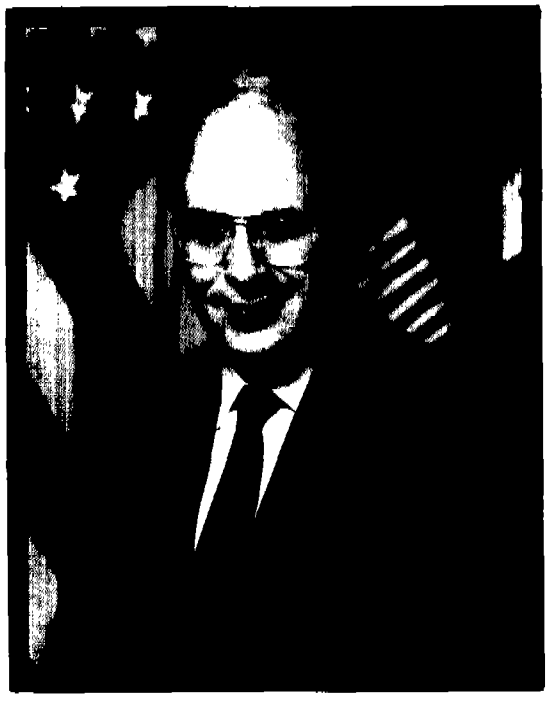
Thoughts on Environmental Policy



''I want the Department of Defense to be the Federal leader in agency environmental compliance and protection. Federal military bases must meet environmental standards."

Honorable Richard Cheney
Secretary of Defense

"The U.S. Army's formula for establishing environmental priorities must have HEALTH as the primary driver. This concept is in concert with the Nation's new environmental direction as espoused by the National Academy of Science, Public Health Service, and the Environmental Protection Agency."

Colonel Ronald M. Bishop
Commander, U.S. Army
Environmental Hygiene Agency

CONTENTS

INTRODUCTION

PURPOSE

This technical guide--

a. Defines the health risk assessment (HRA) process.

b. Explains the relationship between mission readiness and the HRA process.

c. Identifies the role of the installation commander in the HRA process as it impacts on the installation environmental program.

d. Describes the elements of the HRA process so that the installation staff can perceive the health-based implications of environmental contamination.

e. Identifies the services provided by the U.S. Army Environmental Hygiene Agency (USAEHA):

(1) HRA consultation.

(2) HRA quick response.

(3) HRA document review.

f. Explains the interagency agreement between the Department of the Army (DA) and U.S. Public Health Service-Agency for Toxic Substances and Disease Registry (ATSDR).

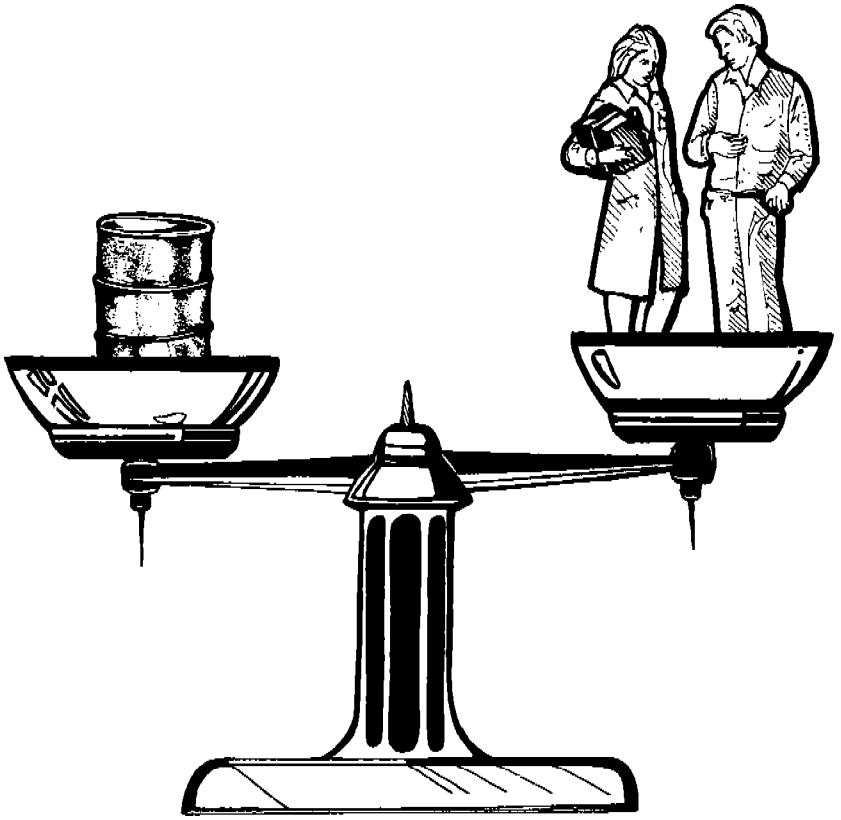
AUTHORITY

a. The HRA process is legally mandated by the Comprehensive Environmental Response Compensation Liability Act (CERCLA), 42 U.S.C. 9601 et. seq., referred to as "SUPERFUND ". In 1986. Congress reauthorized this act as the SUPERFUND Amendments and Reauthorization Act (SARA). CERCLA requires that remediai actions be selected which protect human health and the environment.

b. Title 40, Code of Federal Regulations (CFR), Part 300, National Oil and Hazardous Substances Pollution Contingency Plan (NCP), implements CERCLA as amended by SARA.

c. Army Regulation 200-1, Environmental Protection and Enhancement, implements the Federal law for the DA.

d. DA Pam 40-578, Health Risk Assessment Guidance for the Installation Restoration Program and Formerly Used Defense Sites, establishes the HRA process for the DA in the installation restoration and formerly used defense sites programs.



