	Institutional Controls Matrix					
Type of Institutional Control	Definition & Example	Benefits	Limitations	Enforcement		
GOVERNMENTAL CONTROLS	Controls using the regulatory authority of a governmental entity to impose restrictions on citizens or property under its jurisdiction. Generally, EPA must turn to state or local governments to establish controls of this type. For example, a local jurisdiction may zone the site to disallow uses that are incompatible with the remedy.	Do not require the negotiation, drafting, or recording of parcel-by-parcel proprietary controls. This is important with large numbers of distinct parcels, particularly where some of the landowners are not liable parties. The legal impediments (e.g., whether the control "runs with the land"; whether the right to enforce the control can be transferred to other parties) to long-term enforcement of proprietary controls can be avoided; governmental controls remain effective so long as they are not repealed and are enforced.	Will almost always have to be adopted and enforced by a governmental entity other than EPA (e.g., state or local governments). Thus, their effectiveness depends in most cases upon the willingness of state or local governments to adopt them, keep them in force, and enforce them over the long term. There may also be enforcement costs for the state or local jurisdiction.	Usually enforced by the state or local government. The willingness and capability of the state or local government to enforce the IC should be 12given due consideration.		

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1. Zoning	A common land use restriction specifying allowed land uses for certain areas Example: A local government could prohibit residential development in an area of contamination or limit gardening in certain areas	Zoning can be used to prohibit activities that could disturb certain aspects of a remedy or to control certain exposures not otherwise protected under a remedy.	Zoning ordinances are not necessarily permanent; they can be repealed or local governments can grant exceptions after public hearings. Typical zoning classifications such as "industrial" and "commercial" may not be stringent enough for a remedial context. For example, many zoning ordinances allow land uses below a certain level of intensity (e.g., allowing residential uses in industrial districts.) In addition, existing "blanket" zoning districts may not provide appropriate restrictions for specific remedy considerations, and local authorities may be concerned about potential legal challenges for "spot zoning" when rezoning a single parcel or small group of parcels. Therefore, an amendment to, or creative application of the zoning ordinance may be necessary to clarify which uses are	Zoning laws may not be fully effective unless they are monitored and enforced over the long term and local governments may not have or be able to commit the resources necessary to such oversight.

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2. Local permits	Special permits outlining specific requirements before an activity can be authorized Example: An ordinance requiring that anyone seeking a building permit in a particular area be notified of contamination	Can take advantage of existing restrictions and apply them to site-specific situations	Often permits are narrowly focused and the requirements can be modified over time.	Effectiveness of enforcement depends on the willingness and capability of the local governmental entity to monitor compliance and take enforcement action.
3. Other police power ordinances	Controls placed on access or use of certain areas Example: Placing bans on fishing and swimming in specified areas	Can take advantage of existing restrictions and apply them to site-specific situations	Bans on fishing or swimming may be communicated through posting of the ordinance. However, postings, by themselves, may not be effective in preventing incidental contact or consumption.	Effectiveness of enforcement depends on the willingness and ability of the local governmental entity to monitor compliance and take enforcement action
4. Ground water use restrictions	Restrictions directed at limiting or prohibiting certain uses of ground water which may include limitations or prohibitions on well drilling. Example: Establishment of ground water management zones or protection areas; capping or closing of wells	Can take advantage of existing restrictions and apply them to site-specific situations	Implementation of such restrictions are dependent on a state's ground water ownership and use laws. Local or state expenditures may be necessary to compensate owners of condemned property.	Effectiveness of enforcement depends on the willingness and ability of the local governmental entity to monitor compliance and take enforcement action

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5. Condemnation of property	Taking over title of a property by condemning it under a government entity's eminent domain authority. Example: Taking over title through condemnation to prevent the site from being used.	Used as a way to take title of a property to control land use or impose a desired land use for a public purpose. Property may be condemned under Federal, state, or local authority.	The owner of the property is entitled to compensation, may be recoverable under section 107 of CERCLA.	Not applicable.

