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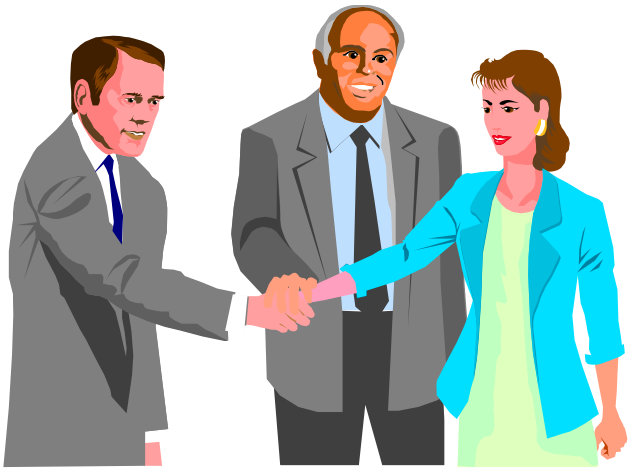
EP 200-1-9

# Effectively Working with State & Federal Regulators

**19 August 1998**



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DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Washington, DC 20314-1000

EP 200-l-9

CEMP-RT

Pamphlet
No. 200-1-9

19 August 1998

**Engineering and Design**

# Effectively Working with State and Federal Regulators

**1. Purpose.** The primary purpose of this Engineer Pamphlet (EP) is to provide ideas, strategies, and discussion in an effort to assist in better communication and coordination with environmental regulators in the successful execution of Corps' projects.

**2. Applicability.** This EP applies to all USACE commands having Civil Works and/or Military Programs hazardous, toxic, or radioactive waste (HTRW) project responsibilities.

**3. References.** References are provided in Appendix A.

**4. Distribution Statement.** Approved for public release, distribution is unlimited.

**5. Discussion.**

a. This document is a collaboration of experience, opinions, and lessons learned by various engineers and scientists who have been working in the hazardous waste remediation field for many years. This EP does not provide formal USACE policy, and it should not be used as a basis to render legal opinions about the subject matter.

b. Successfully working with local, state, and/or Federal environmental regulators is a challenging job. It is important to realize that it takes a lot of different types of expertise and experience and is almost an art form to effectively communicate with environmental regulators. Effective communication with regulators must begin in the initial stages of the project. Open, honest, frequent, and early communication are essential components of any environmental project.

FOR THE COMMANDER:

ALBERT J. GENETTI, JR.
Major General, USA
Chief of Staff

2 Appendices
APP A - References
APP B - List of Acronyms

# Effectively Working with State and Federal Regulators

## Table of Contents

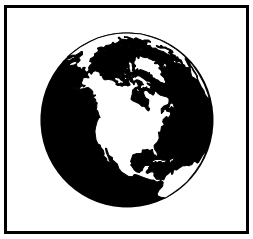
## *Advisory message to the reader*

*This document is a collaboration of experiences, opinions, and lessons learned by various engineers and scientists who have been working in the hazardous waste remediation field for many years. As such the document does not provide formal USACE policy, and it should not be used as a basis to render legal opinions about the subject matter. Through this collection of lessons learned the author's intent was to provide more global advice to the reader in order to hopefully aid them in their project endeavors.*

*It should also be noted that this document is not meant to assign roles or responsibilities for dealing with regulators. This document addresses the collective "you", "project engineers", "project teams", "engineers and scientists", etc. This may mean whoever is included when you meet with regulators, including but not limited to, the customer, Commander, engineers, scientists, attorneys, etc.*

*It is important to realize that a very difficult part of HTRW work is the fact that you must deal with regulators and other stakeholders almost on a daily basis. Stakeholders may include the local community and residents, tribal parties, and other environmental groups. In any event, the simple fact is, we must work as partners in order to get the job done. To clarify, we must work as partners who mutually trust and mutually respect each others' positions, technical capabilities and authorities.*

*We must learn to work side-by-side. After all, we are in pursuit of a common goal...the cleanup and protection of our environment and the protection of everyone's health!*



## Let's get started

Successfully working with your local, state and/or Federal environmental regulators is a challenging job; probably one of the toughest tasks associated with environmental work. It is important for you to realize that it takes a lot of different types of expertise and experience and is almost an art form to effectively communicate with environmental regulators. So, do not ever be discouraged, thinking the task is too monumental. Just sit back, read this pamphlet and think about the way you are going to approach your next problem.

Effectively working with state and Federal regulators means that you must begin to communicate with the regulators from the initial stages of the project. Open, honest, frequent, and early communications are an essential component of any environmental project.

## Why should I read this pamphlet?

If you have picked this pamphlet as reading material, it is probably because you want to improve (or enhance) your skills in "communicating" with your local, Federal, and/or state environmental regulators. We have all been there at one point or another. As you read through this pamphlet, you will see that we have tried to gather day to day "real-life" lessons learned from various professionals who have dealt with regulators throughout their Hazardous, Toxic, and Radioactive Waste (HTRW) careers. The unique characteristic of this document is that it is not written based on the principles of Total Quality Management (TQM) or formal negotiated rule-making or other management and leadership textbooks. This document has been written by engineers and scientists who have had experience with local, state and Federal regulators. In this case, experience may be the best teacher. Hence, the intent of this pamphlet is to provide ideas, strategies and discussions in an effort to assist you in better communicating and coordinating with environmental regulators for the successful execution of your project.

## HTRW remediation work

Unfortunately, there is no easy formula for conducting HTRW work. HTRW work is relatively straightforward from an engineering and scientific point of view. But from a procedural, political, and regulatory point of view, HTRW work can be very complicated. There are many complex and dynamic laws and regulations. There are many state, local and Federal regulators with different goals and perspectives. There are many stakeholders; and HTRW can be an emotional issue.

***Experience***

A HTRW Center of Expertise (CX) representative recalls attending a public meeting on a Formerly Used Defense site as an example of how emotional the HTRW business can be. The citizens appeared frustrated. There were six reported cases of Hodgkin's disease in a four block area of the community. The county and state Public Health officials stated at the meeting that this did not constitute an 'unreasonable cluster' and this was not a high incidence for that area of the state. To the CX representative though, it seemed unlikely to expect six cases of the same disease in a four block area of a town.

During the public meeting the various Corps representatives explained what remediation would be done at the site, why and when remediation would occur. At the end of the public meeting, the mayor rose to his feet and informed the audience of about 200 people that there were only five cases of Hodgkin's disease in the area now -- one person had died.

***Lesson Learned***

Hazardous and toxic waste issues can be emotional matters. This fact should be recognized and accepted when working with the stakeholders. This consideration may play a very important role in community relations for the future.

As HTRW issues can be emotional, this factor must be recognized, accepted, and dealt with openly. Decisions may be made by regulators and stakeholders that are driven in part by emotion. Emotions and politics are strong forces in HTRW remediation work.

As discussed above, decisions may be made based on a combination of emotional, political, scientific and technological factors. It is imperative that the project team responsible for working with the regulators understand the dynamics of the situation and the environmental laws and regulations under which the regulators and the Corps must operate. Do not expect or rely upon contractors to determine the requirements established in environmental laws and regulations. The project team must recognize when these requirements arise and include agency counsel to determine the agency position on the requirements.

The following is a broad overview discussion of the major regulatory programs in which the Corps performs HTRW work. There may be other state programs that are applicable, but this document only discusses the remediation program processes under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended[1], the Defense Environmental Restoration Program (DERP)[2], and the Resource Conservation and Recovery Act (RCRA) as amended.[3]

***Experience***

Several years ago, a Corps HTRW project engineer attended a meeting for a Civil Works remediation project. In the conference room there were representatives from the State Water Control Board, the State Regional Water Quality Control Board, the State Air Office, the State Hazardous Waste Office, the State Regional Air Office, the State Solid Waste Office, the Federal EPA CERCLA Office, the Federal EPA Wetlands Office, the customer and the Corps. Everyone at this meeting appeared to be present for different reasons, trying to obtain different goals. Everyone seemed to have viable concerns about the project.

Due to the large number of regulators from various offices, it was difficult for the Corps representative to determine with which regulatory office he was discussing a particular requirement. It is important to know which office the regulator represents when you are discussing matters. For example, if you are discussing waste characterization requirements, you should be discussing this subject with someone from the RCRA office as this office is responsible for this subject matter, not the CERCLA office.

***Lessons Learned***

It is important to know the responsibilities and authorities of each regulatory office you are working with in order to get the appropriate perspectives and responses to your questions.

Within DOD, there has been a concerted effort to eliminate this problem by requiring the states and EPA to establish single points of contact. These points of contact should coordinate the appropriate questions within their regulatory agency. In addition, appropriate legal counsel should be consulted in the event of a question of this sort, and the designated communication channels should be required to sort out any conflicting demands or asserted requirements. It may be appropriate in some situations to request, or even demand, that the designated regulatory point of contact consult with certain program staff within their agency, such as the RCRA or CWA personnel. The USACE staff should not attempt to separate complicated issues and take them directly to separate regulatory elements outside of the designated point of contact. Such efforts may lead to disputes and contrary determinations being made later by the authorized point of contact, as well as leading to deterioration of the working relationship with the point of contact.

***Our Nation's Major Environmental Response Programs***

National programs to clean up the environment and protect the public have seen considerable growth since the 1970's. When Congress enacted the Clean Air Act[4] in 1970, one of the primary purposes of the statute was to protect and enhance the quality of the nation's air resources so as to promote public health and welfare. Similarly, when Congress enacted the Clean Water Act[5] in 1972, one major objective was to achieve a national goal that the discharge of pollutants into navigable waters would be eliminated by 1985 and that the discharge of toxic pollutants in toxic amounts be prohibited.

