KELLY AFB
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 3399

Meeting Agenda
Kelly AFB Remediation Advisory Board
Nov. 15, 1994

Location: City of San Antonio Fire Training Academy
4531 S. Zarzamora

7 p.m.	Welcome and opening remarks by Mr. Bailey, Kelly co-chair
7:10	Self-introduction by members
7:30	Discussion/approval of charter
7:45	Members (excluding Mr. Bailey) elect community co-chair
8:10	Break
8:20	Installation Restoration Program orientation/training session
9:10	Board decides on date and time, location of next meeting
9:15	Meeting adjourns; Kelly staff available for informal discussions

Kelly Air Force Base
Restoration Advisory Board
Meeting Minutes

Nov. 15, 1994

Restoration Advisory Board
Meeting Minutes - 15 Nov 94

Mr. Bailey welcomed all of the attendees and congratulated those who had volunteered to serve on the Restoration Advisory Board (RAB). He stated that the RAB, was a Department of Defense (DOD) initiative designed allow the regulatory and public community to become stakeholders in the clean-up of DOD. The Installation Restoration Program (IRP) is the United States Air Force's program for accomplishing Kelly AFB's clean-up activities, through the Environmental Management Office. He also stated that this was the first RAB to be established at any of the Air Logistics Centers (ALC). After his welcoming comments, the following were briefly discussed among the board members:

- Review responsibilities of RAB members and/or their alternates, when reviewing contractor documents, and how RAB member comments and feedback will be handled by the board.

- Section 3 of the proposed charter in the information package had been changed to read "211 SARA". Board members were instructed to inform Mr. Estrada whether or not they wanted their and their alternate's home phone numbers or business phone numbers on the members contact list that will be provided to the public.

- As a result of the diverse background of the broad members and the anticipated learning curve required to allow them to become familiar with Kelly's clean-up program, the board decided to meet at least monthly. The board decided that the next meeting should be held before 19 December 94. An invitation to attend a tour of Kelly AFB prior to the next meeting was given to everyone by Mr Bailey.

- The RAB charter was discussed and approved. The RAB meeting facilitator, Mr Teague, an employee of SAIC was introduced and assumed responsibility for proceduly electing a Co-Chair of the RAB. Five (5) individuals had volunteered to serve as Co-Chair for the RAB. They were: Mr. Ayala, Mr. Mixon, Mr. Haglethorn, Mr. Moore, and Mr. Jimenez, who was not present. Each was invited to give a brief biography of themselves. By secret ballot, Mr Haglethorn was elected as Co-Chair to serve along with Mr Bailey.

After the meeting break, Mr. Richard Trevino, Chief of the Environmental Management Restoration Operations Branch, gave a basic overview of IRP program at Kelly AFB. During his presentation, he briefly addressed issues related to underground storage tanks, questions on history of clean-up program, accomplishments of IRP program and rationale for the establishing the RAB. The charter of the RAB was reinforced on several occasions to indicate that currently the RAB is established to focus on IRP clean-up activities. As requested, specific points of contact with respect to the different zones being investigated on Kelly AFB is provided by attachment.

The meeting was closed at 9:15 p.m. with the next meeting was decided to be at the Fire Academy at 6 p.m. on 12 Dec 94. In the meantime, Mr Bailey indicated if there is anything anyone on the board needed between now and then to let him know. Mr Bailey thanked the board volunteers for their time.

Action Items:

(1) Points of Contact for Kelly AFB IRP zone investigations with all individuals being contacted by calling (210) 925-1812/1813:

Zone 1 - Mr. Daniel Medina
Zone 2 - Mr. Kenny Johnson
Zone 3 - Mrs. Victoria Wark
Zone 4 - Mr. Ed Roberson
Zone 5 - Mr. Stephen Escude'

(2) Request for ranking of IRP sites at Kelly AFB: This information is a major agenda topic for the 12 Dec 94 RAB meeting and will be presented during the meeting.

(3) Request for funding currently expensed on the IRP at Kelly AFB: Kelly AFB has expensed over $74 million from 1983 to 1994. Over $25 million has been expensed on the cleaning sites; the remaining dollars were used to evaluate the extent and type of contamination.

(4) Request for information on the status of the TIER II Report: Kelly AFB is currently not required to submit a TIER II Report. On 01 Aug 94, Kelly AFB submitted to the Chairperson of the Local Emergency Protection Committee (LEPC) a list of chemicals that exceed threshold values. On 11 Aug 94, a revised listing was submitted updating this information. The TIER II Report is required to be submitted to the LEPC by March 1995. In addition to the LEPC, the Environmental Management Office will also submit a copy of the TIER II Report to our Base Fire Department and the local Department of Health.

Restoration Advisory Board
Meeting Minutes - 15 Nov 94
Attachment 1

RAB members present:

Mr. Allen Hagelthorn, resides at 19602 Encino Knoll in San Antonio, formerly worked for the Environmental Protection Agency, presently is a Director for an environmental community relations firm in San Antonio. He holds an Environmental Sciences Degree and an MS in Regulatory Management.

Ms. Yolanda A. Johnson, resides at 3859 Bay Street in San Antonio, she is representing the Committee for Environmental Justice-Action, her alternate is Mr. Raul Villar.

Mr. Armando C. Quintanilla, resides at 710 Price Ave in San Antonio, is representing the American Association of Retired People, and is a Political Consultant.

Mr. Charles H. Ayala, resides at 17010 Turkey Point in San Antonio, is a Major in the United States Air Force stationed at Kelly AFB, and served a previous internship at the Pentagon.

Mr. Sam Sanchez, has been employed for more than 20 years with the San Antonio Metropolitan Health District at 332 W. Commerce St., Room 101.

Ms. Debra Robinson, resides at 4411 Meredith Woods in San Antonio, alternate for Mr. Bill Sain who represents the Bexar Audobon Society and is also a Kelly AFB employee.

