



# A Guide to Establishing Institutional Controls at Closing Military Installations

## About This Guide

This guide supplements the land use matrix developed under the February 1996 ‘Guide to Assessing Reuse and Remedy Alternatives at Closing Military Installations’ by helping to ensure the compatibility between the selected land use and the selected remedy. The land use matrix is intended as a tool to build consensus among Base Realignment and Closure (BRAC) cleanup teams (BCTs), local redevelopment authorities (LRAs), restoration advisory boards (RABs), and other community members, as well as to identify and resolve the complex restoration and reuse issues at closing installations. This guide further explains land use restrictions, namely institutional controls (ICs), that may be associated with a restoration and reuse alternative. This guide is intended to:

***ICs are mechanisms that protect property users and the public from existing site contamination that continues to be present during the use of a site***

- facilitate, early in the process, discussions among stakeholders to enhance understanding mechanisms of ICs, i.e., what they are and how they might be used as part of a proposed remedy alternative in the BRAC cleanup program;
- act as a planning tool and checklist to assist stakeholders in considering a selected remedy which does in fact include the use of ICs; and
- provide a framework for building cooperation among the stakeholders in the establishment and maintenance of ICs.

For a particular restoration and reuse alternative, the stakeholders may identify the need for ICs. This guide assumes that the LRA will take the environmental condition of property into account in development of its reuse plan, and that use restrictions will be included in the remedy decision arrived at through the remedy selection process. In this guide, ICs are taken to be mechanisms that protect property users and the public from existing contamination that continues to be present during the use of a site. A more detailed explanation of ICs is presented in the BRAC Environmental Program Fact Sheet: *Institutional Controls: What They Are and How They Are Used* (see: ‘Where to Learn More,’ page 8). There may be other ICs associated with the property but not related directly to an environmental response action, such as historic and cultural preservation, access for utility maintenance, or ecological concerns, e.g., wetlands and wildlife protection.

Conflict can arise among stakeholders during the process of identifying and evaluating restoration and reuse alternatives. A detailed discussion of conflict resolution techniques can be found in the July 1996 document entitled *Partnering Guide for Environmental Missions of the Air Force, Army, and Navy* (see ‘Where to Learn More,’ page 8). That guide provides techniques for forming and maintaining an effective problem-finding, problem-solving team. By applying the techniques described, the parties involved in establishing and maintaining ICs can identify common issues and maximize the effectiveness of the tools available to each.



## What Is the Role of Institutional Controls in the Remedy Selection Process?

The potential need for ICs is identified when stakeholders develop the land use matrix recommended in the BRAC Environmental Program Fact Sheet: *A Guide to Assessing Reuse and Remedy Alternatives at Closing Military Installations*. When various restoration and reuse alternatives are being developed, the first question to be asked is:

*Does this alternative require some sort of control or limit on use of the property?*

If the answer to that question is “yes,” then this guide should be used to evaluate how an IC would be established. Considering the pros and cons of establishing and maintaining ICs should be an integral part of the decision-making process in the selection of a restoration action. When ICs are used, they are a vital part of the remedy and must be maintained to protect human health and the environment. ICs are legal mechanisms, such as deed restrictions, and may be coupled with physical controls, such as signs posted at the site or fences. The control or notice mechanism will vary depending on the nature of the contamination, its location, the targeted land use, the structures located on the site, and the length of time for which the use is restricted.

***During remedy selection, the nature and extent of specific limits placed on future property use should be discussed with the community and the LRA so that they may be considered in planning reuse of BRAC property.***

Once remedy alternatives, including ICs, have been identified, the remedy selection process is applied to evaluate the alternative as a whole, including any ICs involved. For example, using the process under the National Contingency Plan (NCP) for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the BCT will develop a proposal on which the public and regulatory agencies will be invited to comment — both in writing and at a public meeting. A response to those comments will be prepared, and a response action selected. Throughout the remedy selection process, the ICs will be evaluated in the same manner as all other components of a potential remedy, as required by statute and Executive Order 12580. Stakeholders need to seriously consider and discuss all aspects of establishing, maintaining, and funding ICs as part of a remedy.

Two situations commonly occur in which ICs play an important role: (1) to protect the integrity of an engineering control intended to contain contamination, reduce its mobility, and minimize exposure, such as a landfill cap, and (2) to limit the exposure of individuals to residual contamination by limiting the reuse activities associated with that portion of the installation.