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PROPRIETARY CONTROLS	Tools based on private property law used to restrict or affect the use of property	Can be implemented without the intervention of any federal, state, or local regulatory authority Advisable when restrictions on activities are intended to be long-term or permanent (contaminants will be left in place that prevent unrestricted use)	Since property laws vary by state, always check whether or not there are court- recognized doctrines that would limit the extent to which the controls run with the land or are transferable to other parties Property law requires a conveyance of a property interest from a landowner to another party for a restriction to be enforceable	 To be enforceable in most courts, the instrument used for the conveyance of any property right should clearly state: the nature and extent of the control to be imposed; whether the control will "run with the land" (i.e., be binding on subsequent purchasers); whether the right to enforce the control can be transferred to other parties

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1. Easements	A property right conveyed by a landowner to another party which gives the second party rights with regard to the first party's land. An "affirmative" easement allows the holder to enter upon or use another's property for a particular purpose. A "negative" easement imposes limits on how the landowner can use his or her own property. Examples: Affirmative easement - access by a non-landowner to a property to conduct monitoring Negative easement - prohibit well-drilling on the property by the landowner	Most flexible and commonly used proprietary control EPA can hold an "in gross" easement since it generally will not own an adjacent parcel of land. An "appurtenant" easement can only be given to adjacent landowners. (Note: the site manager or Regional Counsel should check all applicable state property laws and should not consider "in gross" easements to be transferable). Most useful in situations where a single parcel of land is involved and the current owner of the land is subject to regulation under CERCLA or RCRA	For an easement to be created there must be a conveyance from one party to another. An easement cannot be established unless there is a party willing to hold the easement. This can present difficulties since EPA cannot hold an easement under the NCP without compliance with all procedures required by section 104(j) of CERCLA. Furthermore, some state governments cannot hold easements, and other parties may be unwilling to do so. Since the owner may not be the only party with whom it is necessary to negotiate, a title search should be conducted to ensure that agreements have been obtained from all necessary parties (e.g., holders of prior easements with right of access) Less useful where a large number of parcels are involved and the owners are not PRPs because negotiations would have to	In general, an easement is fully enforceable as long as its nature and scope are clear and notice is properly given to the parties against whom the agreements are binding (e.g. by recording the easement in land records) Use caution when determining who will hold the easement. Sometimes PRPs acquire easements from other landowners thus taking on the burden of negotiating and paying for them. However, as a third party, EPA may not have the right to enforce or transfer the easement unless that right is specified in the agreement between the PRP and other landowners. The terms of easements are enforceable by the holder in the state court with jurisdiction over the property's location.

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2. Covenants	A covenant is an agreement between one landowner to another made in connection with a conveyance of property to use or refrain from using the property in a certain manner. Similar to easements but are subject to a somewhat different set of formal requirements Example: A covenant not to dig on a certain portion of the property.	Can be used to establish an institutional control where the remediated property is being transferred from the current owner to another party	This agreement is binding on subsequent owners of the land if: (1) notice is given to the subsequent land owner, (2) there is a clear statement of intent to bind future owners, (3) the agreement "touches and concerns" the land, and (4) there is vertical and horizontal privity between the parties. ¹	Enforcement of covenants is subject to state law and enforceable by the holder in the state court with jurisdiction over the property's location.

¹ Horizontal privity means that only a contract party may claim relief for a breach of a contract warranty or a condition. In other words, no person other than the buyer can sue for damages that arise out of the breach of a contract warranty or condition. Vertical privity means that each party in a distribution chain only has a contract with the person ahead of him or her in the chain. For example, vertical privity would mean a consumer only has a remedy against the person from whom he or she purchased a particular item and could not sue the manufacturer.

