



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

OSWER No. 9355.0-106

OCT 7 2004

MEMORANDUM

SUBJECT: Re-Transmittal, "EPA Strategy to Evaluate the Implementation of Institutional Controls at Superfund Sites"

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This memorandum re-transmits EPA's "Strategy to Evaluate Implementation of Institutional Controls (ICs) at Superfund Sites." The document sets forth a five year plan to ensure that effective ICs are in place and functioning properly at approximately 900 sites that have achieved construction completion. This is being resent to emphasize the applicability of this strategy to federal facility sites.

This document has been developed with significant assistance from both regional management and staff. EPA also solicited state and tribal support and comments and the attached document reflects their helpful input. Thank you to everyone who has dedicated time and effort to this initiative. Because of this hard work, we have already achieved step one of the strategy by populating the IC Tracking System with Tier 1 data. We look forward to maintaining this momentum and accomplishing the important tasks set forth in the attached document.

If you have questions please contact us or have your staff contact K.C. Schefski (OSRE) at (202)564-8213, schefski.kenneth@epa.gov or Mike Bellot (OSRTI) at (703)603-8905, bellot.michael@epa.gov.

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STRATEGY TO ENSURE INSTITUTIONAL CONTROL IMPLEMENTATION AT SUPERFUND SITES

OSWER No. 9355.0-106

September 2004

I. INTRODUCTION

This document sets forth EPA's strategy (Strategy) for ensuring that institutional controls (ICs) are successfully implemented at Superfund sites, with an emphasis on evaluating ICs at sites where all construction of all remedies is complete (construction complete sites).¹ This Strategy will serve as a roadmap for EPA regional and headquarters personnel in preparing Region specific action plans and conducting the work necessary to ensure the proper implementation of ICs at Superfund sites. This work includes gathering and entering information in the Institutional Controls Tracking System (ICTS), evaluating the data generated through ICTS, prioritizing and conducting site-specific followup activities, building the capacity to better manage and review IC information, and coordinating with other interested parties. EPA expects that the Agency will undertake the projects outlined in this Strategy over approximately the next five years.

Through the development and implementation of this Strategy, EPA intends to achieve the following goals:

- Define a nationally consistent approach for tracking and evaluating whether appropriate institutional controls have been implemented at Superfund sites.
- Identify IC related problems at Superfund sites using the IC Tracking System and independent evaluation.

¹ The focus of this Strategy is on sites where EPA serves as the "lead Agency" under the NCP. However, for sites where other federal or state departments and agencies serve as the "lead agency," EPA's role will be different for certain aspects of this Strategy. EPA will work with other federal and state departments and agencies to develop a collaborative effort to implement the relevant parts of this Strategy at these sites.

- Define a nationally consistent and resource appropriate approach to remedy IC related issues identified at Superfund sites.
- Identify and implement pipeline business process improvements to minimize future problems (e.g., need to revisit model consent decrees, orders, remedy decision documents, statements of work, close-out procedures, Five-Year Reviews, etc).
- Establish a tiered approach and appropriate time line for population, continual updates, and maintenance of the IC tracking system.

II. BACKGROUND AND PURPOSE

EPA defines ICs as “non-engineered instruments, such as administrative and legal controls, that help to minimize the potential for human exposure to contamination and protect the integrity of the remedy.” ICs work by limiting land or resource use and by providing information that helps modify or guide human behavior at properties where hazardous substances prevent unlimited use and unrestricted exposure. For example, a remedy may use an engineered cap to cover contaminated soils and an IC (e.g., an excavation permit) may be used to restrict people from excavating through the cap. Common examples of ICs include zoning, building or excavation permits, well drilling prohibitions, and easements and restrictive real covenants.²

