ Enforcement Documents/Orders

IC Overview:

IC Terms

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- ❑ ICs
- ❑ AULs
- ❑ LUCs
- ❑ "Deed Notices"
- ❑ ECs (Engineering Controls)
- ❑ Environmental Covenants
- ❑ LURs
- ❑ Environmental Easements

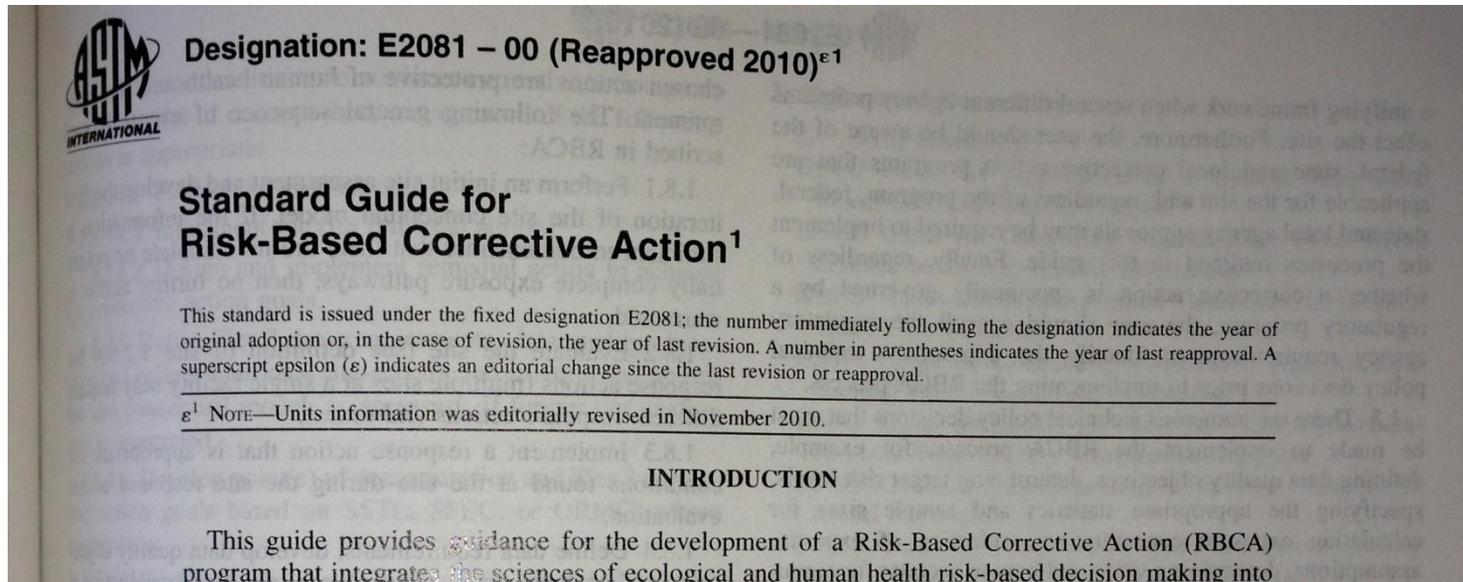
IC Overview: Evolution of ICs (1990 NCP)

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EPA expects to use **institutional controls** such as water use and deed restrictions to supplement engineering controls as appropriate for short- and long-term management to prevent or limit exposure to hazardous substances, pollutants, or contaminants. **Institutional controls** may be used during the conduct of the remedial investigation/feasibility study (RI/FS) and implementation of the remedial action and, where necessary, as a component of the completed remedy. The use of **institutional controls** shall not substitute for active response measures (e.g., treatment and/or containment of source material, restoration of ground waters to their beneficial uses) as the sole remedy unless such active measures are determined not to be practicable, based on the balancing of trade-offs among alternatives that is conducted during the selection of remedy. 40 CFR 300.430 (a)(iii)(D)

IC Overview: Evolution of ICs (2000 ASTM RBCA Guide)

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- ❑ ICs are critical to the success of risk-based corrective action (“RBCA”)
- ❑ An understanding of the importance of durable ICs to the success of risk-based corrective action led to the development of the first ASTM guide on ICs in 2000 (E 2091-00)

IC Overview: Evolution of ICs

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- ❑ **ASTM E 2091-11 (Standard Guide for Use of Activity and Use Limitations, Including Institutional and Engineering Controls)**
 - The ASTM IC Guide has been updated twice since its initial issuance over a decade ago
 - The Guide uses the terminology "Activity and Use Limitations" (to include both institutional and engineering controls)

- ❑ **The Guide discusses the five primary types of AULs:**
 - Proprietary controls
 - State and local government controls
 - Enforcement tools
 - Informational devices
 - Engineering and access controls

IC Overview: ASTM E 2091-11

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- ASTM E 2091 provides guidance on:
 - The purpose of AULs (eliminating exposure pathways; providing notice; identifying exposure assumptions; identifying permitted and prohibited uses; etc.)
 - What type of AUL may be most appropriate for each chemical of concern and each exposure pathway
 - The relative strengths and weaknesses of the different types of AULs
 - The importance of developing long-term monitoring and stewardship plans

IC Overview: Uniform Environmental Covenants Act

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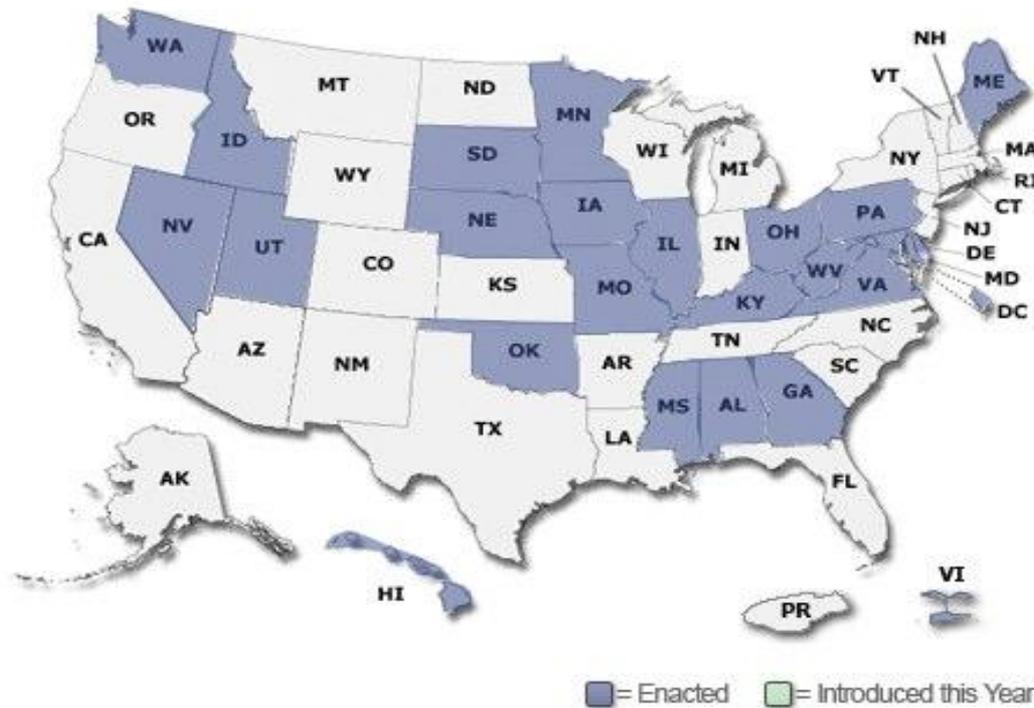


Uniform Law Commission

The National Conference of Commissioners on Uniform State Laws

Environmental Covenants Act

Enactment Status Map



□ What is an Environmental Covenant?