The information collected during the Remedial Investigation is used to determine if contamination is present and to characterize the site. In some cases, removing all contamination to allow unrestricted use of property may be very costly, the technology may be unavailable, or the time required to remediate and transfer the property may be prohibitive considering the community’s reuse requirements for planned reuse and timing of property transfer.

The preferred remedy, protective of human health and the environment, sometimes requires that contaminants not be disturbed, leaving them in place. For example, the excavation of landfills can actually increase the risk to human health and the environment, in the short term, by exposing toxic contamination. One approach to reducing the long-term risk associated with such contamination left in place is to limit the uses to which that property will be put. The limit may be broad — for example, no residential occupancy — or it may be specific — for example, any activity involving the disturbance of soil must be approved in advance and any excavated soil must be disposed of properly.

During the remedy selection, the nature and extent of the specific limits placed on future property use should be discussed with the community and the LRA so that they may be considered in planning reuse of BRAC property. Although the final details, such as engineering plans, zoning plans, and certain longer-term ICs such as deed restrictions, will not be determined until the Remedial Design is developed, the Feasibility Study (FS) should provide as clear a description as possible of the nature of the anticipated restrictions. Another important element of the FS is the anticipated duration of the restriction. If the

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restriction is limited to a relatively short period during the actual remediation, it will have a very different impact on reuse than a restriction that is anticipated to last for a longer period of time. Such a longer-term restriction, for example, might be a restriction on groundwater use until treatment or attenuation has reduced contaminant levels to below health-based standards or a restriction on surface use over a landfill cap.

The proposed plan outlines the preferred remedial alternative and summarizes the other alternatives considered in the FS. The proposed plan should be written in a manner that can be easily understood by the public. A clear statement of the restrictions associated with the proposed action should be included to allow the public to be fully informed about the proposed action and implications of using ICs if they are a part of that action. The remedy selection process under CERCLA and the Environmental Protection Agency's (EPA) position on the use of ICs are described in the National Contingency Plan (NCP) (40 CFR Part 300.430(a)(1)(iii)) and its preamble (55 FR 8706). Under the NCP, community acceptance is one of the nine criteria for selecting a CERCLA remedy. While community acceptance is an essential ingredient in making the final remedy selection, it is not always possible to accomplish all the community's goals. It is the Department of Defense's (DoD) responsibility to make the final remedy selection in accordance with applicable laws and requirements and to ensure that it will be protective of human health and the environment, as well as be compatible with, to the extent reasonably practicable, community reuse plans. This final remedy selection is formalized through the Record of Decision (ROD), which will be compatible with any ICs that may be implemented at the site.

### **When the Selected Response Includes Institutional Controls**

#### ***Form a Team***

When a selected response includes ICs, the team members (see box) involved in developing the future land use and evaluating the response should work together to establish and maintain the selected ICs. Requirements for establishment and maintenance of ICs vary from site to site and are dependent on the real property and environmental cleanup laws and regulations of that jurisdiction. Cooperation, therefore, is essential to achieve success. That success depends on building a team that will be effective in using the tools available at that site and in that location.

Team members already should be a part of the process through their participation in groups such as those listed in the box below. Key members of these existing entities (although others may be consulted as necessary) should be part of the team developing a plan for the success of ICs at that site. It is important to build a team that works together to ensure the success of the response action and the effective reuse of the land.



### ***Establish Cooperation***

Such success will be easier to achieve when the following commitments are made:

- The team makes a commitment to the success of ICs
- The team develops the skills needed to work together well
- Throughout the process, all team members make a commitment to open communication
- The team members maintain mutual trust, honor, and respect
- The team members accept responsibility, make decisions, take risks, and resolve issues
- The team makes decisions through consensus
- The team develops creative solutions and applies them to all problems
- The team maintains agreed-upon processes for resolving disagreements or disputes
- The team evaluates progress and recognizes successes

### ***The Task of the Team***

This guide identifies issues that may be relevant to any number of response actions. It does not suggest how to resolve specific issues, but offers tools that the team may find useful. It is up to the team establishing the ICs to develop and implement a plan that uses these and other tools and the resources available to them at that site to create an effective remedy.

## **Checklist of Issues and Tools To Be Considered When Establishing and Maintaining Ics**

The following questions should be asked when DoD and stakeholders discuss how to establish and maintain ICs.