EPA and other government agencies have used ICs at Superfund sites for nearly two decades. Over the last ten years EPA has focused increased attention on understanding and overcoming the complexities and challenges associated with the use of ICs. In recent years, this experience has led EPA to make significant improvements in our approach to ICs at Superfund sites.³ These improvements have been targeted at the full-life cycle of ICs from identification, evaluation, and selection to implementation, monitoring and enforcement. By making these changes and more clearly defining EPA’s policies and practices the reliability and durability of

² EPA generally consolidates the types of ICs available into the following four general categories: 1) governmental controls (e.g., zoning, local ordinances); 2) proprietary controls (e.g., easements, restrictive covenants); 3) enforcement and permit tools (e.g., consent decrees, administrative orders); and, 4) informational tools (e.g., notices filed in the land records, advisories).

³ This document refers to “Superfund sites” for sake of simplicity but the reader should understand that a Superfund site may be made up of many parcels of property owned by different parties, which is a more relevant description related to ICs. There may be many ICs at a site for many different parcels of property. One of the greatest challenges that EPA faces with respect to ICs is recognizing this intersection of environmental cleanup law and the traditional law of real property.

ICs at Superfund sites has greatly improved. EPA is continuing these efforts to improve the use of ICs at Superfund sites as they enter and proceed through the cleanup process – some of the specific activities are outlined in Section VI of this document.

The recent improvements, however, have only focused on recent decisions, meaning that many sites addressed earlier in the Superfund program have not benefitted from the increased understanding of ICs. One barrier EPA and others have faced in attempting to apply these improvements at older Superfund sites is the lack of centralized and reliable information on the site-specific status of ICs. Therefore, EPA will gather baseline information and populate the new IC Tracking System (ICTS) as the first step in this Strategy.

ICTS is a tool which EPA will use to help ensure the long-term durability, reliability, and effectiveness of ICs throughout their life-cycle. In the not too distant future, ICTS will include publicly available IC information. However, in the near term EPA will use initial data collected (i.e., Tier 1) to help evaluate the current status of ICs at Superfund NPL sites. The data collected in ICTS will help us define the scope and magnitude of the issues that EPA needs to address, so that we can better characterize and prioritize the work to be done. EPA achieved its goal of June 30, 2004 for Tier 1 data entry for approximately 900 construction complete sites.

Upon completing ICTS Tier 1 data entry, EPA Headquarters and Regions will assess the data to evaluate the current status of ICs at all construction complete sites for data gaps and actual site-specific IC issues. Although EPA lacks solid information on the status of ICs at Superfund sites in the aggregate, the Agency has conducted studies at select sites and can anticipate some of the most relevant issues. Data from the first phase of ICTS data entry will highlight two critical site-specific situations: 1) sites where contaminated media (e.g., soil, groundwater) do not support unlimited use and unrestricted exposure, yet an IC was not required as part of the remedy decision; and, 2) sites where ICs were required as part of the remedy decision, yet one or more of those ICs have not been implemented. In addition to these two situations, certain proprietary controls (i.e., easements and covenants) used as ICs early in the program may have implementation problems. Tier 1 ICTS data entry will not directly identify sites with this problem; however, data in ICTS will identify sites where this type of control was used and EPA expects to conduct further review.

Once EPA has determined where data gaps and site-specific IC problems may exist, the Agency will use this information to prioritize EPA's work to address these issues based on a variety of factors, including resources and the number of sites with potential IC issues. EPA's goal is to identify and review IC problems at all construction complete sites over approximately the next five years, relying on a combination of independent evaluation and scheduled Five-Year Reviews. The sites identified as priorities will likely be addressed through an independent evaluation unless a five-year review is scheduled within 12 months of problem identification; for these sites the evaluation will take place in conjunction with or as a component of the Five-Year Review. Priority evaluations will focus on whether ICs were required and properly implemented for all media not cleaned up to levels that allow for unlimited use and unrestricted exposure. As

noted, EPA does not yet know the scope of these priority evaluations but expects that these evaluations will be conducted over the next two years, resources permitting. After two years, the remaining sites will be evaluated through the Five-Year Review process.