- The Uniform Environmental Covenants Act defines an **environmental covenant** as:

“A servitude under an environmental response project that imposes activity and use limitations.”

UECA Section 2(4)

- **Servitude** –

“An encumbrance consisting in a right to the limited use of a piece of land or other immovable property without the possession of it; a charge or burden on an estate for another’s benefit.”

Black’s Law Dictionary (8th ed. 2004)

□ What is an Environmental Covenant?

- **Environmental Response Project** - A plan or work performed for environmental remediation of real property and conducted:
 - Under a federal or state program governing environmental remediation of real property...
 - Incident to closure of a solid or hazardous waste management unit, if the closure is conducted with approval of an agency, or
 - Under a state voluntary clean-up program..."

UECA Section 2(5)

- **Activity and Use Limitations (AULs)**

“restrictions or obligations created under this Act with respect to real property.”

UECA Section 2(1)

What UECA Does

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- Confirms the **mechanics** of an environmental covenant; creates a **structure** for implementing, modifying, enforcing, and terminating environmental covenants
- Provides “real **notice**” to the world by using the real property recording system
- Broadens the universe of potential “**holders**” of this limited property interest
- Broadens the universe of **enforcers** (Sec. 11)
- Clarifies the **modification** and **amendment** process (Sec. 9(b) and 10)

What UECA Does

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- Eliminates the **common law defenses** that might otherwise invalidate the covenants over time (horizontal and vertical privity; appurtenant interests; dislike for “spurious” easements; need to “touch and concern” the land; Marketable Title Act/Dormant Mineral Interests Act) (Sec. 5(b) and 9(d))
- **Runs with the land** and is **perpetual** in duration (Sec. 5(a) and 9(d))
- Addresses related legal issues including **eminent domain, tax liens, abandonment, adverse possession, and changed circumstances** (Sec. 9(a) and (c))

What UECA Does

22

- Creates a legal infrastructure for creating, modifying, terminating, and enforcing AULs
 - Broader universe of “holders”
 - Broader universe of “enforcers”
 - Runs with the land
 - Negates applicability of common law defenses
 - Can be modified/terminated

What UECA Does

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- Perpetual in duration (unless limited by its terms)
- Cannot be extinguished by
 - Foreclosure of a tax lien
 - Issuance of tax deed
 - Adverse possession
 - Abandonment/waiver/lack of enforcement
 - Eminent domain, unless agency consents and all parties are given notice
 - Marketable Title Act

What UECA Does

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- Agency will always have the right to enforce
- Agency *may* be a holder, *i.e.*, grantee of a limited property interest, but doesn't have to be
- Notice *as required* by the agency to:
 - All who signed
 - All holding a recorded interest
 - All in possession
 - Local government

What UECA Does

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- Environmental Covenant must:
 - State that it's an Environmental Covenant created pursuant to the Act
 - Contain a legally sufficient description of the real property
 - Describe the activity and use limitations (AULs)
 - Identify the holder (*i.e.*, grantee of the Environmental Covenant)
 - Be signed by
 - The agency
 - Owner(s)
 - Holder
 - Identify name/location of administrative record

What UECA Does NOT Do

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- ❑ Provide this “Super Servitude” tool for purely private transactions
- ❑ Bind prior interests in the property unless those interests are subordinated
- ❑ Provide standards for remediation or the specific AUL
- ❑ Provide independent condemnation authority
- ❑ Address the federal facility/state fight
- ❑ No citizen suit authority

This presentation is not a product of the United States Government or the United States Environmental Protection Agency (the US EPA). The views expressed are those of the speaker only and do not necessarily represent those of the United States or the US EPA.

EPA GUIDANCE ON INSTITUTIONAL CONTROLS

<http://www.epa.gov/superfund/policy/ic/guide/>

EPA's IC Workload: Tracking System Highlights Progress

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- EPA Superfund IC Registry (aka IC Tracking System).
 - Mostly Superfund “construction complete” sites
 - Tracking System shows IC implementation remains needed
- IC Status designation
 - Case 1 - No ICs Required
 - Case 2 - ICs Required
 - Case 3 - ICs Required and Implemented
 - Case 4 - No information publicly available

http://www.epa.gov/ictssw07/public/export/regionalReport/ALL_REGIONS_IC_REPORTS.HTM

EPA's IC Workload:

Five-Year Reviews Highlight IC Issues to Be Addressed

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TABLE I. Recent FYRs by Type

Five-Year Review Types				
Fiscal Year	Statutory	Policy	Discretionary	Total Conducted
2008	136	97	0	233
2009	163	60	5	228
2010	204	53	0	257
2011	176	52	2	230

Note: EPA's annual reports to Congress are available at: <http://www.epa.gov/superfund/cleanup/postconstruction/5yr.htm>.

- NOTE: Copies of all five-year reviews can be accessed publicly via the national Superfund webpage available at: <http://cfpub.epa.gov/fiveyear/>. The issues and recommendations reflected by the table on the following slide were flagged on an OU basis. The speaker utilized information publicly available on the EPA website and cannot guarantee the accuracy of the data.

EPA's IC Workload:

Five-Year Reviews Highlight IC Issues to Be Addressed

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TABLE 2. FYRs with IC-related Issues and Recommendations that Affect Protectiveness

Five-Year Review IC Issues and Recommendations				
Fiscal Year	2008	2009	2010	2011
ISSUES				
FYRs with at least one IC issue	107	92	120	74
% of FYRs with IC issue(s)	46%	40%	47%	32%
# issues affecting current protectiveness	25	10	10	5
# issues affecting future protectiveness	203	147	164	103
RECOMMENDATIONS				
Create IC Plan	28	27	39	22
Evaluate IC Effectiveness	34	32	24	10
Implement ICs	95	51	91	62
Work with Parties to Enforce ICs	1	2	2	2

EPA Guidance:

IC Supplement to the Five-Year Review Guidance

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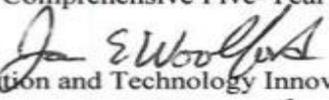
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 13 2011

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Transmittal of OSWER Directive "Recommended Evaluation of Institutional Controls: Supplement to the 'Comprehensive Five-Year Review Guidance'"

FROM: James E. Woolford, Director 
Office of Superfund Remediation and Technology Innovation

Reggie Cheatham, Director 
Federal Facilities Restoration and Reuse Office

TO: Superfund National Policy Managers, Regions 1 - 10

This memorandum transmits OSWER Directive 9355.7-18, entitled "Recommended Evaluation of Institutional Controls: Supplement to the 'Comprehensive Five-Year Review Guidance'".

This guidance supplements OSWER's 2001 *Comprehensive Five-Year Review Guidance* and provides recommendations for conducting five-year reviews for the IC component of remedies in a manner similar to the review of engineering or other remedy components. This document is designed primarily for U.S. Environmental Protection Agency Remedial Project Managers.