To begin to understand the waste problems in the United States, Congress created the Solid Waste Disposal Act[3] of 1965. One goal of the legislation was to provide funding so that each state could study and compile information on its waste disposal problems and practices, and to assist states in dealing with the problem of open burning dumps. Additionally, technical and financial assistance was made available for the development of state solid waste management plans.[3] By the mid 1970's, Congress recognized that the careless disposal of hazardous waste was contaminating surface and groundwater and contributing to air pollution. To combat the problem, Congress revised the Solid Waste Disposal Act and created the Resource Conservation and Recovery Act (RCRA)[3] which was passed in 1976.

The goal of RCRA is to promote the protection of health and environment, and to conserve valuable material and energy resources.[3] RCRA has kept in stride with current waste management issues and problems by way of Congressional amendments, the most notable of which occurred in 1984 with the passage of the Hazardous and Solid Waste Amendments (HSWA).[3] Under the provisions of HSWA, Congress established the authority for Corrective Action requirements at permitted or interim status hazardous waste management facilities. Promulgation of these requirements under RCRA sent a message to industry and the government that they were expected to remediate releases from permitted or interim status hazardous wastes management sites at facilities they owned and operated as a condition of EPA allowing existing hazardous waste management operations to continue.[3]

RCRA was enacted to require proper management of waste generated at existing facilities.[3] However, incidents such as Love Canal soon made it abundantly clear that another statute was needed to clean up the nation's abandoned hazardous waste sites.

Thus, in December 1980, Congress enacted CERCLA. This was the first major Federal response to the problem of abandoned waste sites throughout the nation resulting from the past release of hazardous substances in nearly any type of situation. This law imposes response action requirements on the President, and thus all Federal agencies, and also creates certain regulatory and enforcement authority in EPA. In order to fund the work required of EPA, Congress established a trust fund known as the 'Hazardous Substance Superfund', or commonly referred to as the 'Superfund'. Congress initially authorized EPA to use the Superfund to undertake a program of $1.6 billion over five years funded by a tax on petroleum

companies and chemical manufactures.[1]

In 1986, Congress enacted the Superfund Amendments and Reauthorization Act (SARA).[1] Among the changes made in SARA was that it significantly increased the size of the fund. The passage of SARA had a considerable effect on DOD activities related to hazardous waste site remediation. SARA also included section 211, the Defense Environmental Restoration Program (DERP)[2] statute. This portion of the statute created the authority of DOD to undertake certain response actions and establish the Defense Environmental Restoration Account (DERA).[2]

***The Defense Environmental Restoration Program (DERP)***

Congress created the Defense Environmental Restoration Account (DERA) when it enacted Section 211 of SARA -- also known as the Defense Environmental Restoration Program.[2] Although the DERA is not limited to sites on the EPA National Priorities List (how a facility gets on the NPL list is discussed on page 13), per the statute, hazardous substance response activities funded by the DERA must be carried out subject to, and in a manner consistent with, Section 120 of CERCLA.[1,2] Department of Defense (DOD) environmental managers should be aware of the significance of that limitation, particularly when EPA or state regulators insist the cleanup be conducted pursuant to RCRA corrective action or state requirements other than CERCLA. If regulators demand cleanup efforts that are inconsistent with CERCLA section 120, DERA funds will not be available to support those endeavors.[2] This is a very complicated legal matter that will warrant discussion with your legal counsel. DERA/DERP, by DOD policy, does not apply to Civil Works facilities.

***Purpose of the CERCLA Remedial Action Program and the RCRA Corrective Action Program***

CERCLA[1] was enacted to create Federal authority and standards for responding to releases of hazardous substances at certain sites in the nation. EPA may conduct response actions at National Priorities List (NPL) sites or removal action sites. The law imposes responsibility and liability for response action on four categories of parties know as Potentially Responsible Parties (PRPs), who may in some circumstances be ordered by EPA to conduct response actions or pay for the costs of response. Federal agencies are responsible for conducting response actions on installations and facilities under their jurisdiction where there have been releases of hazardous substances.

The RCRA[3] Corrective Action program was established to remediate facilities where a current owner/operator of the hazardous waste management facility is present and responsible for cleaning up the site. The RCRA Corrective Action program authorizes EPA to require corrective action at a facility seeking a permit where there has been a release of a hazardous waste or constituent at the facility, regardless of when waste was disposed of at the facility,

and to require work beyond the facility boundary where necessary to protect human health and the environment.[3]

***Federal and State Regulatory Authorities***

The Superfund program is administered by the EPA. The regulations implementing CERCLA are found in 40 CFR 300, the National Contingency Plan (NCP).[6] For non-governmental NPL sites undergoing a CERCLA remediation, the EPA is the lead enforcement agency.

Executive Order 12580, Superfund Implementation dated 23 January 1987, as amended by Executive Order 13016, dated 28 August 1996 delegated many of the authorities of the President established in CERCLA to DOD, as well as other Federal agencies, for all facilities not on the NPL, and for facilities on the NPL as to DOD and DOE.[7] One such authority is that DOD is the lead Federal agency for response actions at both NPL and non-NPL DOD installations. This includes the authority to select remedies, subject to the concurrence of EPA for NPL sites as per section 120(e)(4)(A) of CERCLA.

Under CERCLA, EPA does not authorize states to administer the program. States, however, may promulgate their own "mini" CERCLA-type laws. It should be recognized that these are strictly state laws and do not preempt the authorities of EPA or other Federal agencies under CERCLA.[1]

Unlike CERCLA, RCRA[3] contains provisions for states to develop and administer hazardous waste programs that are at least as stringent as the Federal RCRA law. States submit their state hazardous waste laws and regulations to the EPA for a determination if the state will be authorized to administer its own program in lieu of the Federal program. EPA may grant the states varying levels of authorities based on their ability to administer RCRA. Most states currently have base RCRA authority. Significant amendments to RCRA, such as the Hazardous and Solid Waste Amendments of 1984, have included provisions requiring states seeking authority to issue permits which include HSWA requirements such as corrective action to submit a new application to EPA for review of their laws and regulations for consistency with HSWA. Similarly, if EPA issues new regulations which establish more stringent standards, states may not issue permits or take action based on lesser standards, and must revise their regulations and seek EPA review for consistency with the new Federal standards. States may also have their authorized programs revoked by EPA if their authorities or the implementation of their program are determined to be inadequate.[3]

Since states can be authorized to administer portions of the RCRA program, the project team should consult with agency counsel to determine the extent of state's authority to administer a hazardous waste program. Issues of this sort may be affected by Federal sovereign authorities.

### *Initiating a CERCLA Action*

In section 120(c) of CERCLA[1], Congress required EPA to develop a list of all Federal facilities that ever stored, treated, disposed of, released/spilled or are currently generating, treating, storing or disposing of hazardous wastes, or have released a hazardous substance in a reportable quantity. The list, which EPA maintains, is called the Federal Agency Hazardous Waste Compliance Docket. The Docket is comprised of sites included in the Federal property hazardous waste site inventory reports, sites for which a Treatment, Storage or Disposal Facility (TSDF) permit has been applied for, or for which a notification of hazardous waste activities subject to a permit have been given, and sites for which a notice of a release has been submitted to the National Response Center (NRC).[1]

CERCLA establishes the requirements for actions on sites listed on the Docket. CERCLA requires that a Preliminary Assessment (PA) and Site Inspection (SI), if warranted, be performed on all Federal sites that have been listed on the Docket.[1] Inclusion on the Federal Docket is the one way for Federal Facilities to be brought into the CERCLA remediation process. Currently, Formerly Used Defense Sites (FUDS) are not routinely included on the Docket.

### *Overview of the CERCLA Process*

Once a Federal facility is listed on the docket, a PA must be conducted at the facility. If, after completing the PA and consulting the NCP requirements, further action is required, the facility must perform a SI. Upon completion of the PA and SI, the EPA may numerically rank the site utilizing the Hazard Ranking System (HRS). EPA has discretion as to which sites will be scored, depending on the nature of the site information presented in the SI and the activities of the agency controlling the property or other regulatory agencies. If the site is scored, the resulting numerical score aids the EPA in determining whether or not the site will become an NPL site. If the site is determined to be an NPL site (scores $\geq$ 28.5), the facility must initiate a Remedial Investigation and Feasibility Study (RI/FS) no later than six months after inclusion on the NPL. The process outlined in the NCP must be followed. After the RI/FS has been completed, a proposed plan must be presented to the public with an opportunity for comments to be received and considered by the agency, after which a Record of Decision (ROD) will be signed. If the ROD selects a remedy which requires it, then the remedial design will be performed, followed by the remedial action.[1,6]

Compliance with the NCP is required even if the site is not on the NPL. This means the facility should consider such factors as the appropriate site investigation and analysis of remedial alternatives, the selection of a cost-effective response, and the opportunity for public comment before deciding on a remedial action or that no further action is required. For non-NPL sites, it should be determined if there are other regulations in addition to the NCP and DERP that apply to the site.[1,2] A good example is a facility that has an operating RCRA permit. In this case, RCRA corrective action may be applied at the site. Consultation with

legal staff is essential when determining the application of state requirements and the respective authorities of state regulators.