EPA expects that upon further evaluation some data gaps will be the result of missing information in the site file; however, at some sites there will be legitimate problems with IC implementation that need to be addressed. How to address these problems will depend on a variety of site-specific factors. This Strategy covers general considerations and EPA expects that additional guidance may be developed as needed, throughout Strategy implementation. EPA will need to work closely with states, federal agencies, tribes, and potentially responsible parties to resolve site-specific IC issues.

In addition to priority reviews, this Strategy also sets forth specific capacity building steps EPA will take to improve our ability to gather, manage, and evaluate IC information for the remaining construction complete sites as well as all future Superfund sites. This will allow EPA to identify and rectify site-specific IC problems, and evaluate the overall effectiveness of ICs at a given site, through EPA's existing cleanup and monitoring process (e.g., Five-Year Reviews, monitoring submissions). First, EPA will explore expanding ICTS to include more information and make the system more dynamic and functional (i.e., Tier 2 & 3). Second, EPA will produce an IC supplement to the Five-Year Review guidance, in order to improve the evaluation of overall IC effectiveness during the periodic review process. Third, EPA will provide training and support to Regional and State staff on ICs, ICTS, and topics related to the use and implementation of ICs such as real property law.

In addition to capacity building to improve the use of ICs at NPL sites, EPA recognizes that other categories of sites may also have IC weaknesses such as, removal only sites and Formerly Used Defense Sites. EPA expects to continue to assess the need for evaluation of IC implementation at these other categories of sites and learn from the IC problems encountered at these sites. The use of ICs at these sites will also benefit from the lessons learned in EPA's evaluation of NPL construction complete sites.

To implement this ambitious Strategy will take significant coordination and communication within EPA and with outside parties. To facilitate these interactions, EPA has organized both staff and management, at Headquarters and the Regions, into a group dedicated to implementing this Strategy. This group consists of a Management Advisory Group for ICs, a headquarters staff level team, and regional IC legal and program coordinators. In addition to internal coordination, this group will coordinate with states, federal agencies, and other parties at both the national and regional level.

III. EVALUATION OF INSTITUTIONAL CONTROLS AT CONSTRUCTION COMPLETE SITES

Through the collection of basic IC information for Superfund NPL sites that have reached construction completion, the information gathered through the Tier 1 data collection effort will provide an indicator of the scope of IC issues at NPL sites. Tier 1 data will not supply a final determination of required/needed ICs; rather, the information will provide a site-specific summary of what information the site-file contains regarding whether an IC was required and implemented, as well as a guide to aid in assessing where there is a need for potential site-specific follow-up.

- 1) The Regions will begin by entering Tier 1 ICTS data for the following universe of sites:

Region	Construction Completions
Region 1	53
Region 2	125
Region 3	120
Region 4	128
Region 5	221
Region 6	66
Region 7	43
Region 8	26
Region 9	56
Region 10	61
Totals	899

- 2) Using the ICTS data and other site information, EPA will prioritize sites with potential IC issues for further evaluation.
- 3) EPA will conduct additional evaluation of ICs at priority sites to confirm the existence of specific IC issues.
- 4) Steps will be taken to rectify IC problems that need further attention.

A. IC Tracking System – Tier 1 Data Entry

Goal: To collect and enter baseline IC information, for all construction complete sites, by June 30, 2004.