Mr. Leonel C. Benavidez (Leo), resides at 3700 Posado Circle in San Antonio, and is employed at the Institute of Texan Cultures.

Mr. Nicolas Rodriguez, Jr., resides at 8731 Coffee Drive in San Antonio, and has been employed with the Bexar Metro Water District for more than 20 years.

Mr. Bill Brown, is employed with Texas Natural Resource Conservation Commission in San Antonio, and is a retired Army officer. His alternate is Craig Meppen.

Mr. George Rice, resides at 1658 Rob Roy in San Antonio, and is groundwater hydrologist and is owner of a consulting business in San Antonio.

Mr. Roy Gill, resides at 127 Hollenbeck in San Antonio, and is employed at Kelly Air Force Base.

Mr. Thomas E. Moore, resides at 5038 Windyhill in San Antonio, and is an Environmental Specialist (Staff Sergeant) with the Air Intelligence Agency.

Ms. Kelly Thurlow, resides at 8722 Cinnamon Creek #121 in San Antonio, and is a first lieutenant in the Protocol Office at Kelly Air Force Base.

Mr. Carl Mixon, is Bexar County Fire Marshal and serves as chairman of the county's Local Emergency Planning Committee.

Mr. Richard Hirsch, resides at 6424 Brookway Drive in San Antonio, and is employed at Kelly Air Force Base.

Mr. Lawrence O. Bailey, Jr., Director of Environmental Management at Kelly Air Force Base.

RAB Members Not Present:

Mr Jimenez (Community Member)

Mr Gary Beyer (TNRCC, Austin, Texas)

Restoration Advisory Board
Meeting Minutes - 15 Nov 94
Attachment 2

Non-RAB member attendees:

Stephen Escude	SA-ALC/EMRO
Ed Von Dran	SA-ALC/EMRO
Dick Walters	SA-ALC/PAE
Dale E. Johnson	Community Member
Kelly P. Thurlow	SA-ALC/CCP
Yolanda Johnson	CEJA
Mary Villar	CEJA
Raul Villar	CEJA
Joseph Ebert	SA-ALC/EMRO
Ronald Catchings	SA-ALC/EMRO
Thomas Moore	6968 AIS/CEV
Sam Sanchez	SA Metro Health
Kenny Johnson	SA-ALC/EMRO
Sonia Gallegos	SA-ALC/EMRO
Byron Cotton	SA-ALC/JAV
Cliff Trimble	SA-ALC/PKOE
Arthur Valdez	Community Member
Maria Gill	Community Member
Antonio V. Lopez	Community Member
Chris J. Hebner	Community Member
Desi Raygosa	BMWD
Nick Rodriguez	BMWD
Leo Benavidez	Community Member
George Rice	Community Member
Brenda Rodriguez	SA-ALC/EMR
Carl L. Mixon	Bexar County
Michael Estrada	SA-ALC/PA
Victoria Wark	SA-ALC/EMRO
Eric Wolff	Raba-Kistner

Junta de Consejo de Restauración (RAB)
Síntesis de la Reunión Efectuada el 15 de Nov 1994

El Sr. Bailey dió la bienvenida a todos los asistentes y felicitó a las personas que se ofrecieron como voluntarios para servir en la Junta de Consejo de Restauración (RAB). El señor Bailey comentó que el RAB era una iniciativa de el Departamento de Defensa (DOD) diseñada para permitir a la comunidad y a las autoridades ha participar en la limpieza del DOD. El Programa de Restauración de Instalaciones (IRP) es un programa de la Fuerza Aérea destinado a realizar las actividades de limpieza ambiental en la Base Kelly, atravéz de la Oficina de Administración Ambiental. El Sr. Bailey expresó que éste es el primer RAB establecido en un Centro de Logística Aérea. Después de sus comentarios y bienvenida, los siguientes puntos fueron rápidamente discutidos por los miembros de el RAB:

Determinar las responsabilidades de los miembros de el RAB y sus suplentes al evaluar y revisar documentos entregados por las compañías contratistas, y cómo va a manejar el RAB los comentarios echos por sus miembros respecto a éstos documentos.

La Sección 3, en el paquete de información que contiene la Constitución y los Códigos propuestos, cambió para que lea "211 SARA". De la misma manera, se les solicitó a los miembros de el RAB que se comunicaran con el Señor Michael Estrada, si deseaban que sus números telefónicos (trabajo y casa) y el de sus suplentes fueran incluídos en una lista que va a ser distribuída a el público.

Debido a las variadas profeciones y oficios de los miembros de el RAB, y la extensa información que necesitan asimilar para familiarizarce con el programa de limpieza de Kelly, la junta decidió reunirce cuando menos una vez al mes.

Los miembros de el RAB acordaron que la próxima reunión se realizará el 19 de Diciembre de 1994. El Sr. Bailey hizo una invitación a todos los presentes a un recorrido por la Base Kelly antes de que inicie la siguiente reunión.

El Código ó Constitución de el RAB fué discutida y aprovada. El mediador de la reunión, el señor Teague empleado de SAIC, fué presentado y asumió la responsabilidad de elegir un presidente de el RAB. Cinco personas se habían ofrecido para servir como presidente. Las personas fueron: el señor Ayala, el señor Jiménez quien no estuvo presente, el señor Haglethorn, el señor Mixon, y el señor Moore. Cada uno fue invitado a dar una corta autobiografia. Por medio de una

votación secreta, el señor Haglethorn fue elegido como presidente para servir junto con el señor Bailey.

Después de un breve receso, el señor Ricardo Treviño, jefe de la subdirección de el Departamento de Operaciones de Restauración, dió un resúmen de el programa IRP en la Base Kelly. Durante su presentación, el señor Treviño rápidamente abordó temas relacionados con tanques subterráneos de almacenamiento, respondió preguntas respecto a la historia de el programa de limpieza, presentó los logros de el programa IRP y explicó los motivos por los cuales se estableció el RAB. La constitución de el RAB fué modificada en varias ocaciones para que especifique con claridad que actualmente el objetivo de el RAB es enfocarce en actividades de limpieza de el programa IRP.