USAEHA's ROLE IN THE HRA PROCESS

The three available HRA services are consultations, quick response, and document review.

a. Consultations are special studies that evaluate risk associated with a particular site or project. These may require a complete characterization of the contaminant at the site or an in-depth review of available data to perform all elements of the risk assessment.

b. Quick response is a limited evaluation of a site or project where time constraints impact the Army's mission. This response is appropriate when immediate risk determinations are needed. It evaluates the site or project in its current use scenario.

c. Document review is a multi-disciplinary environmental health review of the chain of documents. These documents result from the execution of remedial investigations. They include-

(1) Preliminary assessment/Site investigation.

(2) Remedial investigation.

(3) Baseline risk assessment documents.

(4) Feasibility study.

(5) Record of Decision.

The Army Surgeon General has approval authority over all HRAs. USAEHA recommends approval, conditional approval pending modification, or rejection of the HRA documents to The Army Surgeon General.

TECHNICAL ASSISTANCE

a. Obtain HRA quick response assistance and consultation from USAEHA by calling DSN 584-3651 or commercial (410) 671-3651.

b. Address written requests for HRA document reviews to Commander, USAEHA, ATTN: HSHB-ME-S, Aberdeen Proving Ground, MD 2101 0-5422.

c. Send Electronic-Mail requests to hshbmes@aeha1.apgea.army.mil

d. Send FAX requests to DSN 584-3656 or commercial (410) 671-3656.

HRA PROCESS

The HRA process analyzes the potential current or future adverse health effects caused by releases of hazardous substances, pollutants, or contaminants from a specific site by—

a. Characterizing the environmental contamination.

b. Determining the impact to human health.

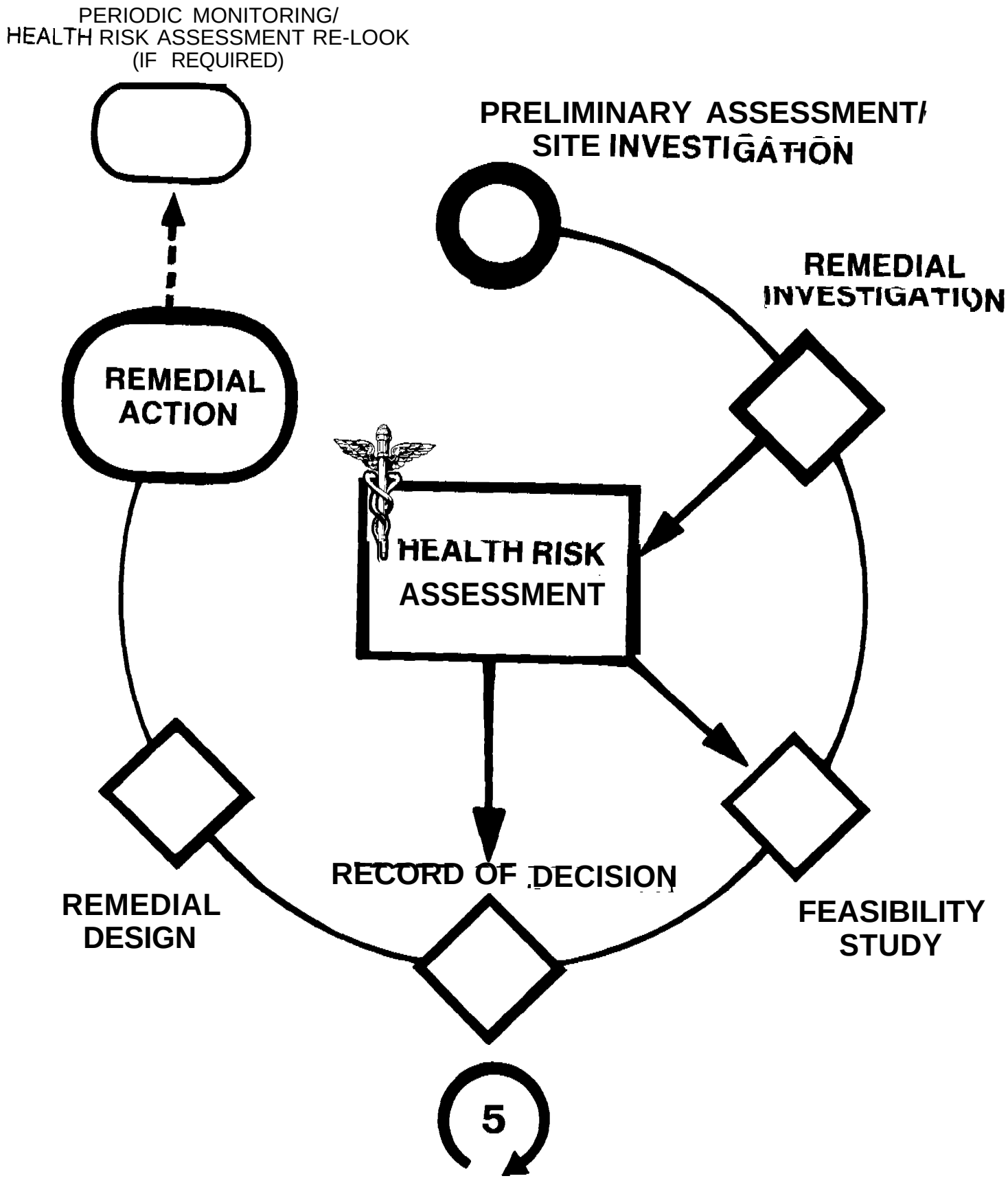
c. Providing installation commanders with scientific information enabling them to make health-based environmental decisions. This assessment is made under the assumption that no mitigating actions will be taken.