The Regions will enter Tier 1 data for all construction complete sites in ICTS by June 30, 2004. Tier 1 data consists of six information categories:

- *Site Name*
- *IC Basic Questions*
 - 1) Is there residual contamination for the site above a level that prohibits unlimited use and unrestricted exposure (by media)?
 - 2) Are ICs required or called for in site decision documents (by media)?
- *IC objectives* – Information regarding the intended goal of the IC in minimizing the potential for human exposure to remaining contamination and/or protecting the integrity of an engineered control/remedy by limiting land or resource use in a particular media.
- *IC instruments* – Information regarding the administrative or legal mechanism that establishes a specific set of use restrictions, including instrument name, use restrictions outlined within, issuing organization of the instrument, and planned or actual implementation dates of the instrument.
- *Contacts* – Information regarding any person and/or organization that may be directly or indirectly involved with ICs at the site, including an organization name, individual name, telephone number, and email.
- *Data sources* – Information regarding the source of the information that is entered into the data entry form, including type, title, issuing organization, and the electronic copy of the document/application or the URL to access it if it is available on-line.

B. Evaluating ICTS Data

Goal: Once EPA Regions have entered Tier 1 data for construction complete sites, the Agency will review that data to prioritize further evaluation at specific sites.

- 1) Identify Data Gaps – Once the Regions have entered Tier 1 data for construction complete sites, and the data have been through the data approval process, EPA Headquarters will pull the following reports by Region:

- Sites where the data indicate a media with residual contamination but no IC instrument data correspond with that media. These sites can be identified by answers to the Basic Questions in ICTS.
 - Sites where the data indicate an IC was required but there is no planned or actual implementation date for a corresponding IC instrument that meets the IC objective. These sites can be identified by answers to the Basic Questions in ICTS.
 - Sites at which there is at least one proprietary control.
 - Sites at which the only IC is an informational tool
- 2) A copy of this report will go to the Management Advisory Group for ICs for review.
 - 3) Prioritization for Additional Review – the Management Advisory Group for ICs will conduct the initial data evaluation to prioritize follow-up activities and provide recommendations regarding further review to the Directors of OSRTI and OSRE and the Regional Superfund Division Directors.
 - To be completed by September 30, 2004
 - 4) Potential considerations when assigning priorities for further evaluation may include:
 - Factors that may be indicative of increased risk if an IC is not properly implemented, such as IC objective (threats to human health v. protection of the engineered remedy), IC instrument (restriction v. informational), site demographics.
 - Known failures of ICs
 - Date of scheduled five-year review
 - The length of time since the site reached construction completion
 - Whether the site is still active or has been deleted from the NPL
 - Regional concerns
 - 5) The Regions will prepare region-specific action plans for conducting additional evaluation and remediating site-specific IC problems consistent with national priorities and regional concerns.
 - To be completed by October 31, 2004

C. Conducting Additional Evaluation

Goal: EPA will conduct additional analysis for priority sites either through an independent evaluation or a scheduled Five-Year Review to determine whether necessary ICs have been properly implemented.

EPA will initially focus on identifying sites where IC implementation has not occurred or implementation was not done correctly. A more in depth evaluation of the overall effectiveness of ICs will be an ongoing effort using improved existing processes, such as future Five-Year Reviews and O&M plans (see Section IV. Capacity Building). However, in the course of

reviewing sites for implementation issues, EPA will also identify any IC failures – an obvious sign that an IC may not be effective – and take the necessary steps to ensure the protection of human health and the environment.

- 1) The Region should confirm that ICTS data gaps reflect actual lack of IC implementation for media with residual contamination and for ICs required by the remedy decision document by going beyond the site file and coordinating with other interested parties (e.g. the state)(see #4 below).
- 2) Once lack of IC implementation is confirmed, the next step is to answer the following two questions:
 - *Question 1* – Where ICTS identifies a site with a contaminated media that does not support unlimited use and unrestricted exposure, for which there is no corresponding IC instrument, is an IC necessary, and if so what type?
 - ▶ Generally, any contaminated media that cannot support unlimited use and unrestricted exposure should have an IC and Regions should proceed to question #2 to identify what steps are needed to implement an appropriate IC, unless recent sampling or monitoring data indicate that the media is now safe for unlimited use and unrestricted exposure.
 - *Question 2* – What steps are needed to implement ICs at sites where an IC is necessary but there is no planned or actual implementation of a corresponding IC instrument?
 - ▶ This question applies,
 - where the answer to question #1 was yes; or
 - where ICTS identifies that an IC was required by the remedy decision but there is no planned or actual implementation of a corresponding IC instrument.
 - ▶ Where an RPM has used best professional judgment to propose an IC objective and instrument to fill the gap, the Region should confirm that the objective is appropriate and that the IC is available and will meet the objective.⁴ This will involve communication with ORC attorneys, as well as state and local governments.
 - ▶ Where an IC objective and instrument was identified in the site file but no planned or actual implementation date was entered the Region should coordinate with interested parties (e.g., state and local governments, potentially responsible parties (PRPs)) to develop an implementation plan and identify and enter a planned implementation date in ICTS.