The NCP offers much flexibility at non-NPL sites. In addition to remedial actions, CERCLA removal actions may be undertaken at a site under certain circumstances. Removal actions must be consistent with the final remedy. If you have at least six months to plan a removal action, you need to prepare an Engineering Evaluation/Cost Analysis (EE/CA) prior to beginning the removal action. If you have less than six months, a Time-Critical Removal Action may be initiated immediately without any prior documentation.[6]

***Initiating a RCRA Corrective Action***

Section 3004(u) of RCRA[3] requires that prior to permit issuance to a hazardous waste TSDF, corrective action for all releases of hazardous wastes and constituents from solid waste management units (SWMUs) at the facility must be initiated. The provisions also allow schedules of compliance to be used in permits where the corrective action cannot be completed prior to permit issuance.[3]

RCRA section 3008(h)[3] authorizes EPA to issue an order to hazardous waste management facilities operating under interim status to perform corrective action if necessary to protect human health and the environment as a result of a release of hazardous waste.[3]

Under the provisions of section 7003(a)[3], Congress authorizes EPA to bring a lawsuit or issue an order when the handling, treatment, storage, or disposal of a solid or hazardous waste may present an imminent and substantial endangerment to health or the environment. The order may restrain activities or compel the conduct of an abatement action, or both.[3]

***Overview of the RCRA Process***

RCRA corrective action provisions can be triggered when a facility decides to apply for a RCRA permit to store hazardous waste over 90 days or to treat or dispose of hazardous waste on site. In either case, the facility will submit a RCRA permit application to the state or EPA.[3]

Once the permit application has been submitted to the state or EPA, if corrective action is necessary and agreed to by the agencies and regulators, the RCRA Corrective Action process may begin. The state or EPA (whichever has RCRA authority) may perform the RCRA Facility Assessment (RFA). The RFA is not mandatory and might not be performed, in particular if action at the facility has proceeded beyond the initial identification stage. If the RFA is conducted, the appropriate regulatory agency in consultation with the permittee will identify SWMUs. The regulatory agency will develop the Schedule of Compliance as well as identify action levels at this point. Action levels are those levels at which when

exceeded will trigger initiation of a RCRA Facility Investigation (RFI) for the SWMUs. The SWMUs, Schedule of Compliance and action levels are all items that will be formally negotiated by the customer, project team and attorneys.[3,8,9]

Once these action levels are set, the regulatory agency will draft the permit. The public will have an opportunity to comment on the draft facility operating permit and associated schedule of compliance for corrective action, if any. Once the SWMUs have been identified in the RFA, the facility may have to investigate these SWMUs in the RFI. [The RFI is analogous to the RI prepared under CERCLA.] Upon completion of the RFI, the Corrective Measures Study (CMS) may need to be initiated. [The CMS is much like the FS under CERCLA.] The CMS will be prepared by the facility. During this time the regulatory agency will set Media Cleanup Standards (MCS), then prepare a Statement of Basis which is similar to the ROD under CERCLA.[1,3,8,9]

The regulatory agency approves the remedy and may issue a permit modification to the Schedule of Compliance to incorporate the remedy. The facility will then begin remedial design, then corrective measures implementation (CMI) or remedial construction if necessary for the remedy.[3,8,9,]

It is important to note that corrective action regulations establishing a general remediation process have not been issued by EPA (as of the date of this publication). A common corrective action regulatory process has come into play based on the proposed EPA corrective action regulations that were published in the Federal Register on July 27, 1990.[8] While these regulations have not been finalized by the EPA, many states use them as guidance in developing their state corrective action programs. In May 1996, EPA issued an advance notice of rulemaking and request for comments on a revised strategy for promulgating regulations for a more flexible corrective action process under RCRA. In this notice, EPA articulated their goal to make the RCRA corrective action process a very flexible, site-specific cleanup program.[9] The corrective action process is currently governed by the statutory language, certain limited regulations promulgated under RCRA, and corrective action guidance documents developed by the EPA. As of the date of this publication, there are 30 states with corrective action authority.[10]

***Comparison of the CERCLA and RCRA Programs***

The investigatory procedures for CERCLA and RCRA remedial action programs are quite similar. Figure 1 illustrates the similarities and differences between the actual processes. While the steps in the remediation processes are quite similar, there are some differences in methodology as follows:

a. RCRA grants authority to EPA to authorize states to enforce their own state RCRA hazardous waste permitting program if the state program is approved by EPA. Separate EPA

# Comparison of the RCRA and CERCLA Regulatory Processes[6,8,9]

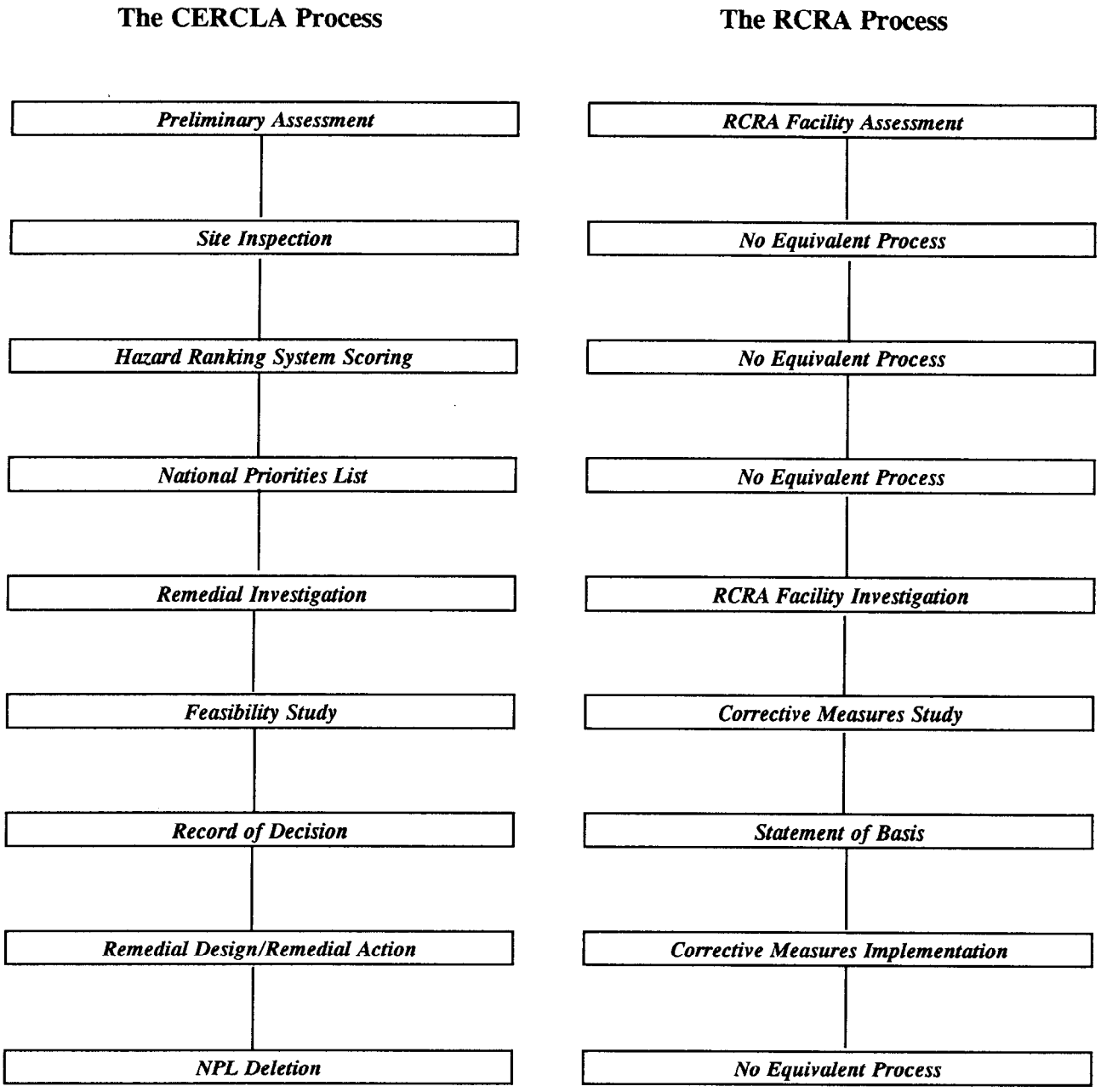



**Figure 1**

approvals are required for a state's authority to permit operations at a hazardous waste management facility, corrective action, or underground storage tank programs, as well as substantive statutory or regulatory amendments to the permitting programs.[3] CERCLA has no provisions to authorize state enforcement of state requirements comparable to those in CERCLA.[1] The applicability of state laws to Federal agencies thus depends on an effective waiver of sovereign immunity for the particular activity, authority and requirements asserted by the state[1]. The authority of a state over a particular activity is a legal issue, thus it is necessary that you consult agency legal counsel to determine the need for compliance with an asserted state requirements.