Como se solicitó, se han incluído los nombres de las personas a contactar para obtener información con respecto a las diferentes zonas que estan siendo investigadas en la Base Kelly.

La reunión concluyó a las 9:15 p.m., decidiéndose que la siguiente reunión sería en la Academia de Bomberos a las 6:p.m. el día 12 de Diciembre de 1994. El señor Bailey agradeció a los miembros voluntarios de la junta por su tiempo prestado.

Asuntos Adicionales:

Las siguientes personas son las responsables de los proyectos en las diferentes zonas investigadas en Kelly AFB. (Puede comunicarce con cualquiera de ellas llamando a los teléfonos 925-1812 y 925-1813.

Zona 1-Sr. Daniel Medina
Zona 2-Sr. Kenny Johnson
Zona 3-Sra. Victoria Wark
Zona 4-Sr. Ed Roberson
Zona 5-Sr. Stephen Escude'

Peticiones para obtener información respecto a el rango ó grado de lugares IRP: Esta información es uno de los tópicos más importantes en nuestra agenda para la siguiente reunión.

Peticiones para obtener información respecto a el presupuesto que se tiene planeado para el programa IRP en la Base Kelly: Kelly AFB ha destinado más de $74 millones de dólares desde 1983 hasta 1994. Mas de $25 millones han sido destinados en la limpieza de la base.

Peticiones para obtener información respecto a el Reporte TIER II (Plan de Acción en Casos de Emegencia)

La Base Kelly se apega y observa procedimientos aprovados para responder a emergencias locales. La oficina de Administractión Ambiental ha subministrado el Reporte TIER II a (1) nuestro cuerpo de Bomberos de la Base, (2) al comité local para la Protección en Casos de Emergencia, y (3) al Departamento de Salud. Además, el esfuerzo para actualizar ó poner al día el Reporte TIER II se a programado para que se complete en Marzo de 1995.

Installation Restoration Program

November 15, 1994

Installation Restoration Program Outline

- *Purpose*
- *Process*
- *Current Status*

Installation Restoration Program
Purpose

- ***PURPOSE*** **of the Installation Restoration Program (IRP) at Kelly AFB, Texas.**

  To remediate or cleanup past hazardous waste sites resulting from base operations.

- ***Focus*** **- Off-base impact & Leon Creek**

IRP - Overview
Cleanup Process

Phase I — Preliminary Assessment Site Investigation

Conducts inital assessment and determines the need to create an IRP site needing more investigation.

Phase II — Remedial Investigation Feasibility Study

Conducts detailed investigation and determines the final cleanup action for each IRP site.

Phase III — Remedial Design Remedial Action

Conducts design of final cleanup action and implements this final remedial remedy for the IRP site.

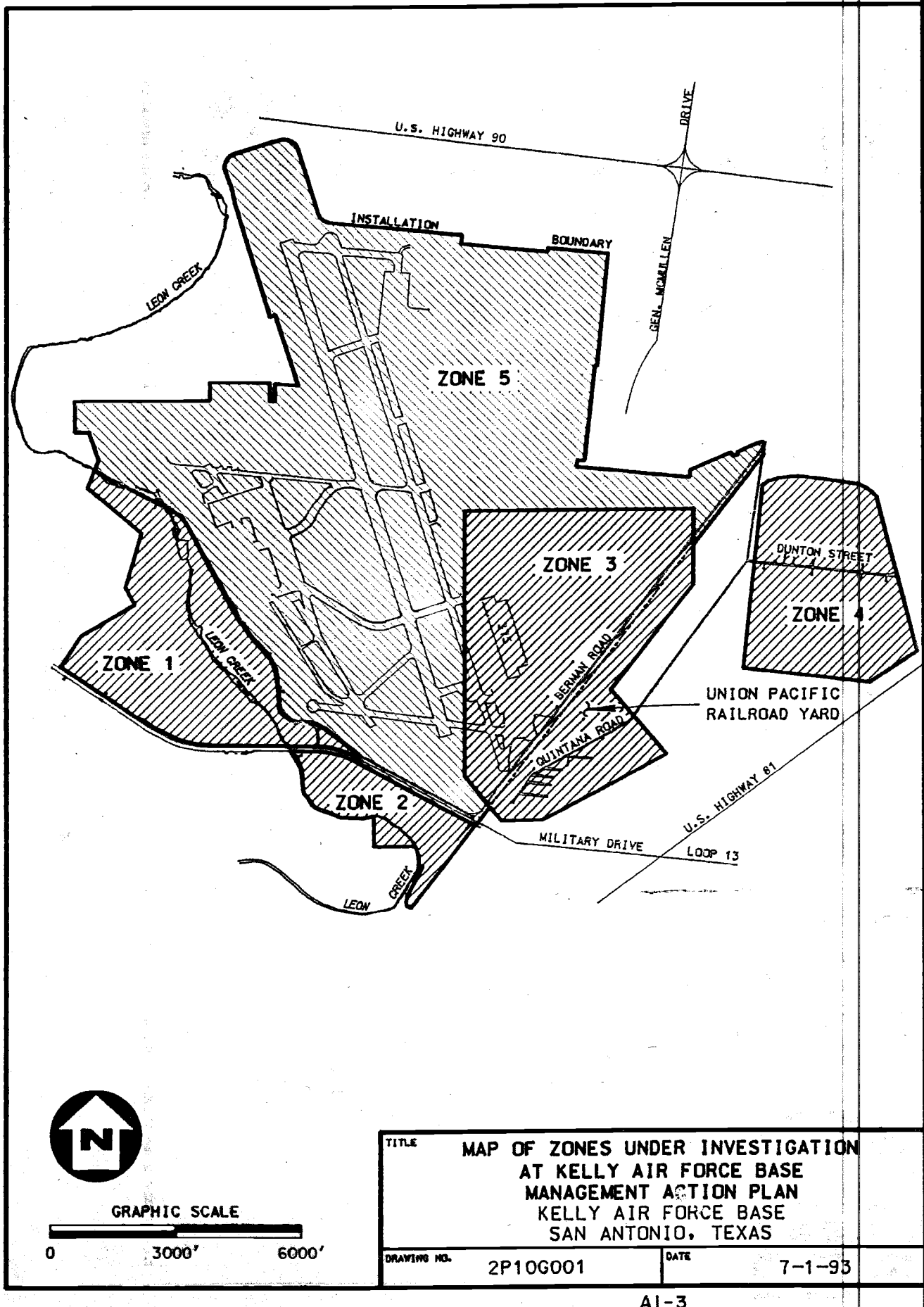
Interim Remedial Action

Conducts immediate interim cleanup action to mitigate potential human health or ecological risks.