If you have any questions, please contact me or have your staff contact Steve Ridenour at ridenour.steve@epa.gov.

Five-Year Review IC Supplement: Overview

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- Evaluating protectiveness of remedies with IC components at Superfund sites
- Geared around 3 questions in Five-Year Review guidance to develop overall protectiveness statement
- Issues, recommendations, and follow-up actions related to ICs
 - What IC issues identified during the review currently prevent the response action from being protective, now or in the future?

Five-Year Review IC Supplement: Key Inquiries

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- IC instrument review, key concepts:
 - Implementation status (title work?)
 - Compliance with IC obligations
 - Long-term effectiveness and enforceability
- Do ICs cover all physical areas that do not support unlimited use and unrestricted exposure (“UU/UE”)?
- Compliance with use restrictions as determined by site interviews/inspections?

Five-Year Review IC Supplement: Recommended Questions

3.1 Recommended questions for the technical assessment

When you ask...

*Question A:
Is the remedy functioning as
intended by the decision
documents?*

*Question B:
Are exposure assumptions, toxicity
data, cleanup levels, and remedial
action objectives used at the time
of the remedy selection still valid?*

*Question C:
Has any other information come to
light that could call into question
the protectiveness of the remedy?*

For ICs, you should consider whether...

- ICs are in place and effective for all areas of the site that do not achieve UU/UE
- Exposures are occurring, or likely to occur, because ICs are not in place
- ICs are tailored to the use restrictions specified in the decision documents
- ICs that are needed to help ensure protectiveness were included in the Region's decision document
- Additional ICs are needed to help ensure protectiveness
- Actual or potential change in exposure pathways has occurred due to changes in land use or zoning
- Actual or potential change in exposure pathways has occurred due to changes in ground water or surface water use
- New information or changed conditions results in new exposure pathways (e.g., vapor intrusion into homes and other structures)
- Indications that land or other resource uses may be changing in the area have occurred (e.g. redevelopment)
- State or local land use law changed in a way that could significantly impact ICs at the site
- Current conditions warrant a change to the ICs or changes to the ICs themselves have occurred (e.g., breaches).

EPA Guidance:

Planning, Implementation, Monitoring, Enforcement

(“PIME”)

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United States Environmental
Protection Agency

Office of Solid Waste and
Emergency Response

OSWER 9355.0-89
EPA-540-R-09-001
December 2012

Office of Enforcement and
Compliance Assurance

Institutional Controls:

A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites

1. PURPOSE

The purpose of this guidance is to provide managers of contaminated sites, site attorneys,¹ and other interested parties with information and recommendations that should be useful for planning, implementing, maintaining,² and enforcing institutional controls (ICs) for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund); Brownfields; federal facility; underground storage tank (UST); and Resource Conservation and Recovery Act (RCRA) site cleanups.³ It highlights some of the common issues that may be encountered and provides an overview of EPA’s policy regarding the roles and responsibilities of the parties involved in the various life-cycle stages of ICs while

¹ The terms “site manager” and “site attorney,” as used in this document, refer to personnel from the lead agency involved in a CERCLA (remedial and removal), Brownfields, federal facility, UST, or RCRA cleanup project. Where the lead agency is a federal agency other than the EPA, EPA and the federal agency may share some site manager/site attorney responsibilities or EPA may retain them independently depending on the responsibility under any of the five cleanup programs. The term “site” is used generically in this guidance to also represent areas of contamination managed under all five of these cleanup programs. The terms “CERCLA,” and “Superfund,” generally

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recognizing that there are some differences among the cleanup

PIME IC Guidance: Overview

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- Integrates concepts from other disciplines such as real estate law, land use planning, and community engagement
- Cross-program guide discussing roles and responsibilities for IC life cycle
 - Particular focus given to the roles of states, tribes, local governments, and communities in IC selection and maintenance
- Supports EPA's "enforcement first" policy
- Recommends early coordination with stakeholders; IC compliance planning (see ICIAP slides)
- Interim final version signed in November 2010 and released to FR; final version addressed ~ 350 comments

PIME IC Guidance: Significant Policy Statements

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- IC “trigger”: UU/UE as one factor
- Documentation of use restrictions and ICs in decision documents
- Community involvement
- Capacity of IC stakeholders, particularly local governments
- State laws as ARARs
- Relationship between ICs and post-removal site controls
- Title searches and other real property law considerations

EPA Guidance:

IC Implementation and Assurance Plans at Contaminated Sites (“ICIAP”)

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United States Environmental
Protection Agency

Office of Solid Waste and
Emergency Response

OSWER 9200.0-77
EPA-540-R-09-002
December 2012

Office of Enforcement and
Compliance Assurance

Institutional Controls:

A Guide to Preparing Institutional Control Implementation and Assurance Plans at Contaminated Sites

A. INTRODUCTION

A.1 Purpose

The purpose of this document is to provide guidance¹ to the EPA Regions for developing Institutional Control Implementation and Assurance Plans (ICIAPs) at contaminated sites where the response action includes an institutional controls (ICs) component. An ICIAP is a document designed to systematically: (a) establish and document the activities associated with implementing and ensuring the long-term stewardship of ICs; and (b) specify the persons and/or organizations that will be responsible for conducting these activities.² Specifically, an ICIAP focuses on identifying the details of how ICs that are selected in decision documents should be implemented, maintained, enforced, modified, and terminated (if applicable) at a specific site. The ICIAP is normally a stand-alone document that is enforceable through, if incorporated as a requirement in, for example, a consent decree (CD), administrative order on consent (AOC), or federal facility agreement (FFA).

The recommendations in this guidance are designed for cleanup actions taken at Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund); Brownfields; federal facility; underground storage tank (UST); and Resource Conservation and Recovery Act (RCRA) sites. For all of these programs, ICs generally are evaluated and selected in a site decision document, such as a CERCLA Record of Decision (ROD), to help ensure protectiveness of human health and the environment.

ICIAP Guidance: Overview

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- Provides technical framework for creating a plan that documents activities necessary to implement, maintain, enforce, and terminate ICs
- Single source document of who does what
- Companion to the PIME; also written as cross-program guidance
- Key recommendations:
 - Early development of ICIAP – e.g., RD phase of Superfund
 - Periodic review of site ICs, modify ICIAP as appropriate

ICIAP Guidance: Recommended ICIAP Contents

Table 1: Recommended Contents of an ICIAP

Report section:	Should address or discuss these topics when appropriate:
1.0 Introduction	<ul style="list-style-type: none"> <input type="checkbox"/> Entity that prepared the ICIAP <input type="checkbox"/> Name and location of site requiring ICs (including any site aliases) <input type="checkbox"/> Agency responsible for IC oversight
2.0 Site Details	<ul style="list-style-type: none"> <input type="checkbox"/> Site description <ul style="list-style-type: none"> ▪ Site identification ▪ Location ▪ Site area and affected resources <input type="checkbox"/> Brief site history <ul style="list-style-type: none"> ▪ Previous site uses ▪ Contaminants of concern (COCs) ▪ Risk exposure pathways ▪ Response action summary ▪ Cleanup objectives ▪ Substantive use restrictions identified in the decision document(s) (i.e., IC objectives) ▪ Current and reasonably anticipated future land use <input type="checkbox"/> Property information and stakeholder contacts <ul style="list-style-type: none"> ▪ Parcel ownership/occupancy information ▪ Property interest and resource ownership ▪ Responsible parties and other stakeholders ▪ Tribal, state, and/or local government contacts ▪ Other relevant stakeholders <input type="checkbox"/> Accurate mapping of residual contamination, IC boundaries, and other site features <ul style="list-style-type: none"> ▪ Location of contamination ▪ Location of impacted parcels ▪ Location of engineering controls ▪ Location of restricted areas ▪ Other relevant features

ICIAP Guidance: Recommended ICIAP Contents (cont.)