b. The RCRA corrective action procedures apply to hazardous waste management facilities, such as TSDFs seeking a permit to operate under 3004(u)[3] and facilities operating under interim status under 3008(h).[3] The application of CERCLA is much broader. Any facility on the Federal Facility Docket is required to at least initiate the CERCLA process through a PA or seek removal of the site from the Docket.[1]

c. CERCLA is thought of as regulating past activities while RCRA regulates the present management of hazardous wastes. Not all sites which handle hazardous wastes are required to obtain a RCRA permit. Thus corrective action will not be triggered at all RCRA sites. CERCLA applies to all sites, past or present, where there is a release or a threatened release of a hazardous substance and all sites where a release or threatened release of a pollutant or contaminant may present an imminent and substantial danger to public health or welfare. Many CERCLA sites are not RCRA permitted or interim status sites. Thus, CERCLA is applicable to all RCRA hazardous waste management (HWM) facilities which are subject to corrective action requirements, but RCRA corrective action requirements are not always applicable to sites subject to CERCLA. While this statement is generally true, the response processes for the two statutes can overlap.[1,3]

d. CERCLA has the NPL with its associated formal ranking process. RCRA has no comparable ranking system.[1,3]

e. CERCLA establishes certain statutory criteria regarding the selection of remedies that are not included in RCRA. One of the criteria establishes a preference for remedies including treatment which permanently and significantly reduces the volume, toxicity or mobility of the hazardous substances. Another criteria provides that the degree of cleanup for a remedy which includes leaving a hazardous substance at the site will attain legally applicable or relevant and appropriate requirements (ARARs) under certain Federal and state laws, unless they are waived pursuant to CERCLA. RCRA does not have the elaborate remedy selection criteria which are provided in section 121 of CERCLA, however corrective action standards are based on protectiveness to human health and environmental and EPA policy is to make the RCRA corrective action process and results comparable to the CERCLA response process.[1,3,9]

f. CERCLA Section 121(e)[1] waives requirements for Federal, state, or local permits for

response actions conducted on the site. (The NCP provides that this applies to CERCLA response actions conducted by EPA or any other Federal agency.) RCRA contains no similar permit waiver.[1,3]

g. There is no statutory preference for an onsite remedy under RCRA as there is under CERCLA. The appropriate regulatory agency will approve the final remedy at a Federal facility under RCRA. The Federal agency, if DOD or DOE are involved, chooses the remedy under CERCLA with concurrence from the EPA if it is an NPL site. EPA chooses the remedy at private sites or other civilian Federal agency sites which are on the NPL.[1,3]

h. The way cleanup levels are set may differ. Proposed RCRA corrective action regulations[8,9] establish two levels: the action level and the media cleanup standards (MCSs). The action level is the level at which corrective actions are triggered if this level is exceeded. The MCS is an EPA/state established cleanup standard that will be achieved during the CMI. While cleanup levels may be established by the regulations when proposed, cleanup standards under RCRA can be determined by a site-specific risk assessment. Under CERCLA the cleanup levels are set on a case-by-case basis through risk analysis and ARARs review. The levels are typically decided among all parties, and may not necessarily be consistent from site-to-site or from state-to-state. However, the state regulators must consistently apply ARARs to all sites (both Federally owned and privately owned) within a particular state.[1,3,8,9]

i. CERCLA and the NCP require public comments to be sought at the stage of the remedial action plan, thus allowing comments on the RI/FS and on the proposed remedy. The lead Federal agency also submits the draft final ROD for public comments. Additional community relations activities are encouraged in the NCP and EPA guidance and are a matter of policy within DOD. RCRA requires that all permits and permit modifications be the subject of a public notice and opportunity to comment, but has no comparable community relations program formalized in the RCRA regulations. It should also be noted that DERP requires notice and consultation with Federal, state and local officials and the public at a number of project stages.[1,2,3,6,8,9]

j. While the CERCLA remedy selection criteria are not identical to the RCRA criteria, they address the same types of considerations and should generally result in similar remedies when applied to similar site conditions.[1,3]

***Pitfalls in choosing a remediation process***

As previously stated, the remediation process for a particular site may be a complicated legal matter for several reasons, including the NPL status of the site, the authorities of the state regulators, consideration of DERP requirements, etc. Thus, it is essential that the project team include legal counsel when trying to determine the appropriate regulatory authorities at the site. In determining under which particular process to remediate a site, several non-tangible factors may also be worthy of consideration such as the potential threat to the environment, health and safety concerns, response time, public perception, etc.

***Petroleum Contaminated Sites***

CERCLA specifically excludes petroleum products and constituents thereof from the definitions of hazardous substance and pollutant and contaminant. However, DERP creates authority to conduct cleanup of petroleum contaminated sites on active installations and FUDS when there is an imminent and substantial endangerment to the public health or welfare or the environment.[1,2]

Many states have corrective action provisions within state regulations for active underground storage tanks (USTs). There is a very specific set of regulations in RCRA.[11] The UST compliance program of RCRA is another program for which EPA may authorize states to enforce the state program in lieu of the Federal program. Many states have been granted this authority. Typically these regulations are implemented by the state or a local regulator. Figure 2 depicts the UST corrective action process.

The application of CERCLA or state UST requirements to Federal remediations, regardless of NPL status, is a very complicated legal matter that must be discussed with your legal counsel.[1,2,3]

## So what's the point?

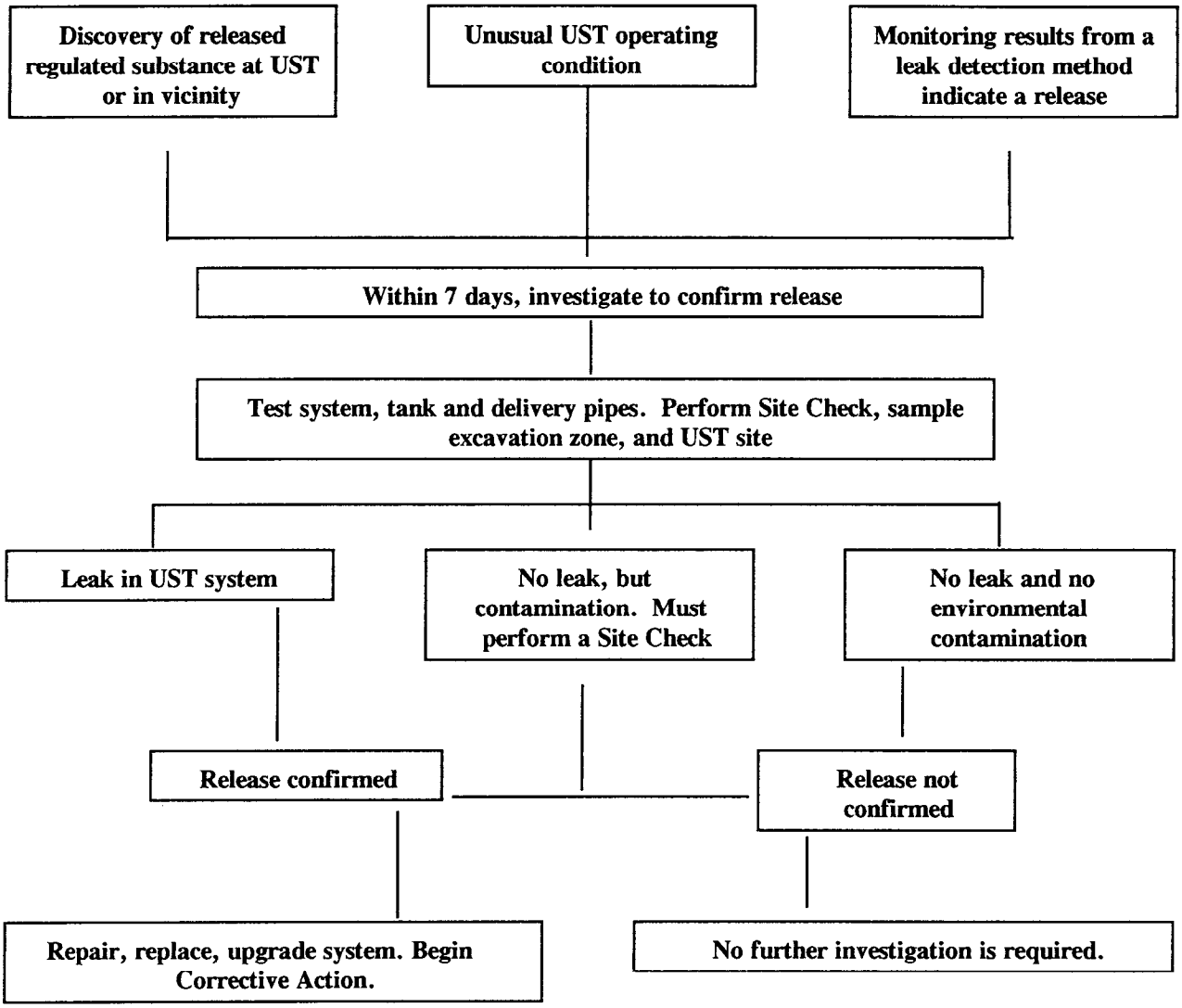
To effectively work with the regulators, several principles should be kept in mind.

Principle #1. You must understand that environmental laws and regulations are complex, and projects may involve any number of difficult legal issues for resolution. It is important that you have a basic understanding of the environmental regulations and that you understand what is legally required versus what is guidance and policy. It is very important that you have a basic understanding of the various authorities of DERP, CERCLA and RCRA, as well as other laws and regulations which may apply to remediation projects. It is also important that you understand the basis of the implementing regulations.

Principle #2. It is important that you know which regulatory agency has the lead enforcement authority at the site. Is the site on the NPL? If yes, the work is required to be conducted in accordance with CERCLA. If the Federal agency which controls the property is the lead agency, consultation with EPA is required. DOD policy is that states will be included in the process of consultation as long as they are willing to participate. Both the DERP and CERCLA statutes provide for state notice and consultation at designated phases of the response process.[1,2]

Principle #3. It is also important that the people meeting with the regulators understand their own project including all technical aspects.