IRP - Overview
Zone Designation

- **Kelly AFB is categorized into five zones:**
  - **Zone 1 (Present Day Golf Course) - 17 IRP sites.**
  - **Zone 2 (EPCF and Jet Engine Test Cells) - 16 IRP sites.**
  - **Zone 3 (Industrial Complex) - 10 IRP sites.**
  - **Zone 4 (East Kelly AFB) - 4 IRP sites.**
  - **Zone 5 (Flightline/Runway) - 5 IRP sites.**

- **52 Total IRP Sites**



TITLE: MAP OF ZONES UNDER INVESTIGATION AT KELLY AIR FORCE BASE MANAGEMENT ACTION PLAN KELLY AIR FORCE BASE SAN ANTONIO, TEXAS

DRAWING NO. 2P10G001

DATE 7-1-93

IRP - Overview
Cleanup Status

- PA/SI - Basewide Assessment
- RI - Zone 4 and Zone 5 - Nine IRP Sites
- FS - Zones 1, 2, and 3 - Thirty-two IRP Sites
- IRAs - 9 IRP Sites (P&T systems)
  - - 6 IRP Sites (Source Removals - USTs)
- Site Closures - 20 IRP Sites

IRP - Overview
Cleanup Status

- **Basewide Regulatory Projects**
- **Neighborhood Water Well Survey**
- **Quintana Road Culvert**
- **Leon Creek Study**

KELLY AIR FORCE BASE FACTSHEET

INSTALLATION RESTORATION PROGRAM

PRINCIPAL LAWS AND REGULATIONS AFFECTING THE CLEANUP PROGRAM

Several Federal laws guide cleanup programs in the United States. Each has a different emphasis, but together, they target the most pressing hazardous waste sites in the nation.

RCRA

Resource Conservation and Recovery Act of 1986 sets the standards for managing hazardous waste facilities licensed by the U.S. Environmental Protection Agency (EPA). It also provides mechanisms for dealing with releases at these sites.

CERCLA

Comprehensive Environmental Response, Compensation and Liability Act of 1980 — also known as Superfund — provides for the funding, study and implementing of cleanup efforts.

NEPA

National Environmental Policy Act of 1969 requires Federal agencies to consider possible environmental effects when making decisions on proposed federal actions.

All three of these laws require public involvement under a well-defined set of activities and schedules. The cleanup process will vary with each site. A phased approach of study is used to help maximize efforts. The phases include studies to understand the problem, identify possible cleanup alternatives, test potential cleanup methods, refine the alternatives, and undergo cleanup activity. Information to make and support an informed decision is made available for review and comment by the public throughout the process.

A phased approach of study is used to help maximize efforts in the cleanup process.

Each of the principal federal laws is described in this factsheet. While details may vary at Kelly Air Force Base, the end goal remains constant — to protect human health and the environment.

RCRA

RCRA created a management system for hazardous wastes, requiring that safe and secure procedures be used in treating, transporting, storing, and disposing of hazardous wastes. Facilities must have permits to handle these wastes and are required to operate within specific guidelines. The law, amended in 1984, allowed EPA to require corrective actions for continuing releases and releases outside the facility's boundary.

RCRA focuses on whether or not releases of hazardous waste has occurred on licensed operating facilities, and requires corrective action if releases are found. A series of measures is taken to determine if a site requires RCRA-regulated cleanup.

1.) The first step is a **RCRA Facility Assessment (RFA)** to determine if further study is needed. This initial study will identify the potential hazards at the site. However, the RFA studies only the identified releases from each site. It does not study other possible hazards that may exist.

CERCLA

CERCLA is a federal law passed in 1980 and amended in 1986. The law created a special tax that goes into a trust fund, commonly known as Superfund, to study and perform remediation, or cleanup, of abandoned or uncontrolled hazardous waste sites. While defense sites—such as Kelly Air Force Base—are not eligible for Superfund monies, Congress also set aside funding for cleanup activities in a special Defense Environmental Restoration Account.

CERCLA is important for providing funds and direction to clean up sites not covered under RCRA provisions. RCRA's scope is limited to permitted waste management facilities which are monitored by EPA.

CERCLA consists of three phases: (1) a preliminary assessment, (2) a study of the site, a review of cleanup alternatives, and a selection of a remedial action plan, and (3) design and execution of the plan.

1.) The preliminary assessment **(Preliminary Assessment/Site Inspection PA/SI)** will determine if the site should be placed on the National Priorities List. This list contains the most serious uncontrolled or abandoned hazardous waste sites. It has sites that states have selected as their top priority sites and sites that pose a significant threat to public health, welfare, or the environment.

The assessment focuses on the potential for contamination. If the assessment shows that further action is needed, a site inspection is performed to determine the threat to the public and the environment. The site is scored based upon this inspection. If any site exceeds a certain score, the site will be added to the National Priorities List.

2.) The second phase includes a **Remedial Investigation/Feasibility Study (RI/FS)**. The first part includes study and planning. All work performed during the RI/FS will collect data on the site to develop a cleanup strategy, identify likely remedies, and prepare a work plan. A sampling analysis plan is developed so that any decisions made are based on the most accurate and best documented data possible.