The Environmental Protection Agency's (EPA) guidance, as contained in Risk Assessment Guidance for Superfund, volume 1, Human Health Evaluation Manual, assists in successfully completing the HRA process.

The HRA process is a sequence of actions that define the adverse health consequences of exposure to environmental contamination. These actions are sampling, assessing, and recommending.

The Installation Restoration Program (IRP) follows step-by-step procedures to evaluate and remediate, if necessary, a potential site. The HRA process provides health-based information to determine what remediation is needed.

ACCOMPLISHING INSTALLATION RESTORATION



RELATIONSHIP TO MISSION READINESS

Mission readiness is the paramount responsibility of an installation commander. By maintaining mission readiness, the nation's defense policies can be implemented. The key objective to readiness is maintaining the health of the soldiers and civilians who support the Army's mission.

The HRA process helps the installation commander fulfill this responsibility. It aids in protecting soldiers, civilians, and the surrounding community from the effects of environmental contamination.

Environmental contamination diverts time and money from mission readiness, Costs related to environmental restoration reduce available resources for training, equipping, and providing for our active duty and reserve components.

THE COMMANDER'S ROLE IN THE HRA PROCESS IS . . . . .

YOU···THE COMMANDER

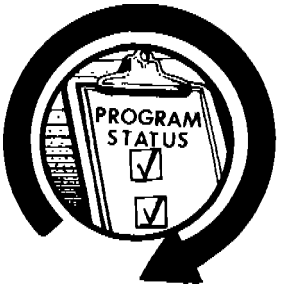
are legally responsible for controlling Army activities which can adversely effect the health of soldiers, civilians, or the surrounding community.

USAEHA will assist you in meeting this legal responsibility and maintaining mission readiness by conducting or reviewing the HRA process.

Your contribution to the HRA process is critical if you are to have a successful environmental program. The HRA process drives the clean-up of your IRP sites. Properly executed the HRA process can help you make the most important management decisions that lie ahead.

THE COMMANDER'S FUNCTIONS ARE . . . . .

EVALUATING THE STATUS OF YOUR HRA PROCESS WHEN YOU TAKE COMMAND



Question your key installation personnel to determine their involvement in the HRA process. The answers you will receive will identify what further actions need to be taken. USAEHA will provide technical assistance in completing the HRA process.

QUESTIONS THAT CHECK PROCESS STATUS . . . . .

Ask your..... INSTALLATION DIRECTOR OF HEALTH SERVICES

1. Have we completed an investigation and evaluation of the health risk of our IRP sites?

2. Have we identified any exposure pathways that could impact on our soldiers, civilians, or surrounding community?

3. What are the health risks?

4. Have we considered the potential health risk to soldiers involved in training activities on our IRP sites?

5. Have we provided health-related technical information to the public affairs officer?

6. Have we established a medical surveillance program that monitors employees who are potentially exposed?

7. Do you participate in spill contingency planning and response?

Continue to ask.. . . . **ENVIRONMENTAL COORDINATOR**

1. Have we conducted a preliminary assessment/site investigation?

2. How many IRP sites were identified?

3. Are we on the National Priority List (NPL)?

4. Have we completed the remedial investigation/ feasibility study of our IRP sites?

5. What preventive measures have we taken to remove or remediate the environmental contamination?

6. What is the status of our Resource Conservation Recovery Act (RCRA) program in managing current waste generations?

7. Are we using health risk information to clean up RCRA sites?

8. Have we updated our spill prevention control countermeasure and installation spill contingency plans?

STAFF JUDGE ADVOCATE

1. Who is the central point of contact on your staff for environmental issues?

2. Are we involved in any pending litigation regarding the IR or RCRA programs?

3. Are we involved in any interagency agreements or record of decision negotiations?

4. Have we signed any record of decision documents?

Then ask. . . . .

SAFETY OFFICER

1. Are you involved in the evaluation of our IRP sites that pose a potential hazard to occupational safety or mission readiness?

2. Have we considered all potential safety hazards to soldiers involved in training activities on our IRP sites?

3. Have those employees who perform their duties on the IRP site received training required by the worker right-to-know program?

4. Do we have a current inventory of material safety data sheets for all chemicals used on the installation?

5. Is the safety office represented on the spill response team?

PUBLIC AFFAIRS OFFICER

1. How are we communicating our commitment to installation restoration and the protection of the community's health?

2. What is the community's attitude toward our efforts?

3. How can we improve our communication process to satisfy the community right-to-know program?

YOUR ROLE CONTINUES.. . . .