<p>3.0 Key Elements for all Planned/Implemented ICs</p>	<ul style="list-style-type: none"> <input type="checkbox"/> General elements <ul style="list-style-type: none"> ▪ Instrument name ▪ Instrument type ▪ Entity responsible for implementation ▪ Implementation event and date ▪ Substantive use restrictions achieved by this IC ▪ Legal description of restricted area(s) ▪ IC instrument lifespan ▪ Potential barriers to IC implementation <input type="checkbox"/> Elements specific to instrument category <ul style="list-style-type: none"> ▪ Proprietary controls ▪ Governmental controls ▪ Enforcement and permit tools with IC components ▪ Informational devices <input type="checkbox"/> IC relationship matrix (see Appendix B)
<p>4.0 IC Maintenance Elements</p>	<ul style="list-style-type: none"> <input type="checkbox"/> IC assurance monitoring <ul style="list-style-type: none"> ▪ Entity responsible for IC monitoring ▪ Frequency of site inspections and IC monitoring ▪ Activities that constitute monitoring ▪ Events and activities to be monitored <input type="checkbox"/> Reporting <ul style="list-style-type: none"> ▪ Reporting procedures ▪ Reporting frequency ▪ Events and activities to be reported ▪ Location and procedures for accessing records ▪ Entity responsible for reporting ▪ Stakeholder/regulatory entity contact

TRENDS IN STATE AND INDUSTRY PRACTICE

State and Industry Approaches: Drafting and Recording ICs

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- Survey of IC Areas
- Tailored Restrictions
- Title Search
- See, e.g.
 - NY IC Guidance
 - Colorado IC Guidance
 - Florida IC Guidance

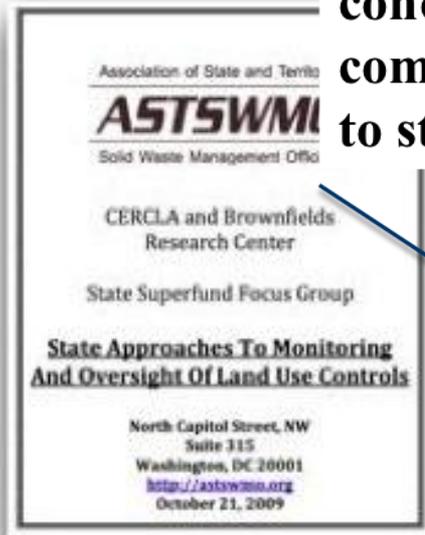
State and Industry Approaches IC Compliance Monitoring

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States Evaluate Institutional Control Monitoring and Oversight

by Mike Sowinski | 11 / 07

success of cleanups and subsequent redevelopment will rest on understanding and effectively using LUCs... efforts to keep locals aware of LUCs, the study concluded, would ... likely result in greater LUC compliance...the rising number of LUCs will continue to strain state resources...



an external procedure remedy for cleanup of environmentally impaired property. The success of these cleanups and subsequent redevelopment, according to ASTSWMO, "will rest on understanding and effectively using LUCs."

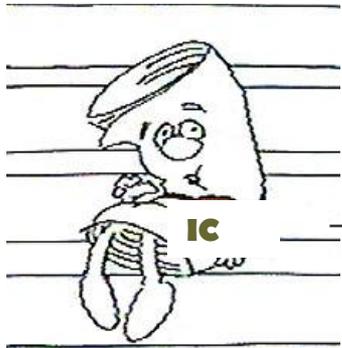
According to the study, states monitor LUCs by either conducting site visits or reviewing property owner self-certifications, and this monitoring ranges in frequency from about 1 to 5 years. Local governments, according to the study, are not significantly involved with LUC oversight. Improved efforts to keep locals aware of LUCs, the study concluded, would be a first step in

creating state-local partnerships and would likely result in greater LUC compliance. Monitoring the rising number of LUCs will continue to strain state resources, according to the study.

State and Industry Approaches IC Compliance Monitoring

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IC Monitoring Approaches



LTS

Property
Transaction



Land Activity
& Use



Periodic
“Snapshot
”
Monitoring

Ongoing
Tailored
Monitoring

Compliance Monitoring

46

Terradex collects and maps multiple categories of land activity at and around LandWatch zones.

Land Activity Events are screened and filtered against objectives for each monitoring zone to trigger alerts.

Monitored Activity Data Sources

Sales and Transactions



- Real Estate Listings
- Real Estate Sales
- Foreclosure Actions
- Pre-Foreclosure
- Tax Liens
- Bankruptcies
- Commercial Lease
- Easements

Local Government



- Building Permits
- Zoning Changes

Excavation Clearance



- Excavation Permits
- Excavation Clearance
- Well Construction
- Dredge/Fill Permits

Sensitive Uses



- Childcare Licensing
- New Occupancies
- New Businesses
- New Educational Sites

Other Sources

- Environmental Release Reporting
- Construction Request for Proposal



Compliance Monitoring: Land Activity Conflicts

Cleanup Deck 2.0

Logout M

Map Layers Data Filters Interactive Map Data Download About Details

Zoom To A State Zoom To An Address Search Active Map Layers (enter min 4 characters)

- Landwatch Sites URS
- Landwatch Alerts URS
- Landwatch Sites USEPA
- Landwatch Alerts USEPA
- Landwatch Sites WDIG
- Landwatch Alerts WDIG

Activity & Use

- Daycare (CA)

Populations

- Median Household Income

Property

- Federal Lands
- Parcels

Renewable Energy Potential

- Geothermal Resource Potential
- Concentrating Solar Power Radiation
- PV Solar Radiation - Tilt
- Wind Resource Intensity