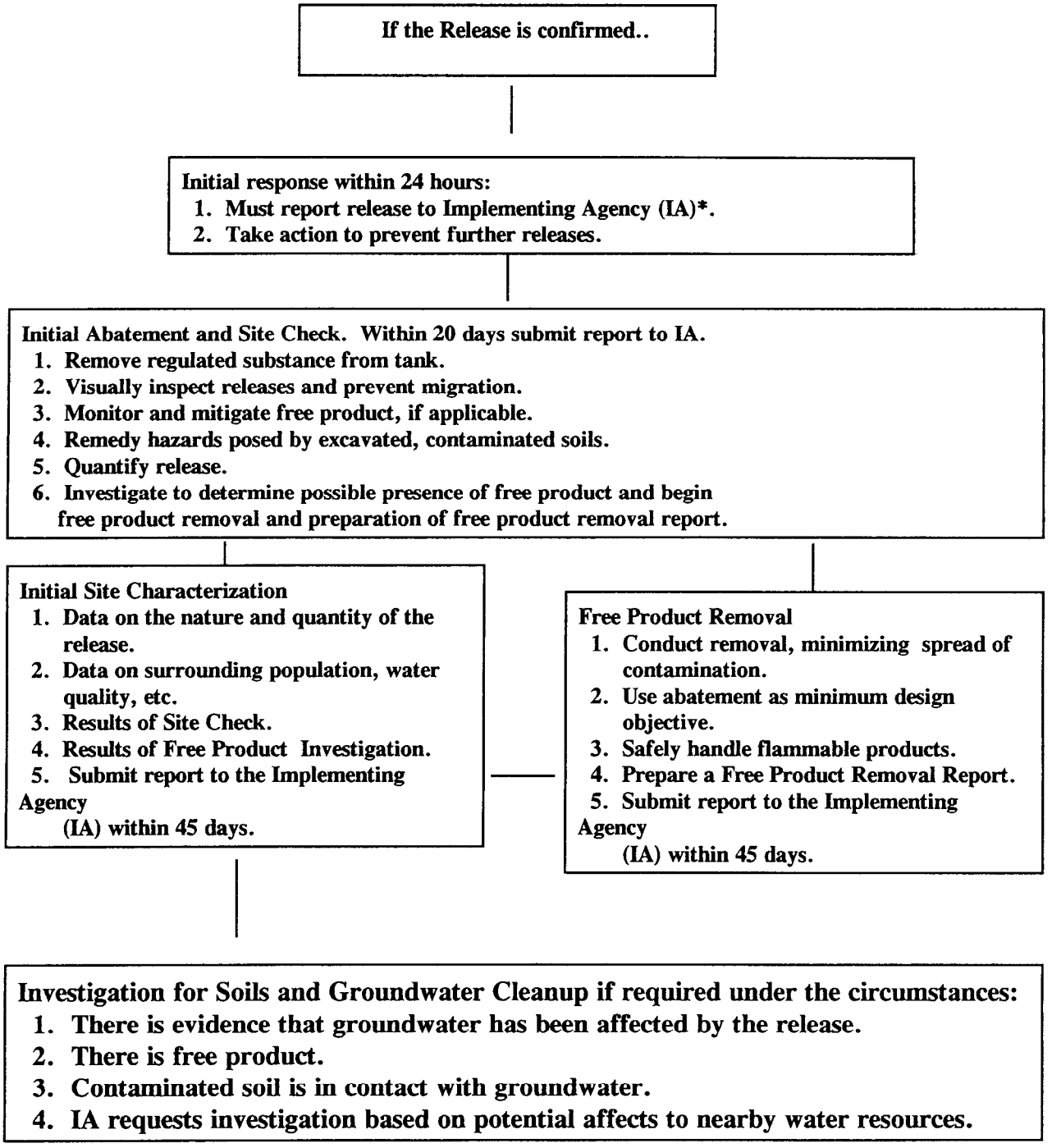
## The Underground Storage Tank (UST) Release Reporting, Investigation and Confirmation Requirements[11]




Note: This table applies to operating tanks which have been taken out-of-service after 1988, and not to older tanks. The response times are negotiable with the regulator based on a reasonable period under the circumstances.

**Figure 2**

# The Underground Storage Tank (UST) Release Reporting, Investigation and Confirmation Requirements[11]




** Implementing Agency may request more information or request preparation of a Corrective Action Plan prior to remediation. The response times are negotiable with the regulator based on a reasonable period under the circumstances.*

**Figure 2 (continued)**

While these principles seem obvious, they are very important. To hold effective and meaningful discussions with regulators, it is essential that you and your team understand the ground-rules (the environmental laws and regulations) and the technical aspects of the work.

***Experience***

One HTRW project manager observed that many installations have been in the process of performing an RI/FS for sites when the states were granted corrective action authority under RCRA. It seemed to the project manager that as a result, states sometimes tried to enforce the corrective action program under RCRA, even at an installation already performing CERCLA studies. In the past, an installation may have redone the work in order to fit the RCRA requirements. This increased the costs at the site as well as increased the time to remediation.

***Lesson Learned***

Now installations realize that a tri-party agreement, such as a Federal Facility Agreement, incorporating the CERCLA and RCRA requirements is an advantageous way to approach this problem. Or, as an alternative, installations are requesting language be added to the corrective action section of their Part B permits which effectively integrates the CERCLA/RCRA programs such that work completed under CERCLA can also be used to fulfill RCRA corrective action requirements.[1,3,12]

## Streamlining the remediation process

There are several ways to potentially streamline the remediation process through the application of existing environmental regulations.

One such way is to use CERCLA removal action authorities. The NCP provides a framework for the DOD to undertake removal actions at their facilities. The DERP statute also provides for DOD to conduct emergency removal actions. Removal actions can be conducted at NPL facilities, as well as non-NPL facilities. The use of removal actions may facilitate remediation. It should be noted that there are EPA regulations pertaining to removal actions in the NCP, and these regulations must be complied with during execution of a hazardous substance response action, except that a DERP emergency removal action is authorized under a separate legal authority.[1,2,7]

Site remediation can also be streamlined significantly through the use of the Superfund

Accelerated Cleanup Model (SACM). The purpose of SACM is to make remediation quicker and more efficient. This is accomplished through more focus on the front end of the Superfund process and better integration among the program components. The approach involves a continuous process for assessing site conditions and the need for action, cross-program coordination, prompt risk reduction through early removal and/or remedial actions coupled with the appropriate long-term remediation. [13]

SACM is intended to promote faster, more efficient remediation within the existing framework of CERCLA and the NCP while ensuring that the remediation is still protective of human health and the environment and that the appropriate public participation requirements are fulfilled. SACM itself is not an authorized program under the NCP. SACM employs the use of early actions, such as CERCLA removal actions, to achieve prompt risk reduction coupled with the development of long-term actions to achieve complete risk reduction through extensive remediation activities. The move towards early action at the site to control the risks is a very good method of streamlining at both NPL and non-NPL sites.[13]

Another way to speed up remediation is through the use of Presumptive Remedies. The presumptive remedy approach is one tool of acceleration that may be used to expedite remedy selection. Presumptive remedies are preferred technologies for common categories of sites, based on historical patterns of remedy selection and EPA's scientific and engineering evaluation of performance data on technology implementation. The objective of the presumptive remedies initiative is to use the program's past experience to streamline site investigation and speed up remedy selection. Over time, presumptive remedies are expected to ensure consistency in remedy selection and reduce the cost and time required to clean up similar types of sites. Presumptive remedies are expected to be used at all appropriate sites except under unusual site-specific circumstances.[14]

The last way to streamline the remediation process is to use good engineering and scientific judgement. Project personnel should meet together and plan for the future. The project team should identify what is important to the installation or Civil Works facility pertaining to the project and identify project goals. The project team and customer should meet with the regulators to discuss the best approach to a plan for response action at the site. Does the site require a removal action to eliminate current threats to human health and the environment, or should the RI/FS process be initiated first to evaluate the contaminant condition and assess risks at an appropriate level for the type of site involved? There is much flexibility within the NCP. This flexibility should be explored to identify the best path for remediation at your site. Engineering Manual 200-l-2, may provide useful guidance on the establishment of goals and data quality objectives for a specific project.[16]

***Experience***

A HTRW project manager recalls that the state requested a report be prepared to characterize the wastes at a pit that collected industrial waste water. The project

team prepared a small RI/FS for the site. The study took approximately one year and cost about $50,000. The study concluded that the small pit should be excavated and the wastes disposed of off-site at a cost of about $10,000.

***Lessons Learned***

It appears that this project would have been a good candidate for the streamlining process of conducting a removal action under the NCP.[1,6,13]

## When should communications with the regulators begin?

The first step in working with regulators is to establish an internal project team including the project manager, an attorney and all other technical team members. If the work is performed for a customer, the customer will probably identify the project team. It may not always be necessary to include the entire team in every meeting, but all members should be kept advised of developments in order to understand the overall situation when their involvement is required. The team must determine who has what authority to act for the agency on various issues, within delegation limitations. Clarification of the customer's role and the roles and authorities of the team should take place before significant contact with the regulators takes place.

Upon the organization of an internal team, communication with the regulators should begin. At the onset of a project, a very helpful practice is to perform a preliminary site visit with the regulators. At this point, just walk around the site and discuss in broad terms what will probably need to be accomplished at the site.

The purpose of the site visit is really two-fold. Yes, it is obviously to visit the site, but the other very important purpose is to meet the regulators early in the project phase. So, by all means invite both the state and Federal regulators. If a single regulatory agency contact has been identified, where it makes sense, ask the contact to also invite regulators from both the RCRA and CERCLA offices, as well as any other office which may have a role in the remediation work. Open the lines of communication early and try to get all the involved parties there onsite in order to do the walk-through and in order for you to get a preliminary feeling for the regulator's point of view about the site.