MANAGING INSTALLATION ACTIVITIES THAT MAY RESULT IN ENVIRONMENTAL CONTAMINATIONS

Examples of these activities are-

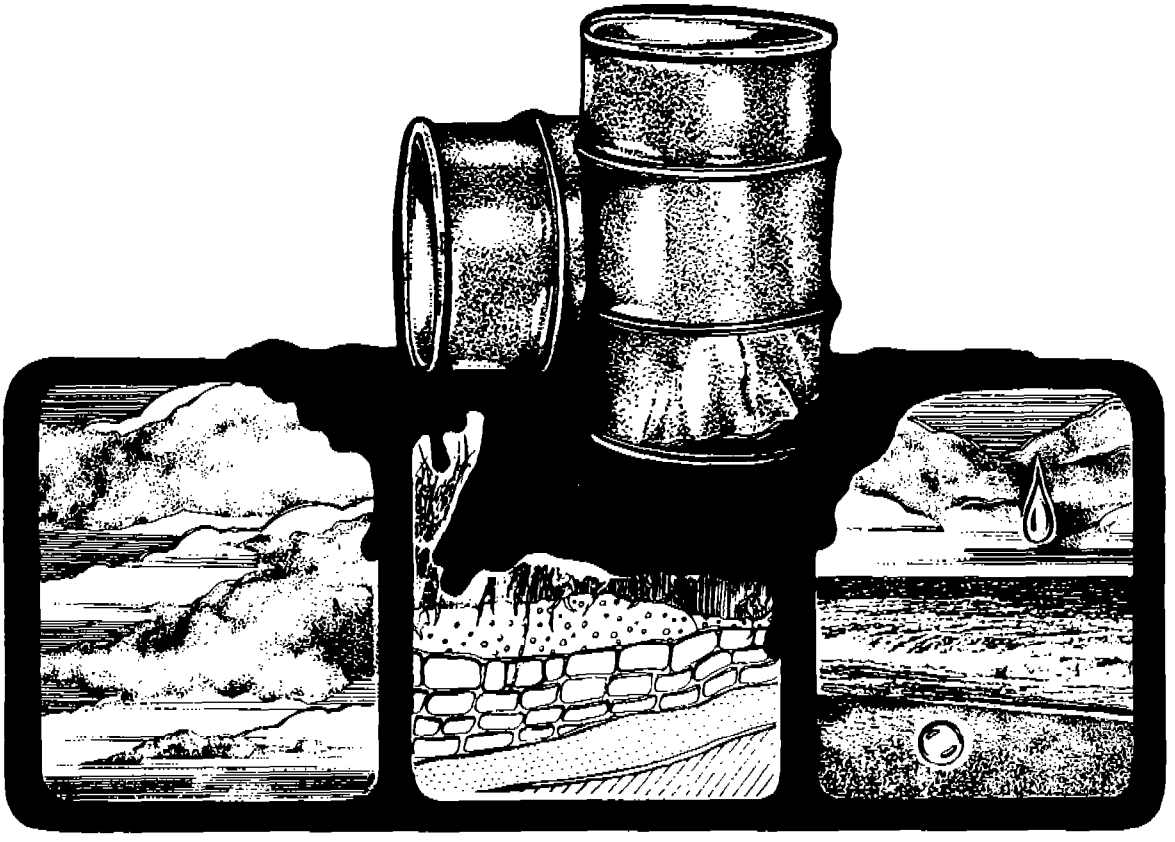
a. Unintentional spills or the result of an accident.

b. Previous activities conducted on the installation prior to the establishment of the Army's environmental program.

c. Current waste management actions.

d. Base closure and land transfer actions.

Environmental contamination is a release of hazardous substances to the air, water, or land. A current release may be an unintentional spill or the result of an accident. A past release is the result of previous activities conducted on the installation. There are important questions that you need immediate answers to if you encounter any of these releases.



IN THE EVENT OF A CURRENT RELEASE, ASK KEY INSTALLATION PERSONNEL IMMEDIATE QUESTIONS . . . . . .

1. Has anyone been injured as a result of this release?

2. What contaminants are involved?

3. When and why did the release occur?

4. Has the release been contained?

5. Is the area secure?

6. Did the release leave the installation's boundary?

7. Is there a regulatory notification requirement?

8. How can we prevent a similar release from happening in the future?

THEN, ASK . . . . .

Is there a potential health risk associated with this release?

IN THE EVENT OF A PAST RELEASE, ASK . . . . .

1. How was this potential site discovered?

2. Do historical documents support this discovery?

3. What past activities were involved on this site?

4. Do any of our experienced employees remember this activity?

5. What potential contaminants might be found?

6. What is the current use of the area and should it be secured?

7. Who must be notified of this discovery?

THEN, ASK . . . . .

Is there a potential health risk associated with this release?

and

Have we conducted an HRA at least every 5 years at our sites where hazardous substances, pollutants, or contaminants remain that may pose a threat to human health or to the environment?

In either of these releases, your preventive medicine personnel will answer the question about the potential health risk. USAEHA can provide HRA quick response services and health consultations that assist in determining the health risk associated with these releases.

Current Waste Management Actions

RCRA governs the current waste management actions. The RCRA facility investigation evaluates the impact that these actions have on human health or the environment.

Base Closures and Land Transfers

Prior to releasing excess property either through base closure or land transfer, you must conduct a preliminary assessment to determine if any hazardous substances were ever stored, released or disposed of on the land. The level of investigation will depend on—

a. How much is known about the land.

b. Its previous usage.

c. Existing monitoring data.

d. Other pieces of information about the parcel.

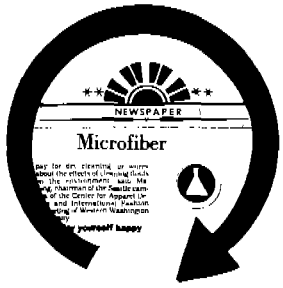
The final questions to be answered will always be:

Does **the land pose a risk to human health or to the environment today?**

Could it pose a risk to human health and the environment in the future?