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3. Equitable Servitude	Closely related to covenants, equitable servitudes arose when courts of equity enforced agreements that did not meet all of the formal requirements of covenants.	Most likely to have value as an institutional control where a party responsible for cleanup expects to own neighboring property for a long period (as might be the case in partial military base closures)	The agreement is binding on subsequent owners of the land if: (1) notice is given to the subsequent land owner, (2) there is a clear statement of intent to bind future owners, (3) the agreement "touches and concerns" the land. The third requirement should be met by any agreement that restricts what the owner can do with the land.	The ability to enforce an equitable servitude "in gross" against subsequent landowners is less likely to be recognized compared to easements and covenants, but this depends greatly on jurisdiction. The terms of equitable servitudes are enforceable by the holder in the state court with jurisdiction over the property's location.
4. Reversionary Interest	A reversionary interest is created when a landowner deeds property to another, but the deed specifies that the property will revert to the original owner under specified conditions. It places a condition on the transferee's right to own and occupy the land. If the condition is violated, the property is returned to the original owner or the owner's successors. Example: Failure to maintain the integrity of a cap	Binding upon any subsequent purchasers Most useful where it can be assumed that the original owner will be available over a long period to conduct further response determined to be necessary (e.g., where a Federal agency is selling the property)	Not useful if there is a chance that the original owner will not remain in existence for a long time	Each owner in the chain of title must comply with conditions placed on the property. If a condition is violated, the property can revert to the original owner, even if there have been several transfers in the chain of title. The terms of reversionary interests are enforceable by the holder in the state court with jurisdiction over the property's location.

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5. State Use Restrictions	State statutes providing owners of contaminated property with the authority to establish use restrictions specifically for contaminated property For example, Connecticut property owners who wish to file an environmental use restriction must demonstrate that each person holding an interest in the land irrevocably subordinates their interest in the land to the environmental use restriction, and that the use restriction shall run with the land. ²	Overrides common law impediments to allow for long term enforceability of real property interests	In some cases, the authority to acquire or enforce the restrictions is conferred only on the state. Therefore, the state's assistance is necessary to implement and enforce.	Determine whether the restriction can be federally enforced; if not, investigate whether the state is willing to take on the role of enforcement

²CT General Statutes, 1997, Vol. 8, Title 22a, Section 22a-133n through 22a-133s, contains the following provision: "No owner of land may record an environmental use restriction on the land records of the municipality in which such land is located unless he simultaneously records documents which demonstrate that each person holding an interest ... irrevocably subordinates such interest to the environmental use restriction. An environmental use restriction shall run with

land, shall bind the owner of the land and his successors and assigns, and shall be enforceable"

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6. Conservation Easements	Statutes adopted by some states that establish easements to conserve and protect property and natural resources Example: Open space or recreational space is maintained to prevent exposure or prevent uses that might degrade a landfill cap	These statutes override common law technicalities and barriers that may pertain to traditional easements and covenants (e.g., "in gross" easements are not upheld in some jurisdictions).	May only be used for a narrow range of possible purposes which could limit their usefulness as institutional controls	In general, the holder must be a governmental body, a charitable corporation, association, or trust
ENFORCEMENT TOOLS (With IC Components)	Enforcement authority is used to either (1) prohibit a party from using land in certain ways or from carrying out certain activities at a specified property or (2) require a settling party to put in place some other form of control. This section addresses Federal enforcement tools as opposed to those that may be available to state or local governments.	May be easier to establish than proprietary controls because EPA is not dependent on 3 rd parties to establish and enforce them.	Typically only binding on the original signatories of the agreement; or binding only the party(ies) to whom it is issued in the case of a Unilateral Administrative Order. Negotiations and finalization of AOCs and CDs can be lengthy.	Enforceable by EPA under CERCLA and RCRA or by a state if state enforcement tools are used.