Environmental Background

- USGS Stream Flow
- FWS Wetlands
- SSURGO Soils
- Natural Asbestos

Background Maps

- Google
- Google Streets

Transparency: 100%

Map Legend

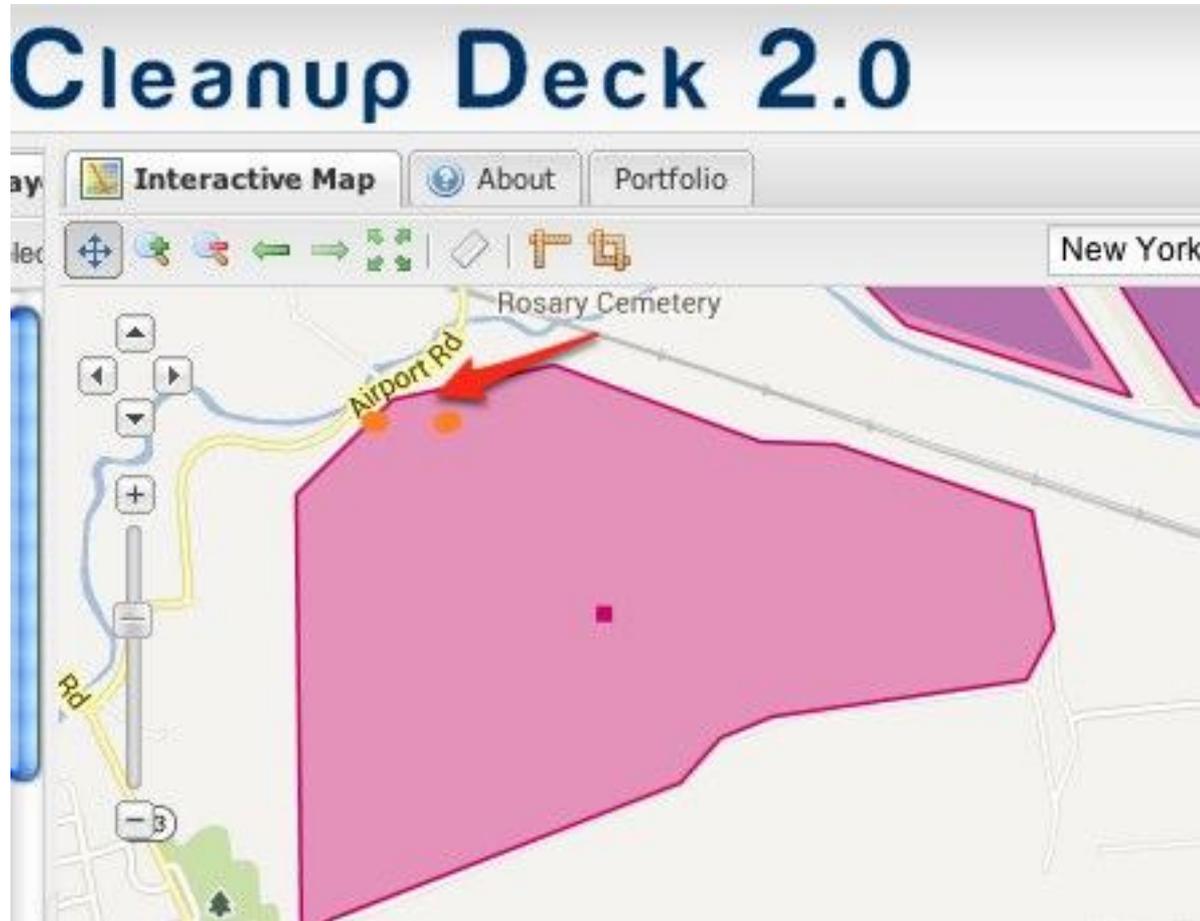
- Landwatch Sites WDIG
- Monitoring Zone
- Site
- Landwatch Alerts WDIG
- Excavation Open
- Excavation Closed
- Real Estate Closed
- Real Estate Open
- Local Government Open
- Local Government Closed

See Alert Details

Map data ©2011 Google - Terms of Use

100 m
200 ft

Compliance Monitoring: Water Well Monitoring





Alert Number: 1069188

Site Name and Address:

██████████ Inc.
12731 E Los Nietos Road
Santa Fe Springs
CA

Site ID: 3246

[Click to view site details](#)

Date & Contact Info



Event Details:

Excavation
INSTALL CONDUIT USA South Ticket Number is
A11050901

Primary Contact Information for Event:

Name: CLIFF
Company: S AND S DIRECTIONAL DRILLING
Phone: 951-279-9958 Ext: Call back: ANYTIME
Fax:
email:

Work/Report (if in Planning) Date: 04/19/11

Alert Begin: 04/18/2011

Alert Close: ██████████ 9/2011

Alert Follow Up Category:

Description of Alert Response:

Secondary Contact Information:

TIME WARNER

Description



Event Location Address, Description and Map:

LOS NIETOS RD SANTA FE SPRINGS CA

[Click to view commonly used abbreviations](#)

STATING AT POLE# 1530329E LOC ON THE N/E SIDE OF LOS NIETOS RD AT: FREEMAN
AVE AND CONT N/W FOR APPROX 40FT AT THAT POINT CROSSING TO THE: S/W SIDE;
W/SIDE OF FREEMAN AVE FRM THE S/W SIDE OF LOS NIETOS RD CONT: S/FOR
APPROX ██████████

Legend : Event Site Polygon



Affected Area



Message

Data Loaded!



Alert Number: 1069188

Site Name and Address: [Redacted] Inc. 12731 E Los Nietos Road Santa Fe Springs	Site ID: 3246 Click to view site details
Primary Contact Information for Event:	

Alert Tracking and Closure



Message

From: [Redacted]
Date: 04/19/2011
 ReferenceEvent ID: 615409

Re: [Redacted] S Public Works and their contractor and they will not be drilling into any waste or any cover area. No work will be done on the Site and all the work will be conducted on the City's R/W. A drawing of where the work is to be conducted is attached to Raudel's 3:18pm (4/19/11) email, and will be kept for future reference. Nothing further needs to be done.

"Nothing further needs to be done."



From: [Redacted]
Date: 04/18/2011
 ReferenceEvent ID: 615409

I spoke with [Redacted] Drilling. The work will be on the N/W corner of Los Nietos, which is the corner of Parcel 49. There is a meeting scheduled for tomorrow at 1PM at the work location with City of [Redacted] and [Redacted] Drilling. [Redacted] will be present during the 1PM meeting, and will discuss the work with them.

Protective Actions Taken



From: [Redacted]
Date: 04/18/2011
 ReferenceEvent ID: 615409

Melanie will be following up with S&S Directional Drilling.

Alert



From: Alexander Edholm
Date: 04/18/2011
 ReferenceEvent ID: #15409

Hello. We are providing this alert to you as specified in our institutional control monitoring [Redacted] he above alert provides information that should assist you in contacting parties with additional knowledge regarding this planned activity. Monitored events include permitting, excavation, construction, property transactions, or CEQA notices. Should you have any comments regarding this alert please send them to [Redacted] ct manager, [Redacted] you.



Excavator

Agency

TO: VINCE PALMER, DOMINION GAS COMPANY

Phone: (304) 677-0182
Fax:
email:

FROM: West Virginia Department of Environmental Protection



Primary Contact: David Hight
Phone: 304-926-0499 ext.1268
email: David.H.Hight@wv.gov

Excavation
Summary

RE: Miss Utility West Virginia Ticket: 1201810240

Ticket Priority: Normal
Work Address: 1952 HUNTERS WAY, MORGANTOWN
Near Intersection: ELJADID DT
Work Description: WORKING IN FRONT OF PROP .GPS N 39 37.109, W 79 55.411 . Work Type: INSTL GAS LINE .
Work Depth: 04FT
Work Date: 01/20/12 09:45
Work Done For: DOMINION GAS COMPA
Location Details:

Dig Clean Safety Advisory



Miss Utility West Virginia has notified the West Virginia Department of Environmental Protection of your planned excavation at or near a known site with environmental restrictions.

Sites with environmental restrictions may

- have chemicals that pose an exposure risk during the excavation;
- require proper management of excavation materials;
- contain surface coverings or buried materials.