THE COMMANDER'S FUNCTIONS CONTINUE . . . . .

COMMUNICATING THE ARMY'S COMMITMENT TO ENVIRONMENTAL RESTORATION



The affected community has a legal right to know about the health implications of the IRP site. Your responsibility is to communicate the Army's efforts in protecting the community's health and environment.

Communicating this impact should be an integral part of your community relations plan (See Commander's Guide to Public Involvement in the Army's Installation Restoration Proqram. Available from Commander, U.S. Army Toxic and Hazardous Materials Agency, ATTN: CETHA-PA, Building E4480, Aberdeen Proving Ground, Maryland 2101 o-5401, DSN 584-2556 or commercial (410) 671-2556.)

Communicate the health risk through the following mediums:

- ★ **Educational material.**
- ★ **Public meetings.**
- ★ **Concerned citizens groups.**
- ★ **State and local health offices.**
- ★ **Television, radio, and newspaper.**
- ★ **Installation public affairs office.**
- ★ **Your office.**
- ★ **Political leaders.**

To adequately communicate the health risk, begin with this checklist:

COMMANDER'S CHECKLIST TO RISK COMMUNICATION

Have I .

Recognized the right of individuals to participate in decisions which affect their health and environment?

Recognized that input from the community is valuable during the HRA process?

Identified all appropriate audiences within the community?

Involved the community during the first stages of the IRP?

Acknowledged that emotions expressed during the communication process are legitimate?

Responded to the different needs of the audiences I will encounter in the communication process?

Evaluated the public's knowledge of our IRP and any existence of miscommunication?

Developed and strongly supported my community relations team?

Provided names and telephone numbers of installation points of contact to the community?

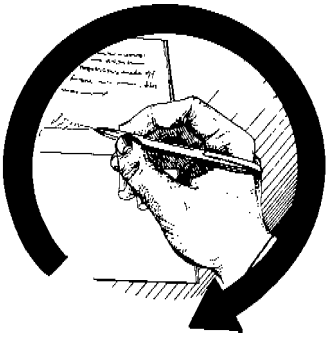
Released health risk information promptly?

Responded to all inquiries?

YOUR ROLE CONTINUES.. . . .

SIGNING THE RECORD OF DECISION DOCUMENT

The record of decision (ROD) is the most important document that you may ever sign during your tenure as the installation commander. It summarizes all that has been learned about the site.



The ROD is a legally binding document that is negotiated with the regulatory officials exercising jurisdiction over your site. The ROD document that you negotiate is an agreement of—

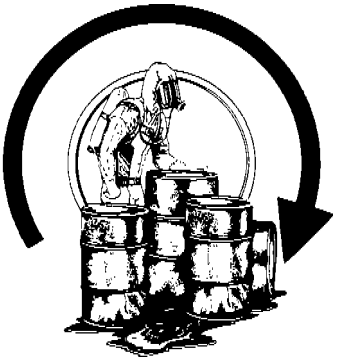
a. Remediation goals.

b. Contaminant clean-up levels.

c. Clean-up methods and the feasibility and cost effectiveness of those methods.

d. Timeframes for the clean-up.

These elements of agreement are the framework in which clean up of your IRP site will be completed. You must complete the HRA process before negotiating the ROD document. The Army Surgeon General approves the HRA through USAEHA. AR 200-1, paragraph 9-7 governs your actions regarding signing the ROD document. The important points to remember are-



* The installation commander signs the ROD document if his installation is an IRP site.

★ For sites included or proposed for inclusion on the NPL, the ROD documents must be reviewed by The Army Environmental Office and the Assistant Chief of Engineers before they are signed. The document is then signed by an EPA representative and the Deputy Assistant Secretary of the Army (Environment, Safety, and Occupational Health).