⁴ For additional guidance see *Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups*, EPA 540-F-00-005, OSWER 9355.0-74FS-P (2000).

- 3) For certain sites with proprietary controls, EPA will work to determine whether these controls were not properly implemented.
- The purpose of this review is not to conduct extensive state law research on the validity of the control so long as the control clearly expresses the intent of the parties to implement restrictions on use and clearly identifies the necessary parties.
 - If a consent decree was recorded in the land records under the assumption that the restriction in the consent decree would bind future owners, this assumption should be revisited.⁵
 - The site attorney should review the IC instrument using the following general guidelines:
 - ▶ Is the document entitled an “easement” or “covenant” or did the prior owner reserve a restriction in the deed, as opposed to, for example, “declaration of restrictions”?
 - ▶ Does the document clearly identify a grantor/covenantor and grantee/covantee or otherwise clearly indicate who has the right to enforce the terms of the document?
 - ▶ Is there a grantee other than EPA?
 - If the answer to any of the above questions is no, the enforceability of the control is questionable and the Region should followup with additional research and/or determine whether another type of IC can or should be implemented. For example, if EPA is designated as a grantee, the Region should determine if EPA later transferred this interest to the state pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 104(j).
 - State attorneys general offices may be of particularly valuable assistance in understanding the real property laws of the relevant state.
- The RPM and site attorney should also work together to determine whether the party responsible for monitoring and enforcing the control still exists and is capable of carrying out its responsibilities.

⁵ See *Institutional Controls: A Guide to Implementing, Monitoring, and Enforcing Institutional Controls at Superfund, Brownfields, Federal Facility, UST, and RCRA Corrective Action Cleanups* (2004)(hereinafter Guide to Implementing, Monitoring, and Enforcing ICs).

- A title report should be reviewed to ensure that the control has priority over all other encumbrances that could jeopardize the effectiveness of the IC (e.g., mortgages).⁶
- 4) Information collection – to answer the above questions the Regions may need to take the following steps to gather additional information:
- Further review the site file and associated documents,
 - Contact state and local officials to inquire about IC status and/or obtain additional documents,
 - Review enforcement documents (e.g., consent decrees, administrative orders on consent, unilateral administrative orders) for IC related obligations and contact PR for more information,
 - Travel to the relevant local jurisdiction to interview appropriate officials and collect documents,
 - Obtain title reports for sites with proprietary controls, or
 - Conduct a site visit.

D. Planning and Undertaking Corrective Measures

Goal: For those sites where necessary ICs have not been properly implemented EPA will plan and undertake the steps to ensure the remedy is and will remain protective of human health and the environment.

How EPA responds to an IC issue is largely dependent on site-specific circumstances. The following represent general considerations for the Regions:

- 1) Where a necessary IC was not properly implemented and there are activities on the site that clearly indicate people may be at risk or that an engineered remedy may be damaged, the Region should initiate a response under CERCLA §§ 104 or 106 or other appropriate authorities.
- 2) Where the level of risk is uncertain, the Regions may consider scheduling a Five-Year Review earlier than required.

⁶ For an explanation of priority and how to subordinate prior interests see *Guide to Implementing, Monitoring, and Enforcing ICs*.