The investigation step requires extensive sampling and analysis activities. This data is used to develop the range of alternatives for cleanup. One alternative is selected, and entered into a Record of Decision, stating the preferred method and manner of remediation. Public comments and community concerns are considered in the selection, and also placed in the record.

3.) The last phase includes a **Remedial Design/Remedial Action (RD/RA)**, conducted to implement the decision, and to monitor the performance of the cleanup.

RCRA (continued)

2.) If a problem exists, EPA requires the owner/operator of the site to conduct a **RCRA Facility Investigation (RFI)** and a **Corrective Measure Study (CMS)**. The RFI will measure the type, extent, and rate of contamination. If a corrective action is needed, the CMS will identify possible solutions to problems at the site.

3.) The last step is to begin the cleanup through a process called **Corrective Measure Implementation (CMI)**. After the EPA selects the solution to pursue, the owner/operator performs the corrective action and monitors the results.

NEPA

NEPA is the Federal law that sets basic policy on protection of the environment. Through this law, every Federal action is reviewed to determine if it has significant environmental effects. NEPA requires Federal agencies to evaluate all environmental impacts before taking any action.

If an action clearly has no significant impact, a Categorical Exclusion is given. If an action may result in environmental effects, an **Environmental Assessment (EA)** or an **Environmental Impact Statement (EIS)** may be necessary. In preparing an EA, data collected will be reviewed to determine if impacts are not significant, or are great enough to require the more complete EIS study.

Under NEPA, when an Environmental Impact Statement is required, public participation is called for early in the process of identifying conditions at the site and reviewing cleanup remedies. Public involvement, or "scoping," ensures that real problems are identified early, efforts are concentrated on those areas, and the EIS is balanced and thorough in its review. The NEPA scoping process is different from that of CERCLA. NEPA scoping focuses on public participation, while CERCLA scoping concentrates on planning.

All cleanup activities are reviewed and regulated by the State of Texas. The Texas Natural Resource Conservation Commission works closely with Kelly Air Force Base in determining the sites requiring cleanup. At any one hazardous site, one or more laws may apply, or none, depending on the extent of contamination and the types of contaminants. The regulations and standards that pertain to each site are determined early to ensure all applicable and/or appropriate requirements are met. The goal for all cleanup activities is to protect human health and the environment.

For more information about the Installation Restoration Program, contact: Michael Estrada
SA-ALC/PAE
807 Buckner, Suite 1
Kelly AFB, TX 78241-5842
Telephone: 925-7951 FAX: 925-1778

OTHER LAWS AND STANDARDS

A variety of other laws or standards may also apply to specific hazardous waste sites.

- The *Toxic Substances Control Act* regulates certain classes of chemicals, including polychlorinated biphenyls (PCBs).

- The *Clean Air Act* is a Federal law that controls emissions of waste into the air. Special protective equipment and permits are required.

- The *Clean Water Act* is a similar Federal law that controls the amount of waste that can be released into surface water bodies by publicly owned treatment systems.

- The *Safe Drinking Water Act* is designed to protect drinking water resources. This law is incorporated into both RCRA and CERCLA provisions dealing with groundwater protection.

- *National Emission Standards for Hazardous Air Pollutants* limit air emissions of pollutants.

KELLY AIR FORCE BASE
INSTALLATION RESTORATION PROGRAM

ACRONYMS

ARAR	Applicable or Relevant and Appropriate Requirements
BNA	Base Neutral Acid Extractable
CAMU	Corrective Action Management Unit
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CMI	Corrective Measures Investigation
CMS	Corrective Measures Study
CRQL	Contract Required Quantitation Limit
DERA	Defense Environmental Restoration Account
DERP	Defense Environmental Restoration Program
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPCF	Environmental Process Control Facility)
EPCRA	Emergency Planning and Community Right-to-Know Act of 1986. (SARA Title III)
FFS	Focused Feasibility Study
FONSI	Finding of No Significant Impact
FS	Feasibility Study
HSWA	Hazardous and Solid Waste Amendments
IFPRS	Interim Free-Product Recovery System
IRP	Installation Restoration Program
IWCS	Industrial Wastewater Collection System
JP-8	Jet fuel
LDR	Land Disposal Restriction
LTTS	Low Temperature Thermal Stripping
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
mg/L	milligrams per liter
µg/L	micrograms per liter
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEPA	National Environmental Policy Act
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PA/SI	Preliminary Assessments and Site Inspections
PCB	Polychlorinated Biphenyls
POTW	Publicly Owned Treatment Works
ppb	parts per billion

PPE	Personal Protective Equipment
PQL	Practical Quantitation Limit
PRG	Preliminary Remediation Goal
QA/QC	Quality Assurance and Quality Control
RA	Remedial Action
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI/FS	Remedial Investigation and Feasibility Study
ROD	Record of Decision
RPO	Representative Process Option
SARA	Superfund Amendments and Reauthorization Act
SWMU	Solid Waste Management Unit
TAC	Texas Administrative Code
TAL	Target Analyte List
TCL	Target Compound List
TNRCC	Texas Natural Resource Conservation Commission
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
UVOX	Ultraviolet Oxidation
VOC	Volatile Organic Compound

For more information about the Installation Restoration Program, contact: Michael Estrada
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KELLY AIR FORCE BASE FACTSHEET

INSTALLATION RESTORATION PROGRAM

THE INFORMATION REPOSITORY AND ADMINISTRATIVE RECORD

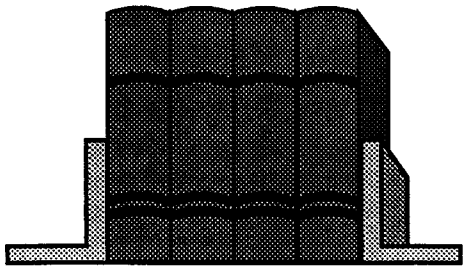
What is the Information Repository?