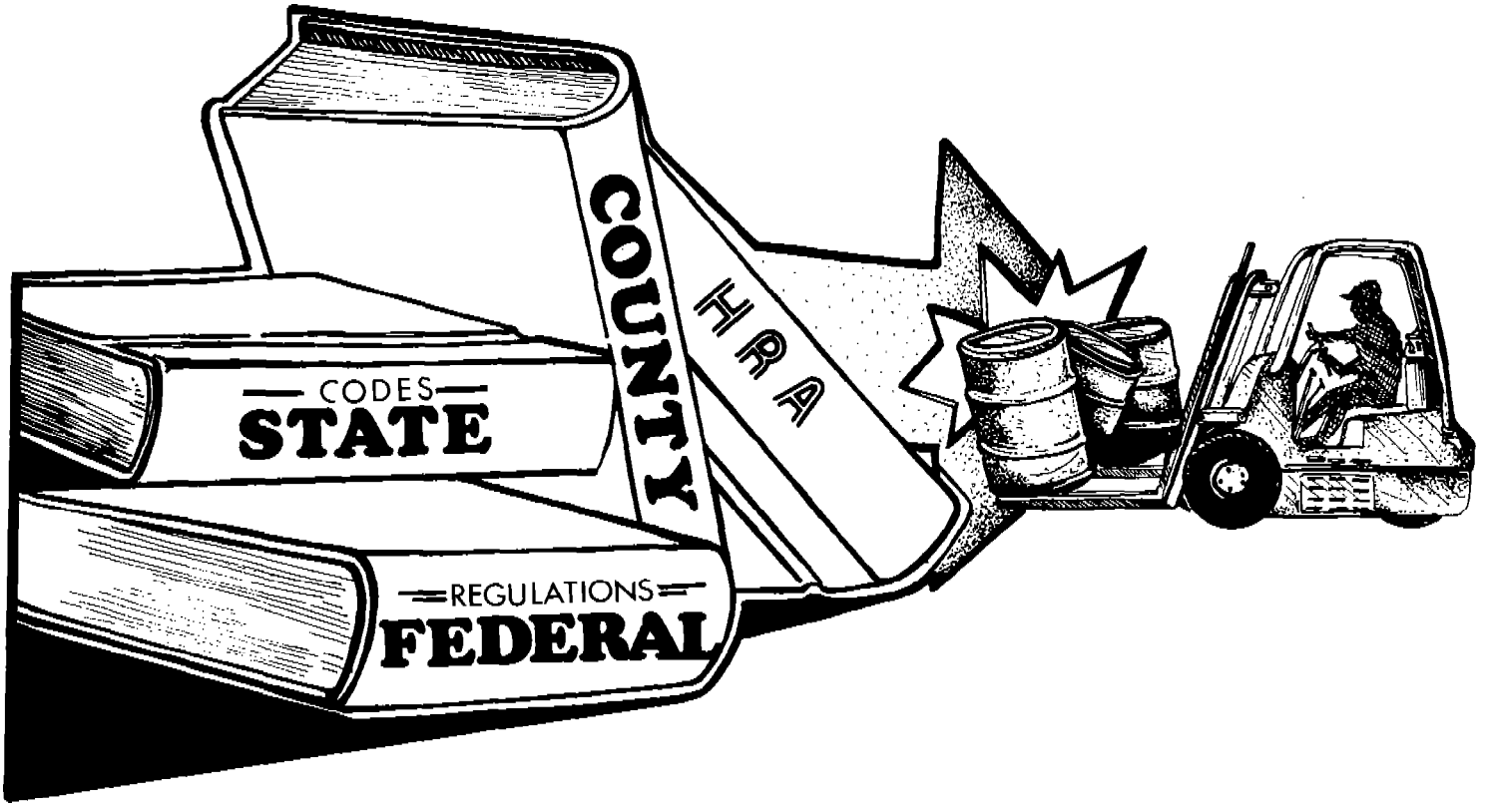
★ In the Formerly Used Defense Sites Program, The Army Environmental Office reviews the ROD document. The Assistant Chief of Engineers and the Deputy Assistant Secretary of the Army (Environment, Safety, and Occupational Health) concur with this review. Then, the ROD document is signed by the commander of the executing U.S. Army Corps of Engineers field operation agency and the Deputy Assistant Secretary of Defense for Environment.

Remedial adtion decisions will be based on-

* Health-impact information in the HRA, Federal and state statutes, and other Applicable or Relevant and Appropriate Requirements (ARARs).

The ARARs include numerous other laws which must be considered when determining the remedial action.

The remedial actions selected for a site are based on conclusions drawn from the HRA. The ROD document describes these remedial actions and sets the timeframe for completion.



THE COMMANDER'S FUNCTION CONTINUES . . . . .

COMMUNICATING HRA METHODOLOGY TO YOUR STAFF

While using the same methodology, there are two distinct risk assessment types. These are a baseline risk assessment and a risk assessment consultation.

The following information provides you with an explanation of this methodology and the two types of risk assessment. Your staff can use this information to understand the health implications of the sites requiring an estimation of risk to people.

Baseline Risk Assessment

The human health evaluation of an abandoned' hazardous waste site is regulated under CERCLA. A CERCLA site health risk determination is called a Baseline Risk Assessment. Baseline risk assessments assume no action will be taken to control or mitigate the release from the site. The results of the baseline risk assessment answer two important questions:

a. What is the current health risk at the site?

b. What is the risk expected to be, when a realistic future use scenario is assumed?

Risk Assessment Consultation

A risk assessment consultation evaluates the health risk at sites caused by current releases or past releases that have been recently discovered. Risk assessment consultations are not as comprehensive as are baseline risk assessments. The consultation only evaluates the current health risk of the site. Consultations provide information that enables commanders to make immediate health-based site management decisions.

Risk Assessment Methodology

A risk assessment consists of four distinct functions:

a. Data collection and evaluation.

b. Exposure assessment.

c. Toxicity assessment.

d. Risk characterization.

Data Collection and Evaluation

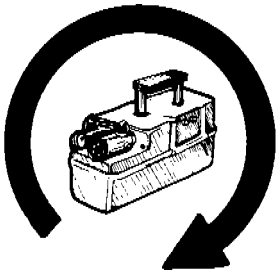
Contaminants can enter the environment through four distinct environmental mediums. The HRA process evaluates the risk to human health posed by the contamination of these mediums.

a. Air.

b. Soil and sediment.

c. Surface water.

d. Groundwater



The contamination of a site can involve more than one medium at the same time. Human contact with a contaminated medium occurs through pathways of exposure. A single contaminated medium can possibly present several pathways.

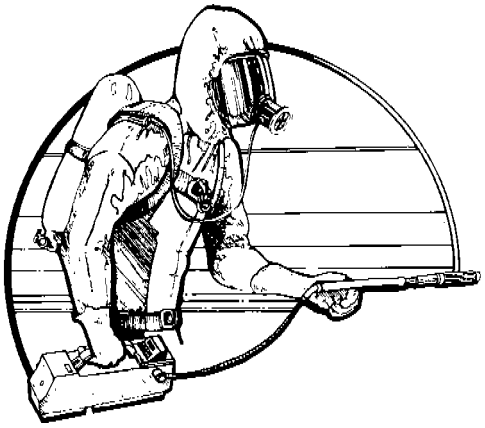
To determine which medium have been contaminated, you sample each and perform laboratory analysis to identify-

* The contaminants that are present.