***Experience***

An installation environmental coordinator recalls that as part of the Installation Restoration Program, letters were sent to the regulatory agencies inviting them to participate on the "technical review committee." The local air quality district received the letter and decided to send a representative from their enforcement section. During the first meeting, a briefing was given which described suspected releases for each site and the corresponding environmental concerns.

Because there was no early involvement with the regulators and no pre-established dialog between the installation and the regulatory agency regarding the "spirit of cooperation" that this meeting was intended to be based upon, the inspector was still operating in an enforcement capacity and began issuing notices of violation based on information presented during the meeting.

***Lesson Learned***

It is important to get the regulators involved early in the process. It is also important that the regulators understand their role and why their participation was requested.

Once the initial site visit is performed it will be necessary to define the applicable legal authorities for the site. At this point it is important to try to determine under which regulatory program cleanup will most likely proceed. It is also important to define the lead regulatory agency/agencies at the site. In certain cases, this may be a very complicated legal matter. But the goal at this point is to chart a course for how the team thinks the project should proceed based on project requirements and regulatory requirements. Obviously, it will be necessary to work with your legal office during this process.

After determining which state and/or Federal regulations potentially apply to the site, and which regulators will probably have enforcement authority at the site, it is necessary to discuss this perspective with the regulators themselves. This is important so that the regulators understand how the work will proceed at the site and why. Also, if the regulators do not agree with the regulatory authorities you are proceeding under, discussions can be held to resolve preliminary differences.

An agreement should be prepared to document these decisions as these are decisions that if changed can alter the course of the entire project. Active military bases and Civil Works facilities on the NPL will enter into a Federal Facility Agreement (FFA) to basically outline the procedures for conducting the work and the procedures to carry out the consultation process among the involved agencies. On non-NPL sites, consideration should be given to at least documenting minutes of meetings with regulators and stakeholders. Minute meetings should be forwarded to all parties in order to document the discussions and decisions. Any such correspondence must be coordinated with your agency counsel.

***Experience***

An installation environmental coordinator describes a situation where an UST leaked into an isolated area where, because of salt water intrusion, there was no possibility of the aquifer ever being used as a drinking water source. Because the geology was such that contamination was not migrating and posed no threat,

the local water district wanted to use the site to conduct a long-term study on natural degradation. Representatives from the regulatory agency, the water district, and the installation met and decided that the installation could delay taking any action on the site to enable the water district to conduct their study. Over the next few years, there were personnel changes at both the installation and the regulatory agency. Because neither the new installation representative nor the new regulatory representative were aware of the agreement, a notice of violation was issued to the installation for failure to remove the free-floating product in accordance with the regulations.

Documenting the agreement between the installation, the regulatory agency and the water district to delay remediation would have prevented the regulatory agency from issuing a notice of violation. The agreement would have served as a historical record of site events.

***Lessons Learned***

Documenting the decisions and/or agreements, and communications among all parties is extremely important. The project team, including counsel, need to understand the environmental laws and the regulatory authorities of the local, state and Federal agencies in order to effectively discuss these matters with the regulators.

## Who's who?

Understanding the roles of the various regulators is very important. There are regulators at the Federal, state and sometimes local levels, and each has specific roles and responsibilities associated with enforcing their particular regulations.

It is important to realize that the mission of the regulators is to ensure compliance with their respective environmental regulations. This is as it should be since the public has entrusted these regulators with the protection of their health and environment. In this role, the regulators must do their job and enforce the applicable environmental regulations upon the regulated community.

Our goals are similar in that we too are trying to be protective of human health and the environment. However, we are the regulated community. While trying to achieve our goal, there are practical considerations and limitations such as time, resources, money, technology, etc. that sometimes hamper our expeditious achievement of cleanup. These are simple facts that must be realized by all parties.

***Experience***

A HTRW CX regulatory specialist describes the predicament in which the wrong office was asked about a specific regulatory interpretation. For example, there may be a need to ask EPA a regulatory question, however, should the CERCLA regulator be asked the question or should the question be posed to the RCRA regulator.

For example, while performing CERCLA work onsite, a CERCLA EPA Remedial Project Manager (RPM) was asked if the contractor could discharge well-development water containing F-listed wastes to the military sanitary sewerage plant. The CERCLA RPM said that it would be fine as far as he was concerned. Prior to allowing the discharge, the Corps project engineer contacted the state RCRA office for guidance. The state RCRA office representative said that discharging F-listed wastes off the CERCLA site to the sanitary plant may be a violation of RCRA regulations and the installation definitely should not allow that operation. If the contaminated water had been discharged to the sanitary plant, the RCRA state enforcement office may have required RCRA corrective action at the plant under their regulation.

***Lesson Learned***

Due to the complexity of environmental regulations, most regulators are very narrow in their field of expertise. The regulators in the CERCLA office are knowledgeable about the CERCLA requirements. The regulators in the RCRA office are knowledgeable about RCRA hazardous waste requirements; the people in the state water offices are knowledgeable about the state's water regulations, etc. Make sure that your questions are being coordinated with the right regulators.

It is imperative that if the FFA, IAG, or DSMOA designates a single regulatory agency contact, use that single contact and request the contact coordinate with the other appropriate regulatory offices.

In summary, it is important to ask the right people the right questions if you expect to get the right answers. This is only common sense; however, this is why it is so important to know which regulators you are working with, as well as their respective regulatory roles and responsibilities. Never underestimate the importance of this information. If a regulatory agency has designated a single point of contact, make sure that your contact asks the right people the right questions.

## What is "negotiable"?

There are many state and Federal environmental laws and regulations. However, the laws and regulations are not necessarily what causes conflict among the regulators and the regulated community. Many times the conflict arises in their application. While the laws and regulations are not negotiable, sometimes the interpretation of the laws and regulations as well as the application of policy and guidance may not be straight-forward or clear. There will be cases in which a regulator interprets the laws and regulations differently than the Corps. You should not just go along with the regulator's interpretation. You should seek a legal opinion from your counsel as to the appropriate interpretation. Upon review, if your interpretation appears to be correct, your interpretation should be presented to the regulators along with the reasoning. Many times, the regulators will accept your interpretation, or they will seek a legal opinion from their attorneys. And, this may be good as the true requirements will probably prevail.

***Experience***

During the course of a scoping meeting at an installation in the northwest, the HTRW project manager relates that the state regulators said that they wanted the Corps to drill to groundwater in order to analyze the groundwater. The technical staff explained that it was approximately 1000 feet to groundwater through non-porous materials, thus from a technical perspective groundwater contamination from this site was not probable. The regulators insisted that the Corps drill to groundwater. Corps representatives explained that by drilling to groundwater, the aquifer could possibly become contaminated as a conveyance for the contamination to reach the groundwater would be established.

As the conversation proceeded, someone specifically asked the regulators for the regulatory reference that required groundwater sampling. At that point, the regulators said there was no regulatory requirement, however it would be good information to have. The installation said they would take that under advisement, however at this time they would not include the requirements in their scope.

***Lesson Learned***

It is important to sort out actual regulatory requirements from regulator's interpretations.

Negotiations should also take place before a FFA or Interagency Agreement (IAG) is signed. DOD has a model FFA to which some states and EPA have agreed, and some provisions in that model are mandatory. Other provisions are negotiable. Formal negotiations

of FFAs and IAGs should be conducted and agency counsel will lead the negotiating team. It is critical that the technical staff be included in drafting the work requirements and schedules as well as other aspects.

***Experience***

Project managers have experienced that the dates in FFAs are sometimes negotiable. If the state regulators say they want comments responded to in two weeks, you should explain to the regulators that a contractor responds to all comments and because of the scope modification process, two weeks is not a feasible time allotment. If the installation is left to negotiate agreements without input from their service agent on the draft agreements, the Corps may be put into a very difficult position.

***Lesson Learned***

Federal Facility Agreements and other similar agreements are probably negotiable, and information should be gathered to support negotiations.

Comments are also negotiable. Not all regulator comments must be accepted, but if those comments are not accepted, proper regulatory basis and technical merit must stand behind your justification. Do not make the mistake of just ignoring a comment. If you do not include a comment, provide the reasons the comment was not incorporated.

## Who should meet with the regulators?

Prior to meeting with the regulators, the Corps project team and the customer should meet to discuss their positions. This meeting should include technical specialists, managers, decision makers, public affairs representatives, and attorneys. This internal meeting is essential in order to provide a united front during negotiations with the regulators. Internal consensus must be achieved on the issues.

After the internal meeting is concluded, the project manager will usually be designated to represent the group during regulatory meetings and agency counsel will represent the project team in the event of legal issues or disputes. The project team, including the project manager, technical staff and counsel, can only act within their actual authority, and should be fully familiar with the technical aspects of the project, as well as the applicable legal and regulatory requirements.

Contractors should never be sent to meet with the regulators alone. The contractor may be present at the internal meetings for technical support and to provide their expertise unless

agency counsel objects for legal reasons. However, during formal negotiations the contractor may be in attendance, but should not be an active participant in the negotiations.

If you are having problems communicating with the regulators you may want to bring in a neutral facilitator. Agency counsel should take the lead in any sort of formal dispute resolution, as there may be processes already established in an FFA or in the DSMOA or otherwise which are mandatory, and there may be potential implications to legal positions or policy which require counsel involvement.

## Is there really a Win-Win Situation?

It is important to realize that when the regulated community is working with regulators and the public, there is really no such thing as a "win-win" situation. "Win-win" implies that all parties get exactly what they want from the negotiations. Realistically, this can never be accomplished as the initial goals are not all the same. What should be strived for is a mutual-gains approach, whereby all parties gain from the outcome.