- 3) At sites where it's necessary to select and implement a new IC, refer to EPA's existing guidance entitled, *Institutional Controls: A Site Managers Guide to Identifying, Analyzing, and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups* (2000) and *Institutional Controls: A Guide to Implementation, Monitoring, and Enforcement of Institutional Controls at Superfund, Brownfields, Federal Facility, UST, and RCRA Corrective Action Cleanups* (2004), for assistance in selecting an appropriate IC.
- 4) For guidelines for describing and documenting institutional controls in Federal Facility Records of Decision (RODs), Remedial Designs, and Federal Facility Agreements/Interagency Agreements, see "Guidance on the Resolution of the Post-ROD Dispute" (issued by James E. Woolford, Director of the Federal Facilities Restoration and Reuse Office, and David J. Kling, Director of the Federal Facilities Enforcement Office, November 25, 2003).
- 5) EPA Regions should work closely with the appropriate state regulatory agency and attorneys general office when evaluating, selecting, and implementing ICs where they are needed but not in place, as well as any other fixes to IC issues identified by the Regions.
- 6) If a PRP was obligated to implement an IC and failed to do so, the Region should take the necessary steps under the appropriate enforcement document to ensure the PRP meets its obligations in a timely manner.
- 7) If specific IC provisions were not agreed to by the PRPs in the RD/RA consent decree, the attorney and RPM should review the "Five-Year Provision" and the "Additional Work Provision" of the consent decree(s) to determine if they may be used to require the PRPs to implement the necessary IC.
- 8) Implementing new proprietary controls may be challenging if the property is owned by someone other than the person with whom a proprietary control was negotiated; therefore, the Region may need to look at other options, such as working with the state and local government to develop a governmental control or performing additional cleanup.
- 9) The National Contingency Plan (NCP) requires EPA to take certain administrative steps if a remedial action "differs significantly from the remedy selected in the ROD with respect to scope, performance, or cost."⁷ The *Guide to Preparing Superfund Proposed*

⁷ 40 C.F.R. § 300.435(c); see also, *Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents* (OSWER 9200.1-23P, 1999) and *Institutional Controls: A Guide to Implementing, Monitoring, and Enforcing Institutional Controls at Superfund, Brownfield, Federal Facility, UST, and RCRA Hazardous Waste Cleanups* (2004); CERCLA 42 U.S.C. § 9617(c).

Plans, Records of Decision, and Other Remedy Selection Decision Documents provides general guidelines for taking appropriate administrative steps with respect to addressing remedy changes, but does not provide many examples on how to apply these general guidelines with respect to addressing IC issues.

A note to the file, Explanation of Significant Differences (ESD) or Record of Decision (ROD) amendment are administrative steps that may be used to select and/or document changes to the selected remedy. All three may be used for private Superfund facilities. However, an ESD or ROD amendment is likely to be a necessary enforcement tool or element at a federal facility site because there are no separate consent decrees and the Federal Facility Agreements make RODs and ESDs the enforceable documents. The following represent a nonexclusive list of potential situations that EPA may encounter and generally what administrative steps EPA will need to take:

- *Note to the File* – The following actions are considered minor changes to the selected remedy or simply implementation of the designated remedy but should be documented in the site file:
 - i) The Region determines that an IC is not necessary for a contaminated media because an IC contemplated in the remedy decision document and implemented for another media accomplishes the objective.
 - ii) For a private Superfund site, the remedy decision document required an IC but no objective or instrument was ever identified, however ICs with appropriate objectives and using appropriate instruments have been implemented.
 - iii) For a private Superfund site, the Region determines that a proprietary control was not properly implemented and responds by requiring implementation of a new proprietary control.
 - iv) For a site where the ROD included ICs, the Region determines that an IC is no longer necessary because media contaminant levels now support unlimited use and unrestricted exposure.
 - v) For a Federal Facility site, the RODs contain appropriate IC objectives for all OUs requiring ICs as well as the appropriate commitments to implement, and monitor the ICs. During a review of the IC implementation, it is found that the base's administrative or permitting requirements are not fully in line with the commitments in the ROD. The Region would initiate discussions with the lead agency to implement the ROD requirements and document this in a note to file.
 - vi) For an active Federal Facility site, the ROD, RD, or RAWP required a base instruction and a permit system to implement the ICs. A failure of the permit system occurred, and as a result of the base's subsequent review, the facility decides to implement a completely different administrative procedure(s).