★ The vertical and horizontal extent of the contaminant's migration.

★ The concentration of the contaminants.

★ The background level of a particular contaminant that may occur naturally or as a result of man's activities.



Exposure Assessment

The exposure assessment determines or estimates the magnitude, frequency, duration, and route of the exposure to a chemical or physical agent.

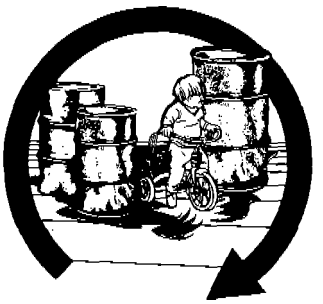
To determine the exposure to humans, measure or estimate the amount of a contaminant at the exchange boundaries, such as lungs, skin, or gut, during a specified period of time.

These measurements or estimations combined with the chemical's specific toxicity information characterize the potential health risks.

Toxicity Assessment

"All substances are poisons; there is none which is not a poison. The right dose differentiates a poison and a remedy."

Paracelsus
(1493-1541)



The statement above by Paracelsus provides a simplistic understanding of the role toxicology plays in the human health methodology.

Toxicity may be thought of as an agent's ability to impart a negative impact on a biological system thus seriously impairing its function or causing death. The more toxic a substance is, the more hazardous it is.

Dose, the amount of the material taken into the system is the other element of concern. Toxicity assessment equals dose plus toxicity.

A moderately toxic substance occurring in low concentrations may not be as significant a problem as a substance of lesser toxicity present in great quantities.

The toxicity assessment compares the hazard severity of a substance to the concentration of the material present.

Terms related to exposure assessment

a. **Absorbed Dose:** The amount of a substance penetrating the exchange boundary of an organism. Expressed as "mass of a substance absorbed into the body per unit of body weight per unit of time."

b. **Chronic Daily Intake:** Exposure expressed as an absorbed dose averaged over a long period of time (7 years-lifetime).

c. Exposure Pathway: A unique mechanism by which a population is exposed to an agent. Each exposure pathway includes a source release, an exposure point, and an exposure route.

d. **Intake:** A measure of exposure expressed as "mass of a substance in contact with the exchange boundary per unit body weight per unit of time."

e. Lifetime Average Daily Intake: Exposure expressed as a mass of a substance contacted per unit body weight per unit of time averaged over a lifetime.

f. **Subchronic Daily Intake:** Same as chronic daily intake but averaged over a portion of a lifetime (2 weeks to 7 years).

Terms related to toxicity assessment

a. **Chronic Reference Dose (Chronic RfD):** An estimate of a daily exposure level for the human population. This population includes sensitive subpopulations that are likely to be without an appreciable risk of harmful effects during a lifetime. Chronic RfDs are specifically developed to be protective for long-term exposure to a compound (as a SUPERFUND guideline, 7 years to a lifetime).

b. **Dose-response Evaluation:** The process of quantitatively evaluating toxicity information and characterizing the relationship between the dose of a contaminant administered or received and the incidence of adverse health effects in the exposed population. From the dose-response relationship, toxicity values are derived that are used in the risk characterization to estimate the likelihood of adverse effects occurring in humans at different exposure levels.

c. Hazard Identification: The process of determining whether exposure to an agent can cause an increase in the incidence of a particular adverse health effect for example, cancer or birth defects and whether the adverse effect is likely to occur in humans.

d. **Reference Dose (RfD):** EPA's preferred toxicity value for evaluating noncarcinogenic effects resulting from exposures at SUPERFUND sites.

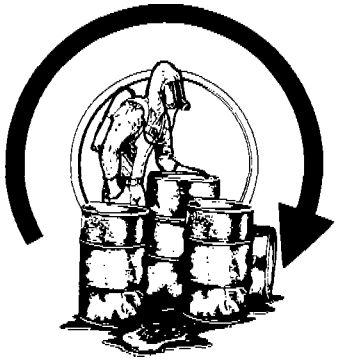
e. Slope Factor: A plausible upper-bound estimate of the probability of a response per unit intake of a chemical over a lifetime. The slope factor is used to estimate an upper-bound probability of an individual developing cancer as a result of a lifetime of exposure to a particular level of a potential carcinogen.

f. **Subchronic Reference Dose (Subchronic RfD):** An estimate of a daily exposure level for the human population including sensitive subpopulations that are likely to be without an appreciable risk of harmful effects during a portion of a lifetime (as a SUPERFUND program guideline, 2 weeks to 7 years).

g. Toxicity Value: A numerical expression of a substance's dose-response relationship that is used in risk assessments. The most common toxicity values used in SUPERFUND program risk assessments are reference doses (for noncarcinogenic effects) and slope factors (for carcinogenic effects).

Risk Characterization

In the risk characterization, the toxicity of each substance and the potential human exposure from each completed pathway are summarized and integrated into **quantitative and qualitative** estimations of risk. A quantitative risk estimate is a numerical expression of the potential health risk. A qualitative risk estimate is the written interpretation of the quantitative risk estimate. Qualitative risk estimates consider the assumptions used to calculate the quantitative risk estimate of a site and the unknown aspects about the site.