The Information Repository is a collection of documents compiled through the Kelly AFB Installation Restoration Program. These documents contain studies and other work related to the Air Force's cleanup of hazardous waste sites at Kelly AFB.

What is the CERCLA/Installation Restoration Program?

The Comprehensive Environmental Response, Compensation and Liability Act, also known as Superfund, governs the cleanup of hazardous waste sites across the country.

The Installation Restoration Program is an Air Force initiative to clean up hazardous waste sites at Air Force installations. Kelly's IRP uses the procedures and process of CERCLA to guide its efforts to accomplish cleanup goals.



What is contained in the Information Repository?

Your input is vital to the cleanup process. Public participation is encouraged in cleanup actions and all public comments are considered before a final action is selected. To help citizens stay informed, all final documents concerning site cleanup are public documents and are made available for review. All CERCLA/IRP documents are kept at the Information Repository including all important investigations, reports, studies and risk assessments.

When draft versions of documents are submitted to the Texas Natural Resource Conservation Commission or the Environmental Protection Agency for review, a copy of the final draft is placed in the Information Repository. When regulatory revisions have been made, the final version is placed in the Information Repostiory in place of the draft.

In addition, the Information Repository contains the Public Involvement Plan and copies of news releases, meeting minutes, Fact Sheets, and Progress Reports that have been distributed through the news media or direct mail, as well as other cleanup related documents.

How can I find a document?

Studies, reports, correspondence and other technical products are listed in the first binder of the Administrative Record. This binder contains an index that is continuously updated. Separate binders contain the actual documents. Each binder is labeled with beginning and ending numbers for the items in it.

Administrative Record sets in the Information Repository are partial sets. To review the complete Administrative Record, contact the Environmental Restoration Operations Branch at 925-1812.

Documents released to the public, such as news releases or transcripts of public meetings, are contained in gray "Information Repository" binders. These include an index at the beginning of volume one and an index in front of each individual group of documents.

What if I can't find a document?

If you can't find a particular document, don't worry. Check the index to be sure it's kept in the

library. If it's listed, look through the documents again. It may be misplaced.

If you still can't find what you're looking for, you may find it at the Administrative Record file, located in Kelly's Environmental Restoration Operations Branch. If the document is not listed in he Administrative Record index or the Information Repository indices, it may not be in the Administrative Record. If you would like access to the Administrative Record, contact the Restoration Operations Branch at 925-1812.

May I check out a document?

Because these documents are for public viewing they may not be removed from the library. However, you can make copies of whatever you need.

What if I have a question or need more information?

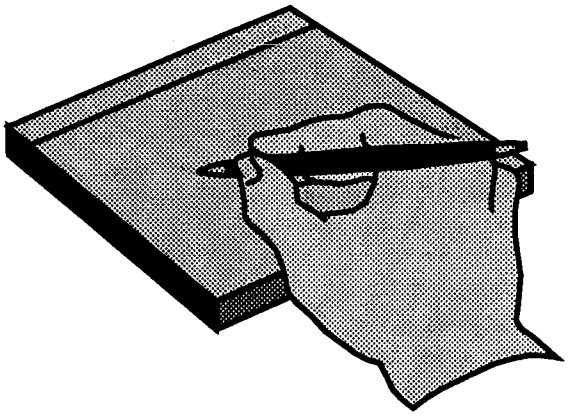
Kelly AFB Environmental Management officials are happy to answer any questions you have about the Installation Restoration Program, Kelly's environmental programs, the Information Repository or any of the documents.

Direct your questions or comments to Mike Estrada, Environmental Coordinator for the Office of Public Affairs, at 925-7951 or to Dick Walters, Public Participation Specialist, at 925-1812.

How can I find out about additions to the Information Repository?

Final copies of studies or reports are usually announced in a *Progress Report* that summarizes their contents. All public comment periods and public meetings are announced by advertisements in the San Antonio Express-News. If you wish to be added to the Installation Restoration Program mailing list, you may contact Mr. Estrada at 925-7951.

The Kelly AFB Information Repository is located in the Business, Science and Technology Section of the main San Antonio Public Library at 203 S. St. Marys Street. A duplicate set of Information Repository documents is also available at the Kelly AFB base library.



Is there someone I can write to for information?

If you prefer, you may also mail questions or comments to the following address:

Environmental Coordinator
Office of Public Affairs
(SA-ALC/PAE)
807 Buckner, Suite 1
Kelly AFB, TX 78241-5842

KELLY AIR FORCE BASE

INSTALLATION RESTORATION PROGRAM

GLOSSARY

Water Quality Standard (WQS) - The combination of a designated use and the maximum concentration of a pollutant which will protect that use for any given water body. For example, in a trout stream, the concentration of iron should not exceed one milligram per liter (1mg/l).

Water Table - The boundary between the saturated and unsaturated zones. Generally, the level to which water will rise in a well (except for artesian wells).

Wetlands - Areas that are covered or saturated by surface or groundwater frequently enough or long enough to support primarily plants and aquatic life which require saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas, and are federally protected. They frequently serve as recharge/discharge areas for surface and ground waters and are known as "nature's kidneys" since they help purify water.

Some definitions courtesy of Chemical Manufacturers' Association.

Toxicity Testing - Biological testing (usually with an invertebrate, fish or small mammal) to determine the adverse effects, if any, of a chemical, compound or effluent.

Toxicity - The ability of a substance to cause harmful effects.

Toxicology - The study of the adverse effects of chemicals on biological systems.

Treatability Study - Usually performed after the feasibility study alternatives screening to better define the physical parameters needed for technology process options being evaluated for use at the site.

Trichloroethylene - A colorless, nonflammable liquid usually referred to as TCE. A solvent commonly used to wash or degrease industrial equipment, and also used in inks, paints and adhesives. Breaks down fairly easily and quickly into vinyl chloride, a known carcinogen.

TSCA - (see Toxic Substances Control Act.)