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1. Administrative Orders	An order directly restricting the use of property by a named party An order also can used to restrict the use of land owned by a <i>non-liable party</i> . This approach would be used if no other method (e.g., proprietary control, governmental control) is successful (see limitations). Example: An order prohibiting the transfer of drums off site or dredging in a containment area.	EPA has broad scope of authority to issue orders to protect public health and the environment (section 106 of CERCLA) Can be implemented without the execution of any further property instruments Can include provisions requiring the property owner to disclose the order's existence to any potential purchaser or lessee, and notify EPA of any anticipated change in ownership, the identities of any potential purchasers or lessees. Does not require an agreement with the landowner (though consent orders are generally considered more desirable). Unilateral orders can be easily modified in the event that the control needs to be modified or withdrawn	Does not bind subsequent owners or parties not named in the order (e.g., lessees). However, depending upon the facts of the case, an environmental regulator may have the authority to issue a new order to the new owner. An order to restrict a <i>non- liable party</i> , may result in a claim for compensation under section 106(b).	Enforcement is by EPA (or state if issued under state authority). Creates the threat of potential penalties for violations as an incentive to properly maintain the control

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2. Consent Decrees	A CD is signed by a judge and documents the settlement of an enforcement case. Similar to an Administrative Order, it is used to specify restrictions on use of land by the settling party. Example: No well drilling on the property.	 Can be used to require a settling party to: 1. file a separate instrument conveying a proprietary control, such as an easement or covenant to EPA or a third party; 2. notify successors-in-title of the CD, site, and any easements; 3. notify EPA of any anticipated change in ownership and the name and address of the potential purchaser or lease; and 4. can be used to require settling non-property owners (PRPs) to attempt to obtain easements from parties that own land contaminated by the PRP in order to restrict land or resource use. 	CDs alone are not binding on subsequent owners and occupants.	Enforced by EPA (or state if issued under state authority); failure to comply can result in penalties. ³

³While EPA may not be able to enter into CDs with federal agencies, states can.

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INFORMATIONAL DEVICES	Tools, which often rely on property record systems, used to provide public information about risks from contamination	May effectively discourage inappropriate land users from acquiring the property Easier to implement than other controls because they do not require a conveyance to be negotiated	Has little or no effect on a property owner's legal rights regarding the future use of the property If not drafted well, informational devices may discourage appropriate development and uses of land	Not legally enforceable
1. Deed notices	Commonly refers to a non- enforceable, purely informational document filed in public land records that alerts anyone searching the records to important information about the property Example: Notice may state that the property is located within a Superfund site, identify the kinds of contaminants present and the risks they create, or describe activities that could result in undesirable exposures to the contaminants left on site.	May discourage inappropriate land use Easier to implement than easements because they do not require a conveyance to be negotiated Use only as a means of alerting and informing the public about information related to a particular piece of property	Because deed notices are not a traditional real estate interest, proper practice in using them is not well established. Investigate state law and local practice in advance to determine whether such a notice will be recorded, how it should be drafted, and who would be entitled to revoke it. Before filing a notice, obtain the property owner's consent to avoid the risk of claims for slander of title. If not written properly, the notice may discourage all development, including uses that would be appropriate for the site, by creating a perceived liability risk.	A deed notice is not an interest in real property, so recording a notice has little or no effect on a property owner's legal rights regarding the future use of the property (i.e., they are non-enforceable).

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2. State registries of hazardous waste sites	Registries containing elements that can be used as institutional controls Examples: Compilation of hazardous waste sites in the state; annual reports summarizing the status of each site on the registry; notice with the deed for sites on the registry that the site is contaminated; and the requirement that any person conveying title to property on the registry to disclose to all potential purchasers the fact that the property is on the registry	With the cooperation of the state, registries can be useful with other measures as part of an overall remedy, especially in providing information to the public. Some laws provide that the use of a property on the registry cannot be substantially changed without state approval.	The procedure for listing and removing sites from registries is solely at the state's discretion	Any requirements are only enforceable by the state
3. Advisories	Warnings that provide notice to potential users of land, surface water or ground water of some existing or impending risk associated with their use. Advisories are usually issued by public health agencies, either at the Federal, state or local level. Example: An advisory issued to owners of private wells in a particular area that contamination has been detected in the ground water	Can be useful with other measures as part of an overall remedy, especially in providing information to the public	These types of warnings, by themselves, are not likely to prevent incidental contact or consumption. Use advisories also have a very short useful life and must continually be enforced.	Advisories do not have any legal effect nor do they create any enforceable restrictions.