The comparison of projected human intake of a contaminant and that substance's toxicity value characterizes the potential noncarcinogenic effect (a health effect other than cancer). The potential for a carcinogenic (cancer-causing) effect over a lifetime of exposure is estimated from projected contaminant intake and the chemical's specific dose-response characteristics.

Data sources for the various estimates have elements of uncertainty. While every effort is made to use the best available human and animal toxicity, as well as other modern toxicological data, the figures generated are not absolutes.

EPA considers a range of risk levels in evaluating a site for remedial action. The probability for carcinogenic risk and the index of hazard for noncarcinogenic risk are reported quantitatively.

Quantitative Estimates

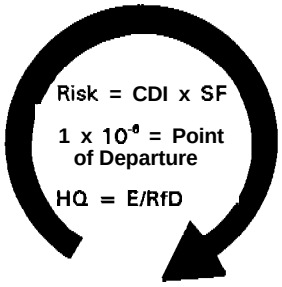
Cancer Risk Estimate

Cancer risk estimate is the upper bound estimate of the probability that an individual would develop cancer as a result of exposure to the contaminant. A cancer risk of 1×10^{-6} indicates a probability of 1 chance in 1,000,000 of an individual developing cancer. A risk of 2×10^{-5} indicates that there are 2 chances in 100,000 of an individual developing cancer as a result of their exposure to the contaminant.

Calculate the cancer risk by using—

Chronic Daily Intake x Slope Factor = Cancer Risk.

EPA provides for a range of acceptable cancer risk of 10^{-4} to 10^{-6}. The Point of Departure is the cancer risk of 10^{-6}. Risks which are higher than 1×10^{-6} warrant close scrutiny to determine if remediation of the site is necessary.



Chronic Hazard Index

The hazard index (HI) equals the sum of the hazard quotients for the contaminants comprising the noncancer risk. The formula for determining a chemical's HI is:

Hazard Quotient = Exposure level/RfD

Where: Exposure level = Human chemical uptake
RfD = Reference dose

HI = The sum of the hazard quotients.

A HI less than 1.0 indicates that it is unlikely that an individual will experience an adverse health effect at the measured concentration. The HI does not represent the probability of a disease developing, but it is a comparison of the estimated exposure to an acceptable exposure or dose.

When characterizing multiple completed pathways, combine all cancer risk estimates for each pathway. Then, combine all HI estimates for each pathway. The combined cancer risk estimates equal the total cancer risk for the site. The combined HI estimates equal the total noncancer risk for the site.

Qualitative Estimates

Interpretations and Uncertainties

Once the quantitative data is presented, a detailed interpretation of the risk assessment must follow. The site specific uncertainties must be incorporated into the presentation.

The risk assessment contains a considerable number of assumptions about toxicity, exposure, and future land use. These assumptions must be discussed to fully characterize the site's human health risk.

Simulation modeling using a particular risk scenario is one method used to incorporate site specific uncertainties into the process. Modeling, when used correctly, can make a significant contribution to the HRA process.

Remember that the risks due to the contamination as calculated in the HRA process represents an excess risk that exists over and above the accepted daily risks that we may be exposed to such as:

a. Eating habits.

b. Smoking habits.

c. Drinking habits.

d. Driving habits.

e. Occupational health risks.

f. Recreational risks.

SERVICES PROVIDED BY THE AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY AS COORDINATED THROUGH USAEHA

The Agency for Toxic Substances and Disease Registry (ATSDR) is a branch of the U.S. Public Health Service. This organization has a congressionally mandated role in the Department of Defense's IRP.

ATSDR-

a. Conducts health assessments at all Federal NPL sites.

b. Develops toxicological profiles of Department of Defense submitted unregulated hazardous substances.

c. Performs health studies of potentially exppsed populations.

The ATSDR health assessment is an analysis and statement of the public health implications posed by the installation or release under consideration, This health assessment-

* Evaluates relevant environmental data, health outcome data, and community concerns associated with a site where hazardous substances have been released.

★ Identifies populations living or working on or near hazardous waste sites for which more extensive public health actions or studies are indicated.

Thus, the HRA process supports the selection of a remedial action at a site.

USAEHA is the Army's central liaison with ATSDR as directed by the Deputy Assistant Secretary of the Army (Installations, Logistics, and Environment).

In this role, USAEHA coordinates the activities between the Army and ATSDR. These functions include-

* Scheduling ATSDR services at all Army sites.

*Providing administrative and funding services that support the Department of the Army and ATSDR interagency agreement.

★ Transfering information which assists in the development of toxicological profiles and health assessments, and health studies.

★ Assists installations in obtaining ATSDR services.

ABOUT USAEHA

USAEHA provides advice and assistance to Army components in the areas of—

a. Environmental Health Engineering.

b. Entomological Sciences.

c. Ionizing and Nonionizing Radiation.

d. Occupational and Environmental Health.

e. Industrial Hygiene and Worksite Hazards.

f. Environmental Sanitation and Hygiene.

g. Laboratory Services.

Located at Aberdeen Proving Ground, Maryland, the main agency performs large scope consultations and specialized work. Regional support to Army elements is provided by direct support activities at FT Meade, FT McPherson, and Fitzsimons Army Medical Center.

Any official installation representative can request USAEHA services. The agency is mission funded thereby making this an excellent cost effective occupational and environmental health consulting firm to Army commanders all over the world.