TSD - Treatment, storage and/or disposal facility. Refers to any facility which treats, stores or disposes of hazardous wastes.

U.S.C. - United States Code. The federal law.

Underground Storage Tank (UST) - A tank located at least partially underground that is designed to hold gasoline, other petroleum products or chemicals.

Unsaturated Zone - A layer, beneath the surface of the land (usually between the surface and the saturated zone) where some openings are filled with air and some with water.

Vadose Zone - The region above the saturated zone; the area not included in the capillary zone.

Vapor Dispersion - The movement of vapor clouds or plumes in the air due to wind, gravity, spreading and mixing.

Vapor Recovery System - A system by which the volatile gases from gasoline are captured instead of being released into the atmosphere. May be required for gasoline stations in non-attainment areas.

Vapor - The gas given off by substances that are solids or liquids at ordinary atmospheric pressure and temperatures.

Vent - The connection and piping through which gases enter and exit a piece of equipment.

Volatile - Any substance which evaporates quickly.

Volatile Organic Compounds (VOC) - Any organic compound containing carbon which evaporates readily to the atmosphere at room temperatures. VOCs contribute significantly to photochemical smog production and certain health problems.

Waste Minimization - Techniques that reduce the amount of wastes generated during industrial processes. The term is also applied to recycling and other efforts to reduce the amount of wastes.

KELLY AIR FORCE BASE

INSTALLATION RESTORATION PROGRAM

GLOSSARY

In discussing environmental issues with government regulators and military representatives, you may hear terms and acronyms that are unfamiliar to you. Although not comprehensive, this glossary is provided to help you create a common dialogue about environmental, health and safety issues.

Acid - A corrosive solution with a pH less than seven. Vinegar is a common weak acid, battery acid is much stronger.

Acid Rain - Precipitation with acidic qualities caused primarily by industrial combustion of fossil fuels and automobile emissions. Increases acidity in soils, surface waters and forests. Dry forms of acidic particulates may also fall.

Activated Sludge Process - A sewage treatment process by which bacteria that feed on organic wastes are continuously circulated and put in contact with organic waste in the presence of oxygen to increase the rate of decomposition of those wastes.

Acute Effect - An adverse or unhealthy effect on any living organism in which severe symptoms develop rapidly and often subside or quit after the exposure stops.

Acute Toxicity - Adverse or unhealthy effects that result from a single dose or single exposure to a chemical; any poisonous effect produced within a short period of time, usually less than 96 hours. This term normally is used to describe the effects in experimental animals.

Administrative Record - A file containing any information used to make a decision on the selection of a response or cleanup action. The file is available for public review in the information repositories.

Aerated Lagoon - A holding and/or treatment pond which speeds up the natural process of biological decomposition of organic wastes. Aeration (addition of oxygen) stimulates the bacteria that degrade wastes in the lagoon.

Aeration - The act of mixing a liquid with air (oxygen).

Aerobic - A biological process which occurs in the presence of oxygen.

Air Quality Standards - The level of pollutants set by law that may not be exceeded in outside air. Used to determine the amount of pollutants that may be emitted by industry.

Air Stripping - A treatment system that removes, or "strips," volatile organic compounds from contaminated water by forcing an airstream through the water and causing the compounds to evaporate.

Alkalinity - The ability of a substance to neutralize acids. A common alkaline is baking soda.

Ambient Air - Any unconfined portion of the atmosphere; open air; surrounding air.

Anaerobic - A biological process which occurs in the absence of oxygen.

Applicable or Relevant and Appropriate Requirements (ARARS) - Any federal standard requirements, criteria or limitations that are legally applicable or relevant and appropriate requirements under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). State ARARS must be met if they are more stringent than the federal requirements.

Aquifer - An underground rock formation composed of materials such as sand, soil or gravel that can store and supply groundwater to wells and springs. Most aquifers used in the United States are within 1,000 feet of the surface. Once contaminated, it is physically impossible to remove 100 percent of the contaminants from the aquifer. At times, engineers will be forced to simply prevent the floating and dissolved contaminants from moving vertically and horizontally.

Artesian - Subsurface water under pressure stronger than normal atmospheric pressure. If a well is drilled into artesian groundwater the pressure release will cause water to surge upward. The Edwards Aquifer is under artesian pressure.

Assimilative Capacity - The ability of a natural body of water to receive waste waters or toxic materials without harmful effects and without damage to aquatic life or humans who consume the water.

BCT - Best Conventional Pollution Control Technology. BCT refers to those control technologies considered most applicable to specific waste streams.

Benthic Organism - Any of a diverse group of aquatic plants and animals which live on the bottom of marine and fresh bodies of water. The presence or absence of certain benthic organisms can be used as an indicator of water quality.

Bentonite - A naturally occurring clay often used to create a slurry wall or seal a groundwater monitoring well.

Bioaccumulation/Biomagnification - A process where chemicals are retained in body tissue and increase in concentration over time. Biomagnification is the increase of tissue accumulation in species higher in the natural food chain as contaminated food species are eaten.

Bioassay - A method of testing a material's effects on living organisms.

Biochemical Oxygen Demand (BOD) - A measure of the oxygen required to break down organic materials in water. Higher organic loads require larger amounts of oxygen and may reduce the amount of oxygen available for fish and aquatic life below acceptable levels.

Biodegradable - The ability of a substance to be broken down physically and/or chemically by microorganisms. For example, many chemicals, food scraps, cotton, wool and paper are biodegradable; plastics and polyester generally are not.

thought to be most dangerous to human health and the environment. (See CERCLA.)

Superfund Amendments and Reauthorization Act of 1986 (SARA) - The amendments clarified many public participation questions and made federal facilities accountable under the statute. Reauthorization extends funding for five years.

Surface Water - Any visible stream or body of water that is open to the atmosphere.

Survey - The review of records and the examination of physical, sociological, economic and other factors that influence restoration decisions.

Suspended Solids - Solids that either float on the surface or are suspended in water, waste water or other liquids.