### **Q. *What are the ICs meant to accomplish?***

What types of reuse are possible, given the environmental condition of property and/or the planned remedial activities? For example:

#### **TYPE(S) OF REUSE ALLOWED**

Residential

- *Housing*      - *Daycare*      - *Hospitals*      - *Schools*      - *Other*

Commercial

Industrial

Recreation

Agricultural

Other

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What are the activities that must be restricted? For example:

### SPECIFIC RESTRICTIONS

Uses of ground and surface water

- Prohibitions against drinking the water
- Prohibitions against use of groundwater from existing wells
- Prohibitions against any other use of the water (e.g., irrigation, watering livestock, or recreational uses, including fishing)
- Restrictions to maintain the integrity of monitoring and reinjection wells
- Other

Use of soils

- Prohibitions against excavation, construction, drilling, or disturbance of the soil (e.g., well installation that may connect an uncontaminated aquifer with a contaminated aquifer, or maintaining landfill cap)
- Restrictions governing depth of excavation
- Other

Other ICs not directly related to the environmental response

- Restrictions preserving historic or cultural areas
- Restrictions protecting wildlife or wetlands
- Restrictions governing access to the property (e.g., utility maintenance)

***Q. What are the techniques and tools available to establish and maintain ICs?***

### TECHNIQUES: METHODS FOR ACCOMPLISHING THE GOALS OF THE ICs

***Layering:*** Layering means the use of a strategy to combine mutually reinforcing controls, for example, a combination of deed restrictions, physical barriers, and notice can expand the number of parties involved and strengthen the network that maintains the remedy and protects human health and the environment. Many tools can be used at the same time and at various levels to accomplish that result. Different team members may have methods available to them that enhance maintenance of the remedy.

***The more people who are aware of and responsible for an IC, the easier it is to ensure that the controls will be heeded and maintained.***

***Notice:*** Providing notice that controls exist at a site is essential to maintain those controls and ensure that users of the property abide by them. The more people who are aware of and responsible for an IC, the easier it is to ensure that the controls will be heeded and maintained.

### TOOLS: SPECIFIC ACTIONS THAT CAN BE USED TO IMPLEMENT THESE TWO TECHNIQUES

***Deed Language:*** Language in the deed is a good method of providing notice and generally will be an important part of any IC plan. The legal instrument and language used should be tailored to the requirements and processes that are best suited to the jurisdiction. The instrument, which may be separate from the deed, may be a covenant or easement or some other form of property right; however, before relying on any such right, the legality and enforceability of such a right in the jurisdiction must be determined. The legal instrument should provide a



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stand-alone explanation of the restrictions and should cite the portions of the administrative record, regulations, and transfer documents that are relevant to establishing the restrictions. Language providing notice and describing the restrictions may also be included in the transfer documents.

Depending on state law, which may vary, and depending on the intentions of the parties to the original transaction and third parties who hold an interest in the land, deed language can be structured to give enforcement rights to the previous owner and to those third parties. Deed restrictions implementing ICs should be structured to run with the land — in other words, to remain in force despite changes in ownership; for example, by stating that the restrictions benefit the surrounding property and benefit the general public, or by stating that the parties intend the ICs to run with the land and bind future parties. State laws vary and the enforceability of deed restrictions should be considered carefully in structuring deed language. The more stakeholders that have authority to enforce a deed restriction, the more effective it will be as a method of control. In spite of any legal limits on the enforceability of deed language, a deed restriction is an important form of notice.

- Records and Community Involvement:** Other available methods of providing notice include the administrative record for the response action; local records like planning and zoning maps and subdivision plats; and similar state records and registries. Means of community education such as public meetings, recurring notices in newspapers, and signs and fences also provide notice.
- Federal, state, and local laws and regulations:** Statutory authority under CERCLA and the Resource Conservation and Recovery Act (RCRA) may provide Federal and state regulators direct legal authority to protect human health and the environment, prevent releases, or control site activities. State and local governments may also play a role through already existing legal frameworks or regulatory programs such as permitting the use of land, monitoring public health through public health statutes, authorizing zoning and land use plans, passing ordinances, and acting under established statewide environmental programs. Such legal avenues can be integrated into an IC plan and provide notice that activities at the site in question are restricted.
- Inspections:** There may be inspections of the affected property associated with the selected remedy, generally as part of the remedy's operation and maintenance. Even though these inspections may not be intended for the purpose of monitoring an IC, they may provide an opportunity to assess activities at the site. For example, an inspection of monitoring wells may also provide an opportunity to establish compliance with an IC restricting excavation. Other existing inspection routines associated with regulatory programs not related to the remediation may also protect the site in question. While such inspections should not be confused with the ICs themselves, they can be used to assist in the maintenance of ICs. Such existing programs can be integrated into an IC plan in association with or in addition to the state and local laws and regulations listed above. The state and Federal members of the BCT may give the appropriate section or branch of the environmental regulatory agency or other pertinent agency notice of the IC or deed restriction by adding the organization's representative to the finding of suitability to transfer distribution list. In addition, the Federal government is required to review a remedy at least every five years, where contamination remains in place. Where ICs are part of the remedy, such reviews should include verification that the ICs are still in place and effective.
- Remedy-specific environmental inspections (generally part of operation and maintenance of a remedy)
  - Inspections to ensure the integrity of the landfill cap
  - Inspections of the leachate treatment system
  - Inspections of the water treatment system
  - Other inspections required for operation and maintenance