This notice maps your proposed excavation area and identifies environmental restrictions. You are urged to contact the WVDEP Project Manager listed above and be protective of your workers, yourself, and the public. You can review this site and other environmental sites with environmental restrictions, as well as their corresponding restrictions, using Google Earth: <http://goo.gl/Em99h>

Get Details

Environmental
Summary



Path of Excavation
Compared to IC Area

Shovel and line indicate your work area as provided to Miss Utility West Virginia.
Numbered and shaded polygons (blue) are the areas of the site(s) of concern.
Note, on occasion the area is outside of the map view.

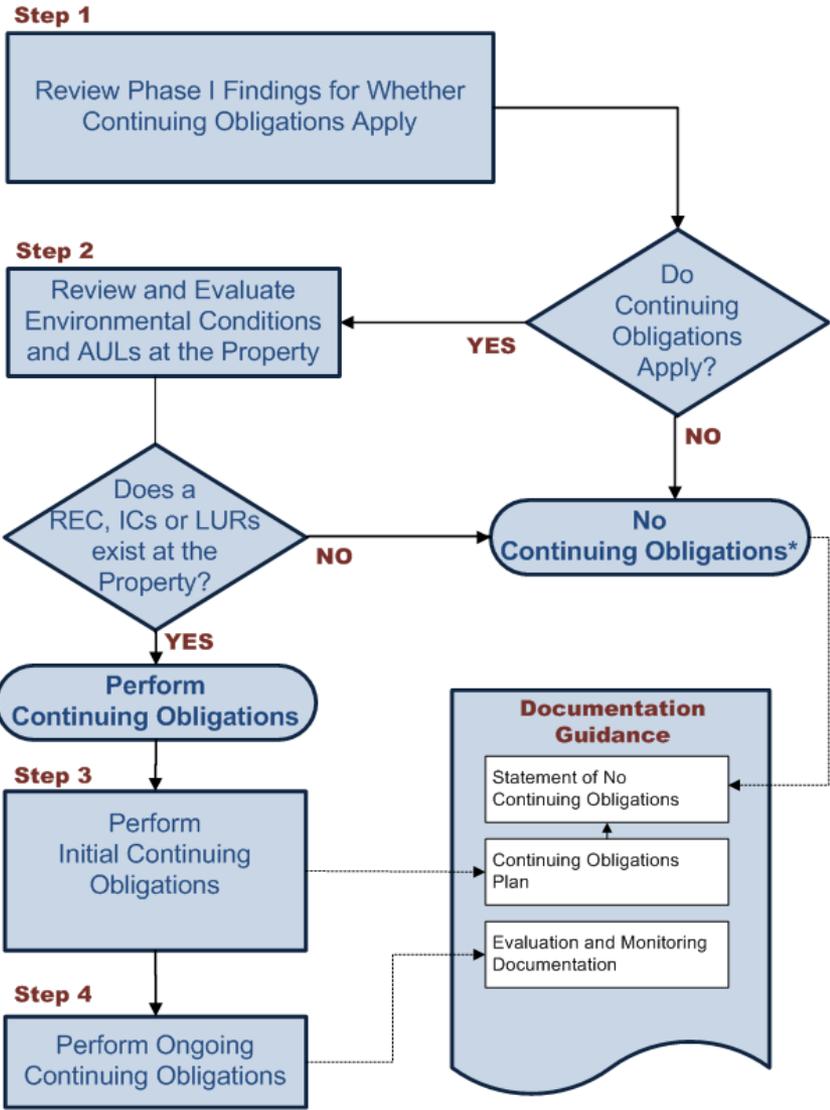
SITES WITH ENVIRONMENTAL RESTRICTIONS SHOWN ON MAP:

- Site 1: Sterling Faucet: Area B (02238-B)
Earl Core Road (St. Rt. 7) Morgan
- Site 2: Sterling Faucet: Area A (02238-A)
Earl Core Road (St. Rt. 7) Morgan
- Site 3: Sterling Faucet: Area D (02238-D)
Earl Core Road (St. Rt. 7) Morgan

ALTERNATIVES TO VIEW INFORMATION:

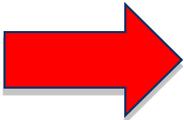
- View on the Web:
<http://www.digclean.com>, enter 1201810240
- Call:
650-209-4229, when prompted enter 100031
- Send Text Message:

Standard Guide for Identifying and Complying With Continuing Obligations¹



Ongoing COs for ICs:

- Property AUL Inspection
- Monitor Land Activity
- Reports and Documentation



ASTM E 2790 Guidance on “Reasonable Steps” – Step 4 Ongoing Steps

8.3.4 *Monitoring Property Excavations*—Users may consider registering their obligations related to AULs within excavation clearance systems, which can provide a mechanism to notify users and excavation contractors of the existence of AULs. This approach may serve users at larger properties, properties where excavations may occur relatively frequently, and/or when the user is not located at the property.

Note: 14—Excavation clearance registrations are not available in all states.

8.3.5 *Monitoring and/or Periodically Inspecting Building, Development, Excavation and Similar Land Use Permits*—Government permits are issued routinely for various land uses and activities. The permits often focus on controlling uses of the property that may be incompatible with or specifically prohibited by an AUL. For example, grading permits control excavation, day care licenses control day care activity, building permits control new construction, and water well permits control access to and use of ground water. These permitting records are often available on the Internet and commercial services, and as such would allow an interested party to monitor prospective changes in land use and activities.

8.3.6 *Monitoring and/or Periodically Inspecting Zoning Ordinances or Zoning Variance Request*—Monitoring zoning generally consists of confirming whether the local government has amended, issued a variance, or allowed a particular ordinance to expire. Monitoring for zoning issues involves inspecting the records of a local government to confirm within a monitoring period whether a zoning amendment, variance, or other zoning decision has been issued that could permit an activity or use at the property inconsistent with the AULs or other continuing obligations.

8.3.7 *Government Agency Inspections and Monitoring*—In some cases, state, federal, or local government agencies conduct monitoring of continuing obligations, particularly AULs. Depending on the circumstances, government-performed inspections may serve in whole or in part as the monitoring and inspection necessary to maintain continuing obligations on an ongoing basis.

years, and some activities might be performed more frequently than others. As one point of reference, current draft EPA

excavation clearance systems (aka One Call)

requires EPA to evaluate a remedy's protectiveness no less than every five years in cases where EPA approved a remedy that allowed hazardous substances to remain. As a final point of reference, in the report titled "State Approaches to Monitoring and

and

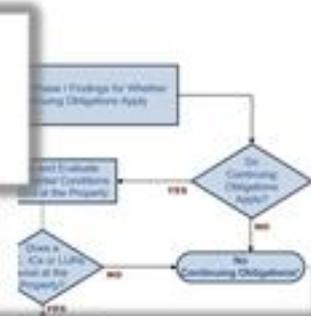
grading permits ... day care licenses ... building permits ... water well permits

set forth in the government's response document documents (if any); (2) the frequency requirements set forth in the AULs (if any); (3) contractual obligations imposed on a tenant or a future purchaser of the property to monitor or maintain

zoning ordinances or zoning variances

an interval that would reasonably assure that continuing obligations are satisfied while keeping in mind that existing practice tends never to fall below a frequency of five (5) years and is often more frequent.