- *Explanation of Significant Differences* – The following examples may “significantly change but not fundamentally alter the remedy selected in the ROD with respect to scope, performance, or cost” and therefore EPA should generally issue or sign an ESD:
 - i) There is contaminated media but an IC was not required and the Region now determines an IC is necessary.
 - ii) The remedy decision document stated that ICs were required, but did not include appropriate objectives or performance standards.
 - iii) The remedy decision required a specific IC instrument which was never implemented and the Region or lead federal agency, as appropriate, must now use a completely different type of IC. For example, the ROD required educational brochures, and EPA now determines that a proprietary IC is also needed. Or, for a federal facility site, the ROD required a proprietary control that the federal facility cannot implement, so the federal facility and EPA decide to implement governmental controls instead.
 - iv) For a private Superfund site, a ROD required a “deed notice”, under the assumption that it would restrict the use of the property. The Region now requires implementation of a restrictive covenant instead.

In some cases, it may be appropriate for the Region to add a public comment period for the ESD when the site is highly controversial or other factors warrant public input.

- *ROD Amendment* – The following examples will generally “fundamentally alter the basic features of the selected remedy with respect to scope, performance, or cost” and therefore the Region, or the Federal Facility and the Region, may need to amend the ROD:
 - i) The Region decides that the response to the lack of, or improper implementation of, an IC is additional cleanup rather than an IC.
 - ii) The remedy in the ROD assumed that no IC would be necessary, but additional site knowledge during remedial design or remedial action requires a change in the remedy, including the need for ICs.
 - iii) In the event that contamination has migrated off-site, and the IC was not identified in a previous remedy decision document, a ROD amendment will generally be appropriate to notify the owners of potential restrictions on their property.
- Other things to keep in mind:
 - i) A Region can always decide to use a more rigorous tool, such as a ROD amendment instead of an ESD, or a ROD amendment or ESD instead of a note to the file. Some situations where this may be appropriate is when a

- region may be preparing an ESD or ROD amendment for another reason; or where community or PRP concerns would be better served.
- ii) ESDs and ROD amendments can be done for sites that have been deleted from the NPL.

IV. CAPACITY BUILDING

In addition to the interim goal of reviewing ICs at priority construction complete NPL sites, EPA intends to improve our capacity to evaluate the overall effectiveness of ICs through EPA's existing processes, so that all construction complete sites are reviewed over approximately the next five years. The following represent the basis of EPA's capacity building efforts:

- 1) Improve the Five-Year Review and other EPA processes (e.g., Operation and Maintenance plans) to continue EPA's evaluation of construction complete sites and all sites in the future.
 - Include expanding the five-year review to ask more in depth questions regarding IC effectiveness.
 - To be completed in fiscal year 2005
- 2) Provide training in 2004 and beyond, so that EPA staff, and external partners better understand ICs, ICTS, and related topics, such as real property law and individual state IC requirements.
- 3) Educate, inform, and involve additional parties to support efforts to identify and resolve IC issues (e.g., local governments, communities).

V. INTERNAL AND EXTERNAL COORDINATION AND COMMUNICATION

A. Internal

EPA has established an internal structure to help facilitate the development and implementation of this Strategy. The following groups from EPA Headquarters and the Regions will work closely on all aspects of Strategy development and implementation:

IC Regional Program Coordinators

- Oversee ICTS Tier 1 data entry.
- Provide input on ICTS development.
- Provide training on ICs and ICTS.
- Provide input on Strategy development and implementation.
- Coordinate the Region's efforts to review priority sites.
- Coordinate with the States and local governments on Strategy implementation.