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- Other Federal, state, and local government inspections not directly related to the environmental response
  - Restrictions preserving historic or cultural areas
  - Restrictions protecting wildlife or wetlands
  - Restrictions governing access to the property (e.g., utility maintenance)
  - Restrictions concerning health
  - Restrictions concerning building standards
  - Other

### **Q. *What are the responsibilities to maintain and ensure the effectiveness of ICs?***

As a network for establishing an IC is created, it is also appropriate and necessary to discuss the associated responsibilities for maintaining its effectiveness. As previously noted, there are numerous existing statutory frameworks and regulatory programs at the Federal, state, and local levels that provide the authority to maintain the integrity of the remedy requirements. Stakeholders may need to discuss resources that are available or might be needed for certain ICs. They also need to discuss how long-term responsibilities for IC implementation at the site will be coordinated among team members.

- Statutory authority to enforce RCRA and CERCLA
- State and local, general or site-specific enforcement authorities that can be applied
  - Property laws
  - Zoning
  - Permitting programs
  - Other laws or ordinances
- Funding maintenance of the IC
- Long-term coordination responsibilities

### **Q. *How is an IC modified or terminated?***

ICs may also be modified or terminated over time. It is therefore useful to discuss what time frames, if known, and what procedures may be necessary for accomplishing these tasks. Due to the site-specific nature of IC plans, procedures for modifications to ICs may vary depending on that plan.

- Length of time ICs are needed
- Legal steps to remove or modify each IC
- Organizations that may be involved with modification or termination:
  - Federal government
  - State government
  - State court
  - Local government
  - Local court
  - Landowner
  - Adjacent landowner
  - Previous landowner



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### Where to Learn More

Further information on this and other BRAC issues can be found by reading:

- DoD's Future Land Use Policy: *Responsibility for Additional Environmental Cleanup after Transfer of Real Property* (July 1997)
- BRAC Environmental Program Fact Sheet: *Institutional Controls: What They Are and How Are They Used* (Spring 1997)
- BRAC Environmental Program Fact Sheet: *A Guide to Assessing Reuse and Remedy Alternatives at Closing Military Installations* (February 1996)
- *Fast Track to FOST: A Guide to Determining if Property is Environmentally Suitable for Transfer* (Fall 1996)
- *Partnering Guide for Environmental Missions of the Air Force, Army, and Navy* (July 1996)

Or by contacting:

Office of the Assistant Deputy Under Secretary of Defense  
(Environmental Cleanup)  
Attn: Fast-Track Cleanup  
3400 Defense Pentagon  
Washington, D.C. 2030 1-3400

Or by looking on the World Wide Web at:

<http://www.dtic.mil/envirodod/envbrac.html>

For additional information about selection of response actions, see the following EPA Office of Solid Waste and Emergency Response (OSWER) documents:

- *Land Use in CERCLA Remedy Selection Process*, OSWER Publication Number PB95-963234\NDZ (June 1995)
- *Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions*, OSWER Publication Number 9355.0-30 (April 1991)
- *A Guide to Selecting Superfund Remedial Actions*, OSWER Publication Number 9355.0-27F5 (April 1990)

These are available on the World Wide Web at:

<http://www.epa.gov/epa/oswer>

The *Guide to Establishing Institutional Controls at Closing Military Installations* was prepared with input from an inter-agency work group made up of representatives of the Office of the Secretary of Defense, the DoD Components, the U.S. EPA, the General Services Administration, the California EPA, the National Association of Attorneys General, the International City/County Management Association, the National Association of Installation Developers, and others. This guide is not a formal statement of DoD policy, but is meant to assist in the establishment and maintenance of ICs at BRAC properties.

***Local reproduction of this fact sheet is authorized and encouraged.***