Note: 15—AULs developed in accordance with Guide E2091 specify inspection frequencies. Further, AULs that are easily damaged or moved but readily verifiable, such as on-property notices, monuments, signs and postings, should be evaluated more frequently (for example, annually), without the need for verification by an environmental professional. The user is directed to Guide E2091 for additional information as to the



X4. RECOMMENDED TABLE OF CONTENTS AND REI

X4.1 Introduction

X4.1.1 Purpose



E2790 Outlines a Sample Continuing Obligations Plan



LEVEL OF REMEDIATION AND LAND USE LIMITATIONS

1. This site was classified as High Priority in accordance with Section 57.7(b)(3) of the Act and 35 Ill. Adm. Code 732.304. In accordance with 35 Ill. Adm. Code 732.404(a), the

PREVENTIVE, ENGINEERING, AND INSTITUTIONAL CONTROLS

4. Preventive: None.

Maintain Cap

Engineering: A building and asphalt surface cover sufficient in thickness to inhibit the inhalation and ingestion of the contaminated media must remain over the contaminated soil as outlined in the attached Site Base Map. This building and asphalt surface cover are to be properly maintained as engineered barriers to inhibit inhalation and ingestion of the contaminated media.

OTHER TERMS

6. Any contaminated soil or groundwater removed or excavated from, or disturbed at, the above-referenced site, more particularly described in the Leaking Underground Storage Tank Environmental Notice of this Letter, must be handled in accordance with all applicable laws and regulations under 35 Ill. Adm. Code Subtitle G.

Soil and Ground Water Management

7. Further information request under the Freedom of Information Act

Illinois Environmental Protection Agency
Attention: Freedom of Information Act Officer
Bureau of Land - #24
1021 North Grand Avenue East
Post Office Box 19276
Springfield, IL 62794-9276

NFR Voidance

8. Pursuant to Section 57.10(e) of the Act (732.704), should the Illinois EPA seek to void this Letter, the Illinois EPA shall provide notice to the owner or operator of the leaking underground storage tank system(s) associated with the above-referenced incident and the current title holder of the real estate on which the tanks were located, at their last known addresses. The notice shall specify the cause for the voidance, explain the provisions for appeal, and describe the facts in support of the voidance. Specific acts or omissions that may result in the voidance of this Letter include, but shall not be limited to:

X4. RECOMMENDED TABLE OF CONTENTS AND REPORT FORMAT FOR A CONTINUING OBLIGATIONS PLAN

X4.1 Introduction

X4.1.1 Purpose

X4.2 Property Description

X4.2.1 Location and Legal Description

X4.2.2 Property Owner(s) and Property Transaction Date

X4.3 Site Assessment and Identification of Existing Environmental Conditions

X4.3.1 Review of Site Assessment Documents

X4.3.1.1 Phase I Documentation

X4.3.1.2 Phase II Documentation

X4.3.1.3 Additional Documentation

X4.3.2 Summary of Existing Environmental Conditions

X4.3.2.1 Identification of Recognized Environmental Conditions

X4.3.2.2 Identification of Institutional Controls

X4.3.2.3 Identification of Land Use Restrictions

X4.3.2.4 Identification of Engineering Controls

X4.3.2.5 Identification of Releases or Future Threatened Releases

X4.3.3 Summary of General Site Use and Conditions

X4.3.3.1 Property and Vicinity General Characteristics

X4.3.3.2 Current and Anticipated Land Use and Land Activities

X4.3.3.3 Natural Resource Features

X4.4 Evaluation of Existing Environmental Conditions to Determine Continuing Obligations

X4.4.1 Nature and Scope of LURs

X4.4.2 Nature and Scope of ICs

X4.4.3 Nature and Scope of Engineering Controls

X4.4.4 Nature and Scope of Present or Future Threatened Releases

X4.4.5 Nature and Scope of Exposure to Human Health and the Environment

X4.5 Description of Initial Continuing Obligations Related to Activity and Use Limitations and Reasonable Steps

X4.5.1 Findings of Initial Site Inspection

X4.5.2 IC or LUR (or other AULs)

X4.5.2.1 Action Needed (if any) to Implement IC or LUR (or other AULs)

X4.5.2.2 Actions Needed (if any) to Not Impede IC Effectiveness and Integrity

X4.5.2.3 Actions Needed (if any) to Comply With LURs

X4.5.3 Reasonable Steps

X4.5.3.1 Action Taken to Stop Any Continuing Releases

X4.5.3.2 Action to Protect Against Any Future Threatened Release

X4.5.3.3 Action to Prevent Exposure to Human Health and the Environment

X4.5.3.4 Other Reasonable Steps Needed for ICs, LURs or other AULs

X4.5.4 Schedule for Completion of Initial Continuing Obligations

X4.6 Descriptions of Ongoing Continuing Obligations Related to Activity and Use Limitations and Reasonable Steps

X4.6.1 Monitoring and Evaluation (including Inspections)

X4.6.1.1 Schedule of Monitoring and Evaluation

X4.6.1.2 Documentation of Monitoring and Evaluation

X4.6.2 Operation and Maintenance

X4.6.2.1 Schedule of Operation and Maintenance

X4.6.2.2 Documentation of Operation and Maintenance

X4.6.3 Communication of Ongoing Continuing Obligations

X4.7 Signature(s) of Preparer

X4.8 Qualifications

X4.9 References

X4.10 Appendices

X4.10.1 Site Vicinity Map

X4.10.2 Site Use (Re-Use) Map

X4.10.3 Copies of AUL documents (covenants, ordinances, etc.)

X4.10.4 Site Assessments (Phase I, Phase II, others)

X4.10.5 Site Conceptual Model

X4.10.6 Risk Assessment

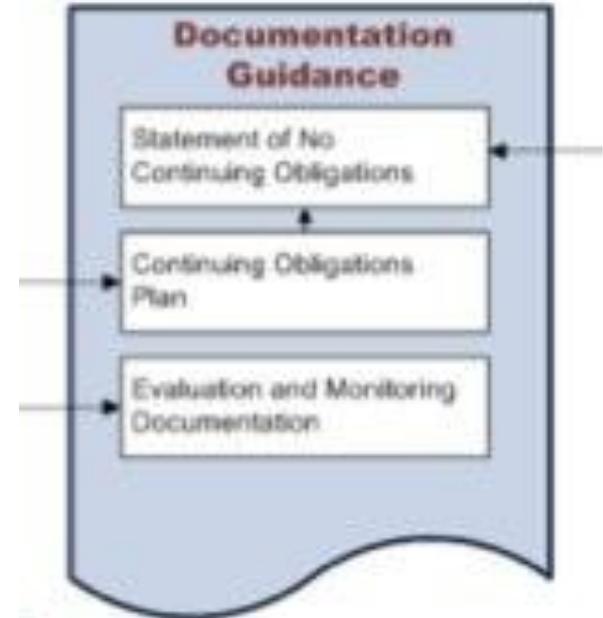
Design and Implement Continuing Obligations

Monitor ICs, ECs, Appropriate Care

Continuing Obligations Documentation

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- Continuing Obligations Plan
 - Existing Conditions
 - Describe Initial COs
 - Describe Ongoing COs
- Monitoring and Evaluation Records
 - “This report documents the periodic monitoring and evaluation efforts that would have been designed within the *continuing obligation plan*, and documents that *property conditions are consistent with continuing obligations at a particular time interval during the user’s term of property ownership.*”



IC COMPLIANCE FOR CERCLA LANDOWNER LIABILITY PROTECTIONS

Brownfields Amendments of 2002: “Continuing Obligations” for BFPPs, ILOs, and CPOs

58

Perform AAI

- Land records are the best place to find information about ICs during AAI
- Growing number of registries

Release Management

Exercise ***appropriate care*** by taking reasonable steps to:

- (a) stop any continuing release
- (b) prevent any future threatened release; and
- (c) prevent or limit any human, environmental, or natural resource exposure to any previously released hazardous substance.