IC Regional Legal Coordinators

- Provide input on Strategy development and implementation.
- Provide legal advice on Strategy implementation as needed.
- Provide training on ICs.
- Oversee the collection of proprietary controls from local land records and title search activities.
- Coordinate the legal assessment of proprietary controls.
- Oversee the Region's efforts to contact and coordinate with potential responsible parties on information gathering and actions to remedy IC issues.

Management Advisory Group on Institutional Controls (MAGIC)

- Make recommendations and help establish priorities for Strategy implementation.
- Assist in quickly resolving issues identified by the Coordinators as needing management input.
- Advise in the overall implementation of the Strategy.
- Assist the Regions in developing and implementing Regional Action Plans.

EPA Headquarters Team

- Coordinate national ICTS data entry and Strategy implementation.
- Provide assistance to the Regional Program and Legal Coordinators
- Elevate issues of national significance to the MAGIC
- Develop policy and guidance documents at the direction of the MAGIC
- Communicate with State and other interested stakeholders on a national level

B. External

Other Federal Agencies

Under the NCP, other Federal Departments and Agencies serve as the “lead agency” at federal facilities. Where these sites are on the NPL, EPA and the lead agency jointly select the remedy. The lead agency has the ultimate responsibility for remedy implementation and maintenance, although some of these responsibilities can be delegated or contracted out to other parties. Therefore, developing and implementing activities described in this Strategy require close cooperation from the federal lead agency. EPA will work with other Federal Departments and Agencies to develop a collaborative effort to implement the relevant part of this Strategy at federal facilities.

States

The states play a significant role in Superfund cleanups and are relied upon for operation and maintenance of constructed remedies and providing assurances that ICs are implemented, will remain in place, and enforced at sites cleaned up using the Superfund. Therefore, developing and implementing activities described in this Strategy requires close coordination with the states. The development of this Strategy benefitted from state involvement and EPA will continue to work closely with the states through implementation on both the national and state specific level. In particular, EPA Regions will work with the states to identify priority sites, review site information for IC problems, and develop and implement long-term fixes for any IC issues.

Native American Tribes

For Superfund sites on tribal lands, EPA will work closely with the tribe to identify and evaluate any IC issues.

Potentially Responsible Parties

PRPs often have responsibility for IC implementation, monitoring, and enforcement, as well as general operation and maintenance at sites they clean up under agreements with EPA. Therefore, they have a vested interest in ensuring the long-term protectiveness of the remedy, including the effective functioning of ICs. EPA expects to work closely with PRPs in the implementation of this Strategy on both a national and site-specific level.

VI. OTHER IC ACTIVITIES

While EPA will focus much of its attention on the tasks outlined in this Strategy, the Agency intends to simultaneously conduct many other activities that will continue to improve the use of ICs. The following are a list of ongoing IC projects outside the scope of this Strategy:

- **Institutional Controls: A Guide to Implementing, Monitoring, and Enforcement of Institutional Controls at Superfund, Brownfields, Federal Facility, UST, and RCRA Corrective Action Cleanups**
 - anticipated release fall 2004
- **Institutional Controls and Community Involvement**
 - external review planned for summer 2004
- **Developing Institutional Controls Implementation and Assurance Plans**
 - first draft under development – tentative fall 2004
- **Calculating the Full-Life Cycle Costs of Institutional Controls**
 - research activities ongoing; first draft in 2005
- **Modify Model CERCLA and RCRA Enforcement Documents**
 - revisions currently being drafted

- **One Call Demonstration Pilots**
 - ▶ Pilots underway in Wisconsin and Pennsylvania and in development for New York and the City of Portland