## The Mutual-Gains Approach

It is important that all parties decide what minimum acceptable outcome they will accept from the negotiations. All parties should establish the Best Negotiated Alternative Position (BNAP). This is defined as essentially the “optimal, realistic alternative you will accept as a result of negotiations.”

Prior to negotiations with regulators, the Corps and their customer should establish a BNAP. The BNAP should be a well thought-out position that will be acceptable as a negotiable position in order to partially satisfy all parties involved.

Obviously, the regulators and stakeholders also have BNAPs. But their BNAPs may not be clear, thus it is necessary for negotiations to ensue until their BNAPs, as well as yours, are fulfilled. Obviously a primary point in effectively working with regulators is for you to determine their BNAP, their real desires and goals for the project, early in the negotiation process.

Using a mutual-gains approach, everyone's goal is to improve their BNAP, instead of having one person gain everything and the others lose everything. The mutual-gains method of negotiating should render an outcome where all parties have improved upon these minimally acceptable positions, their BNAPs.

***Experience***

A project engineer recalls that though contaminated soil at an NPL site was considered "low-risk," the high cost incinerator option was being pursued over the lower cost landfilling option because of the perception that permanent treatment was required by EPA.

CERCLA Section 121 establishes nine criteria which must be considered in the selection of all remedies. CERCLA does include a preference for treatment which reduce the volume, mobility or toxicity or hazardous substances, and it also mandates that every remedy selected be cost effective. Additionally, there is discussion in the preamble to the NCP which states, "...cost effectiveness is established as a condition for remedy selection, not merely as a consideration during remedial design and implementation."

***Lesson Learned***

By using the mutual-gains approach, the Corps secured a protective and cost effective solution while the regulators and the public secured a faster and equally protective alternative. While the regulators wanted incineration, the cost/benefit ratio of that remedy did not support selection of the expensive technology of incineration over landfilling due to the fact that the soil posed a very low risk to the environment and the evaluation of the remedy selection criteria established that the lower cost remedy would meet all the criteria. Thus through negotiations and review of the remedy selection criteria, the regulators and Corps reached an agreement acceptable to all parties.

## Helpful Hints

When working with regulators through the mutual-gains approach, several rules are presented for consideration:

Hint #1. Look upon all meetings with regulators as a mutual-gains situation. Everyone cannot get what they want, but everyone can get satisfaction with respect to their BNAP.

Hint #2. Work with your customer to establish the BNAP before meeting with the regulators and/or stakeholders. Make sure everyone is in agreement as to what you are willing to accept and why, as well as what you are willing to concede to and why. Determine from the counsel team member the various authorities of all the team members, as well as the

limitations on those authorities.

Hint #3. Your goal throughout negotiations is to try to improve upon your BNAP as well as their BNAP within the appropriate constraints, such as regulatory, legal and funding constraints.

Hint #4. Before meetings with the regulators and stakeholders, develop alternatives/options that will meet your interests as well as their interests. Do not be afraid to offer suggestions.

Hint #5. Use the project team's knowledge of the laws, regulations and technical requirements effectively in the discussions in order to achieve the desired outcome. Discussions should be objective and truthful.

Hint #6. Negotiate as if relationships mattered.

## Relationships do matter

When working with regulators, relationships do matter. There should be mutual, professional respect and trust between the regulators and the Corps personnel, whenever possible. It is important that those negotiating respect and trust each other. It is only natural that if the regulator and you have a good working relationship based on mutual trust, honesty and professionalism, then negotiations will be more natural and easier. This trust and respect must be true and sincere.

Where does this trust come from? It is important to be honest and forthcoming with the regulators. For example, if you do not understand the regulations, ask for their assistance and recommendations. If there is an environmental violation that you are aware of, do not try to cover it up, present your problem to the regulator through your proper chain-of-command and ask for their assistance in correcting the problem. If you cannot correct the problem at your organizational level, for whatever reasons, elevate the problem. One of the many lessons learned from the Aberdeen court case is the importance of elevating the problem up your organizational chain-of-command.

Do not jeopardize long-term relationships by pushing too hard for short-term gains. Consider the big picture. Maybe you can give up something now in order to gain something in the future. But, this must be a conscious decision.

So, basically there are two fundamental principles that are important here:

Principle #1. Trust, respect and professionalism are important elements in effectively working with regulators.

Principle #2. Honesty is not only the best policy, but the only policy. Negotiate honestly.

Obviously, this mutual trust and respect cannot be forced. There will be situations where this atmosphere cannot be obtained, but nevertheless everyone must try their best to work cooperatively together for the sake of the project.

## Regulators' responsibilities

For the Corps to effectively deal with the regulators, it is important to understand their roles in the remediation process.

The regulators are essentially the defenders and protectors of the environment and the health of society. This role is monumental, thus regulators may be conservative in their decisions to ensure that those decisions are fully protective of human health and the environment.

The regulators are also entrusted by all of us to enforce the regulations. As taxpayers and consumers, we want agencies such as the US Department of Agriculture (USDA) to inspect meat and cite industries for improper sanitary and handling procedures. Thus, the USDA must enforce their regulations. If you lived next to an incinerator, as a taxpayer and nearby resident you would want, if not demand, EPA to enforce their air and waste regulations. When remediating hazardous waste sites, we must expect and accept the regulator's role as an enforcement agency and protector of the environment.

## The role of stakeholders

Everyone involved in an environmental project is important to the decision-making process. The stakeholders, the community, tribal nations, environmental groups, etc., are all vital players in negotiations. Through the use of Technical Review Committees (TRC), Restoration Advisory Boards (RABs), and the public participation requirements of many regulations, stakeholders will have a means to be formally involved in the decisions made at the site.[1,2]

You must also effectively communicate with the stakeholders. Like the regulators, they will have goals and BNAPs. It is very important to understand their goals and BNAPs in order for you to effectively communicate with them. Public affairs representatives can be a valuable source of information on how to work and communicate effectively with the public.

***Experience***

An NPL site was determined by EPA to require remediation due to elevated

lead levels in a residential community. As an outcome of the CERCLA process, a determination was made to excavate the soils. The regulators were met with strong public opposition to this action because results of blood analysis of neighborhood residents did not indicate elevated blood lead levels. Furthermore, residents expressed concern that dust generated during the remediation process would cause more harm than leaving the soil in place.

The citizens protested the response action and upon further studies the regulators concluded that leaving the soil in place would be acceptable. The stakeholders had a definite interest in this area, as the area is not only their home, but provides recreation which is their major revenue.

***Lesson Learned***

The public, as stakeholders, play a definite role in the decision-making process.

The laws and regulations prescribe certain times during the regulatory process when public participation is required. These designated times may be suitable, however the project team and customer may decide to bring in the stakeholders at early junctures in the regulatory process. For example, stakeholder's concerns are not necessarily taken into consideration during the preparation of a risk assessment or the RI/FS, however, these concerns may be vital in the decision making process. Their concerns may be voiced at public meetings, but many times their concerns should be heard prior to making a decision. Department of Army (DA) regulation fully supports public involvement in restoration activities.[15] The appropriate public affairs representative can assist in public participation responsibilities.

## Politics do matter

During site remediation, a contributing factor in the remediation process may be politics. This factor can be defined as "the influence select people have over a project when the outcome is not apparently based on science or technology."

If public stakeholders feel they have limited voice in the decision-making process, they will rely on political representatives to defend their interests. While this may not seem legitimate to you, it is tremendously effective. The best defense is to ensure public stakeholders are active and early participants in the dialogues with decisions makers.

It is important for everyone on the project team, both Corps and customer, to understand that politics do play an important role in remediation work. This is an indisputable, and in some cases, an unavoidable factor. Some decisions made during the

remediation process may be influenced by politics. It is important to realize why and when this is occurring and to ensure that while that influence has been used, the project still meets all other technical, engineering, scientific, regulatory and legal requirements.

## Communicating with customers

Sometimes the situation may arise where the regulator has made an interpretation that seems inappropriate. After discussions with legal staff, the Corps may not agree with the regulatory interpretation presented by the state or EPA. The customer, however, is reluctant to really discuss the difference of opinion with the regulators because the regulators may perceive this as confrontational. The Corps representatives are then left in a very awkward position since they were hired by the customer for their expertise, but the customer at this juncture does not want this expertise.

***Experience***

At a site on a Federal facility, high levels of dioxin were discovered that prompted CERCLA remediation. The state was insisting that the dioxin was a listed hazardous waste. The Corps representative disagreed with this interpretation as there were no records and no information discovered during the study phase of the project to make that determination. The facility representative did not believe the dioxin was listed waste either, but they did not want to question the regulators because it really did not seem to be a "battle worth fighting" since only five drums were to be transported offsite for disposal. So, the drums were transported offsite as listed dioxin wastes.

About six months later, the Corps began remediation work at an adjacent area. During the investigations, dioxin was discovered. Again the state applied the listed waste code, while there was no supporting evidence to substantiate the listing. Applying the listed waste code here severely increased the remediation cost since the RCRA land disposal regulations became ARARs and incineration was the required technology for listed dioxin wastes under the regulations existing at that time.

***Lesson Learned***

While it seemed harmless to apply the listed waste code to those first five drums of dioxin contaminated soils, this set a precedence for all the dioxin wastes found at the site. It was very hard to argue that the second site was not listed waste when the project team did not argue about the listing applied to the first site. This established a very expensive standard for that facility.
Through good negotiations, the state regulators re-evaluated their original

position and declared that indeed the dioxin was not listed. If there are disagreements of these sorts, it is very important that the long-term ramifications of the various alternatives be considered for all future actions.