Institutional Controls

- Comply with land use restrictions established or relied on in connection with the response action
- Do not impede the effectiveness or integrity of any institutional control

There are also “other” continuing obligations.

Continuing Obligations for ICs and LURs: Meaning of ICs vs LURs?

59

“Comply with land use restrictions”

“Not impede the effectiveness or integrity of any institutional control”

Continuing Obligations for ICs and LURs: Limited case law on scope or meaning

60

- In *Ashley II of Charleston, LLC vs. PCS Nitrogen, Inc.*, 791 F. Supp. 2nd 431, 500-502 (D.S.C. 2011), *aff'd on other grounds, PCS Nitrogen, Inc. V. Ashley II of Charleston, LLC*, 714 F.3d 161 (4th Cir. 2013), the court concluded that the defendant had satisfied the LUR/IC element of the BFPP defense (even though it had not satisfied other elements of the defense)
 - The court did not address what is meant by being "in compliance with any land use restrictions" or "not impeding the effectiveness or integrity of any institutional control"
 - The court did not appear to consider crushed stones, which were being used as an engineering control, to be a "land use restriction"

Continuing Obligations for ICs and LURs:

US EPA Common Elements Guidance Discusses IC/LUR Continuing Obligations

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR - 6 2003

Because institutional controls are tools used to limit exposure to contamination or protect a remedy by limiting land use, they are often used to implement or establish land use restrictions relied on in connection with the response action. However, the Brownfields Amendments require compliance with land use restrictions relied on in connection with the response action, even if those restrictions have not been properly implemented through the use of an enforceable institutional control. Generally, a land use restriction may be considered “relied on” when the restriction is identified as a component of the remedy. Land use restrictions relied on in connection with a response action may be documented in several places depending on the program under which the response action was conducted, including: a risk assessment; a remedy decision document; a remedy design document; a permit, order, or consent decree; under some state response programs, a statute (e.g., no groundwater wells when relying on natural attenuation); or, in other documents developed in conjunction with a response action.

Continuing Obligations for ICs and LURs:

US EPA Common Elements Guidance Discusses IC/LUR Continuing Obligations

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Impeding the effectiveness or integrity of an institutional control does not require a physical disturbance or disruption of the land. A landowner could jeopardize the reliability of an institutional control through actions short of violating restrictions on land use. In fact, not all institutional controls actually restrict the use of land. For example, EPA and State programs often use notices to convey information regarding contamination on site rather than actually restricting the use. To do this, EPA or a State may require a notice to be placed in the land records. If a landowner removed the notice, the removal would impede the effectiveness of the institutional control. A similar requirement is for a landowner to give notice of any institutional controls on the property to a purchaser of the property. Failure to give this notice may impede the effectiveness of the control. Another example of impeding the effectiveness of an institutional control would be if a landowner applies for a zoning change or variance when the current designated use of the property was intended to act as an institutional control. Finally, EPA might also consider a landowner's refusal to assist in the implementation of an institutional control employed in connection with the response action, such as not recording a deed notice or not agreeing to an easement or covenant, to constitute a violation of the requirement not to impede the effectiveness or integrity of an institutional control.⁷

EMERGING ISSUES



Emerging Issues: IC Data Exchange

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Superfund

New Institutional Controls Data Method Available



A new method for government and private computer systems to share information on institutional controls at contaminated sites is now available, according to the Environmental Information Exchange Network. The new [Institutional Controls Data Exchange](#) will allow the exchange of information using a standardized data format, the data exchange network announced June 10. Institutional controls are nonengineered instruments, such as administrative and legal controls that help minimize the potential for human exposure to contamination by limiting land or resource use and guide human behavior at a site, according to the network exchange, which is a partnership among states, tribes, territories, and the Environmental Protection Agency to exchange environmental protection information securely over the Internet. Bob Wenzlau, chief executive officer of Terradex Inc., a company that develops web technologies to assure the safe reuse of contaminated properties, told BNA June 14 the new method is "transformative" because it can be used by the public and those affected by institutional controls. Until now, environmental exchange had been an "inside game," with state governments talking to the federal government, he said. The data exchange on institutional controls is available at <http://www.exchangenetwork.net/data-exchange/ic/>. More information is available from Connie Dwyer of EPA's Office of Environmental Information at (202) 566-1691 or dwyer.connie@epa.gov.

Emerging Issues: Land Stewardship Trust

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2013 WV H.B. 2590

1ST SESSION OF THE 81ST LEGISLATURE

HOUSE BILL 2590

2013 Bill Tracking WV H.B. 2590

[Retrieve Bill Text Report](#)

DATE-INTRO: FEBRUARY 21, 2013

LAST-ACTION: APRIL 29, 2013; Signed by GOVERNOR.

SYNOPSIS: Relates to authorizing the creation of a public nonprofit corporation and governmental instrumentality to facilitate the redevelopment of former commercial, industrial and mining properties subject to federal and state regulations because of contamination or pollution discharge; declares policy and purpose of article; creates **West Virginia Land Stewardship Corporation**; provides for underwriting review of land stewardship program applicants.

Emerging Issues: Estimating IC Costs; IC Fees

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CERCLA and Brownfields
Research Center

Long-Term Stewardship Focus Group

**A Long-Term Stewardship State Conceptual
Framework to Estimate Associated Cost**

August 2012

Emerging Issues: Local Government Coordination

67

Integrating Cleanup Sites Information into Palo Alto's Desktop GIS System

The image displays two side-by-side screenshots illustrating the integration of cleanup site information. The left screenshot shows the City of Palo Alto Desktop GIS interface with a map of a city block. A red circle labeled '1' highlights a specific property on the map. A red circle labeled '2' highlights a 'Related Documents and Links' panel at the bottom of the GIS window, which contains a hyperlink for 'Terradex Cleanup Deck'. The right screenshot shows the Terradex Cleanup Deck 2.0 web interface in a browser. A red circle labeled '3' highlights a specific cleanup site on the map, which is highlighted in yellow. A red circle labeled '4' highlights the 'Feature Info' panel at the bottom of the browser window, which displays detailed information for the selected site, including 'Institutional Control Groundwater Restriction Area' and a list of requirements such as 'Grant Access to Agency for Agency Inspection' and 'No Groundwater Extraction at Any Depth'.

City of Palo Alto Desktop Geographic Information System (GIS)

Terradex Cleanup Deck

Cleanup Deck 2.0

- 1 In the City Desktop GIS, city users focus on a property.
- 2 The user requests Feature Information from their system, which gives immediate access to Terradex Cleanup Deck via hyperlink.
- 3 The Cleanup Deck opens in a web browser, focused on the same extent as being viewed in City GIS. The Cleanup Deck shows Cleanup Sites, Institutional Controls and Groundwater Plumages.
- 4 In the Cleanup Deck the user clicks a Feature, like an Institutional Control, to view summarized land use requirements and restrictions, links to documents, and additional details.