Sometimes, a customer will agree to regulatory requirements because they do not understand the future ramifications of the application of the interpretation. Corps representatives have the advantage of having worked on many HTRW sites, in many states, with many different customers, under varying situations. The experience base is very broad. When a Corps representative finds himself/herself in this situation, they can only try to assist the customer in understanding all the future possible ramifications that may be encountered if the regulatory requirement was accepted without discussing their concerns with the regulators.

Regardless of the decision the customer makes, the Corps representative should always document, in writing, important regulatory decisions including what decision was made and why the decision was made.

## Documenting agreements

Whenever an agreement is reached, it should be documented. Documentation should not only occur in the form of a FFA or an IAG, but small agreements should be documented in the form of letters and memorandums. The reasons the decisions were made should also be well documented.

***Experience***

A Corps construction representative recalls that at one site the interagency agreement with EPA established time frames by which certain key documents were to be submitted for review. According to the agreement, stipulated penalties would be assessed upon failure to submit documents by the specified dates. There were, however, provisions in the agreement for obtaining extensions. When it was realized that a deadline could not be met, the project manager contacted the EPA counterpart to discuss an extension. The EPA counterpart agreed that an extension was justified, however, the project manager failed to formalize the extension by submitting a written request to EPA, as required by the initial agreement. EPA subsequently assessed penalties for failure to submit the document by the specified date.

***Lesson Learned***

All agreements should be documented and if possible signed by all parties

involved in the agreement. All communications and agreements or disagreements should be put in writing, signed by the appropriate officials, and copies furnished to all parties through the designated representative.

## Revisiting decisions

Not all decisions will be permanent and final. Often regulators are criticized because they change the decisions. If all decisions are documented, the regulators will be less likely to attempt to modify them if the decisions do not warrant modification.

There may be occasions when the decision will have to be revisited. Site conditions may change, laws or regulations may change, technologies may change. When change is warranted, negotiations should be reopened and the original decision should be discussed in order to insure that it still remains the optimal decision for all parties involved. When a new decision is reached, it should, of course, be documented.

Change must be accepted as inevitable on HTRW remediation sites. Certain legal modifications will require the implementation of formal negotiations among the customer and the regulatory agencies.

## The formal negotiation process

This document was intended to discuss and provide examples of how the project team (Corps and customer) can better communicate on a daily basis with the regulators in order to accomplish the long-term goal of site remediation. In today's atmosphere of increasing constraints, decreasing budgets and people-power, it is essential that the regulated community and the regulators work together to be more effective and efficient. This document is not intended to provide legal advice on how to conduct formal negotiations of legal requirements or legal documents such as FFAs. Any discussion pertaining to formal negotiations should be taken directly to the appropriate office of counsel.

## In the end...

The laws and regulations are very complicated, dynamic and ever evolving. At the time this pamphlet was drafted, both CERCLA and RCRA were scheduled for reauthorization. Thus, there is no way to adequately depict the future cleanup requirements for Federal facilities.

In any event, working with the regulators adds a challenging dimension to your remediation task. There are certain facts that upon acceptance may make your job a little easier.

In summary, the following suggestions are submitted for your consideration:

### *Summary of the Basic Principles for Effectively Working with State and Federal Regulators*

1. Project requirements are based on good science, good engineering, and the laws and regulations. Know your project and the regulations.

2. You must ask the right regulator the right question to get the right answers. Make sure you know the authorities of the regulators with whom you are working.

3. The regulators must be involved in the project. Involve them early.

4. Streamlining is best for the Corps, the customers, the regulators, and the stakeholders.

5. When working with regulators the best results can be obtained when there is mutual honesty, trust, respect and professionalism. Build those bridges for a better project.

6. Communicating effectively takes technical knowledge of the project as well as knowledge of the legal and regulatory requirements. Send only knowledgeable people to meet with the regulators.

7. Federal Facility Agreements are negotiable. Formally negotiate before signing agreements.

8. The meaning of regulations may not be clear. Communicate clearly the perceived requirements.

9. The Corps, the regulators, the public, the environmental groups, tribal members, and the customer cannot all get exactly what they want. Work together to optimize and obtain the best negotiated alternative for all involved parties.

10. Relationships do matter.

11. Public participation is a requirement of CERCLA, DERP and RCRA. Involve the public early and often in open dialogue on cleanup decisions. The public is a critical factor in the decision-making process.

12. Accept and respect the regulators as protectors and enforcers.

13. Politics do play a role in the decision-making process. Accept that reality.

14. When decisions are made, take the time to document those decisions. Documenting all decisions will save time and money in the long run.

15. Do not be afraid to revisit a decision. Be prepared to revisit some decisions if technically necessary, legal and appropriate. Negotiate and document any changes.

This guidance document was written to provide ideas to Corps persons having to work with state, Federal, and local environmental regulators. Effectively communicating and working with regulators is not always an easy task. It takes professionalism, honesty, technical ability, knowledge of environmental laws and regulations, and good communication skills to be effective in this area, and to make each job a success story. Remember, as stated in the beginning of this document, we the Corps project team, our customers, the regulators, the public, and the stakeholders are all in pursuit of a common goal ... the cleanup and protection of our environment and the protection of everyone's health!

## Appendix A
## References

1. The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) as amended.

2. The Defense Environmental Restoration Program is governed by 10 USC 2701 et seq., which was originally enacted as section 211 of SARA.

3. The Resource Conservation and Recovery Act of 1976 (RCRA) as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 USC 6901 et seq. RCRA was enacted in 1976 and completely replaced the previous language of the Solid Waste Disposal Act of 1965.

4. The Clean Air Act as amended, 42 USC 7401-7671q.

5. The Clean Water Act as amended, 33 U.S.C.A. 1251 et seq.

6. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300.

7. Executive Order (EO) 12580 on Superfund Implementation (January 23, 1987).

8. "Corrective Action for Solid Waste Management Units (SWMUs) at Hazardous Waste Management Facilities", Proposed Rule, 55 Federal Register 30798, July 27, 1990.

9. "Corrective Action for Releases From Solid Waste Management Facilities", Advanced Notice of Proposed Rulemaking, 61 Federal Register 19432, 1 May 1996.

10. Reference 16 January 1997 telephonic inquiry to RCRA/CERCLA hotline. As of June 30, 1996 the hotline representative reported that 30 states have been delegated authority for 40 CFR 264.101(a) and (b). As of the same date, 29 states have been delegated authority for 40 CFR 264.101(c).

11. Technical standards and corrective action requirements for owners and operators of underground storage tanks, 40 Code of Federal Regulations part 280.

12. "Coordination between RCRA Corrective Action and Closure and CERCLA Site Activities", EPA Memorandum from Steven A. Herman, September 25, 1996.

13. "Piloting the New Superfund Accelerated Cleanup Model (SACM). . .aka The New

Superfund Paradigm", EPA Memorandum from Richard J. Guimond dated March 10, 1992. EPA Briefing, March 1992.

14. "Presumptive Remedies: Policy and Procedures", OSWER Directive 9355.0-47FS, EPA 540-F-93-047, September 1993.

15. "Environmental Protection and Enhancement", Army Regulation 200-l.

16. Engineer Manual 200-l-2, "Technical Project Planning Guidance for HTRW Data Quality Design", U.S. Army Corps of Engineers publication.

## Appendix B
## List of Acronyms

| | |
|---|---|
| ARAR | Applicable or Relevant and Appropriate Requirements |
| BNAP | Best Negotiated Alternative Position |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act as amended |
| CFR | Code of Federal Regulations |
| CMI | RCRA Corrective Measures Implementation |
| CMS | RCRA Corrective Measures Study |
| CWA | Clean Water Act |
| CX | Center of Expertise |
| DA | Department of Army |
| DERA | Defense Environmental Restoration Account |
| DERP | Defense Environmental Restoration Program |
| DOD | Department of Defense |
| DOE | Department of Energy |
| DSMOA | Department of Defense-State Memorandum of Agreement |
| EE/CA | Engineering Evaluation/Cost Analysis |
| E.O. | Executive Order |
| EPA | Environmental Protection Agency |
| IA | Implementing Agency |
| IAG | Interagency Agreement |
| FFA | Federal Facility Agreement |
| FUDS | Formerly Used Defense Sites |
| HRS | Hazard Ranking System |
| HSWA | Hazardous and Solid Waste Amendments |
| HTRW | Hazardous, Toxic and Radioactive Waste |
| HWM | Hazardous Waste Management |
| MCS | Media Cleanup Standards |
| NCP | National Contingency Plan |
| NPL | National Priorities List |
| NRC | National Response Center |
| PA/SI | Preliminary Assessment/Site Inspection |
| PRP | Potentially Responsible Party |
| RAB | Restoration Advisory Boards |
| RCRA | Resource Conservation and Recovery Act as amended |
| RFA | RCRA Facility Assessment |
| RFI | RCRA Facility Investigation |
| RI/FS | Remedial Investigation/Feasibility Study |
| ROD | Record of Decision |
| RPM | Remedial Project Manager |

| | |
|---|---|
| SACM | Superfund Accelerated Cleanup Model |
| SARA | Superfund Amendments Reauthorization Act |
| SI | Site Inspection |
| SWMU | Solid Waste Management Unit |
| TRC | Technical Review Committee |
| TSDF | Treatment, Storage, and Disposal Facility |
| TQM | Total Quality Management |
| US | United States |
| USC | United States Code |
| USCA | United States Code Annotated |
| USDA | United States Department of Agriculture |
| UST | Underground Storage Tanks |