Synergism - The interaction of two or more chemicals producing a greater total effect than the sum of their individual effects.

TCLP - (See Toxicity Characteristic Leaching Procedure.)

TDS - Total dissolved solids. The quantity of dissolved material in a given volume of water.

Ten-to-the-minus-sixth (10^{-6}) - Used in risk assessments to refer to the probability of risk. Literally means a chance of one in a million. Similarly, ten-to-the-minus-fifth (10^{-5}) means a probability of one in 100,000, and so on.

Teratogen - A substance that causes abnormal growth and deformities, commonly used in references to fetuses and tumors.

Tertiary Treatment - An enhancement of normal sewage treatment operations to provide water of potable quality by means of further chemical and physical treatment. Highest drinking water standard achieved in the United States.

Title III - Emergency Planning and Community Right-to-Know Act of 1986, (Part of the Superfund Amendments and Reauthorization Act of 1986).

Toxic Substance - A chemical or mixture that may present a risk of injury to health or the environment.

Toxic Waste - A waste which can produce injury if inhaled, swallowed or absorbed through the skin.

Toxic Substances Control Act (TSCA) - Enacted by Congress in 1976 to regulate commerce and protect human health and the environment by requiring testing and necessary use restrictions on certain chemicals and mixtures. Virtually all chemicals, whether or not "toxic," are covered. The EPA can take a variety of regulatory actions governing testing, premanufacture clearance and distribution of chemicals to protect health and the environment from unreasonable risks or harm.

Toxicity Characteristic Leaching Procedure (TCLP) - The TCLP is a test designed to identify wastes likely to leach hazardous concentrations of certain toxic materials into the groundwater as a result of improper management.

for emergency planning and community right-to-know.

Saturated Zone (Zone of Saturation) - The layer beneath the surface of the land in which all openings are filled with water.

Scrubbing - Removal of impurities from a gas stream by spraying a liquid which concentrates the impurities in the liquid waste. A common method of reducing stack air emissions.

Secondary Treatment - The second step in most publicly owned sewage treatment systems in which bacteria consume the organic parts of the waste. This treatment usually removes about 90% of all solids and oxygen-demanding substances.

Sediment - Soil, sand and minerals washed from land into water, usually after rain. Sediments collecting in rivers, reservoirs and harbors can destroy fish and wildlife habitat.

Septic Tank - An underground tank to collect wastes from homes that are not connected to a sewer system. Waste goes from the home to the tank where it is decomposed by bacteria. Solids and dead bacteria settle to the bottom as sludge while the liquid portion flows into the ground through drains. While properly placed and maintained septic systems can effectively treat domestic waste water, others are a major source of groundwater and surface water pollution.

Sludge - The residue (solids and some water) produced as a result of raw or waste water treatment from industrial waste treatment plant operations.

Slurry - A pumpable mixture of solids and fluid.

Solid Waste Management Facility - Any disposal or resource recovery system or component thereof. Any system, program, or facility for resource conservation, and any facility for the treatment of solid wastes.

Solid Waste Reduction (Minimization) - Reducing the amount of materials entering the waste stream by reducing or eliminating the generation of waste. Synonymous with waste reduction. Redesigning products or the patterns of production and consumption, such as using returnable beverage containers, are forms of source reduction.

Solid Waste - As defined under RCRA, solid waste is not always solid. It includes any solid, semi-solid, liquid or contained gaseous, materials discarded from industrial, commercial, mining or agricultural operations, and from community activities. Solid waste includes garbage, construction debris, commercial refuse, sludge from waste treatment plant, water supply treatment plant or air pollution control facility, and other discarded materials.

Solvents - A liquid capable of dissolving another substance; water is the most common solvent. Industrial solvents are cleaning agents and degreasing compounds, sometimes also used as refrigerants and aerosols. Some are suspected of being carcinogenic.

Superfund - Federal legislation requiring EPA to identify, list and clean up abandoned waste sites

Biodiversity - Refers to the variety among living organisms and the ecosystems in which they occur. The term includes the variety at different levels of biological structure, e.g., ecosystems, species, genes.

Bioremediation - The use of living organisms (e.g., bacteria) to clean up oil spills or remove other pollutants from soil, water and waste water.

Biota - All living organisms in a given area.

BTEX - Benzene, toluene, ethylbenzene, and xylene. Organic compounds that are common components of fuel, including jet fuel.

Burial Pits - Disposal sites. Obsolete disposal methods were used to bury materials in unlined ponds, pits, trenches, etc. Many of the pits were larger than football fields. Solvents, waste oils and other chemicals (toxic and non-toxic) were buried in these pits.

Cap - A fairly impermeable seal, usually composed of clay-type soil or a combination of clay soil and synthetic liner, which is placed over a landfill at closure. It serves to minimize leachate volume during biodegradation of the waste by keeping most water from percolating through the landfill. The cap also keeps odors down and animal scavengers from gathering.

Capillary Fringe - The zone immediately above the water table, where water is drawn upward by capillary action.

Carcinogen - Substances likely to cause or contribute to the growth of cancer cells.

CERCLA (pronounced SERK-la) - Comprehensive Environmental Response, Compensation, and Liability Act of 1980, also known as "Superfund." Establishes requirements related to releases of hazardous substances into the environment and cleanup of inactive or abandoned hazardous waste disposal sites.

CFCs - Chlorofluorocarbons. A family of chemicals commonly used in air conditioners and refrigerators as coolants and also as solvents and aerosol propellants. CFCs drift into the upper atmosphere where their chlorine components destroy ozone. Thought to be a major cause of the ozone hole over Antarctica.

CFR - Code of Federal Regulations. A periodic publication of the regulations established by U.S. law.

Chemical Oxygen Demand (COD) - A measure of the oxygen-consuming capacity of inorganic and organic matter. Present in water or waste water. It is expressed as the amount of oxygen consumed from a chemical oxidant in a specific test.

Chlorination - The application of chlorine, to water or waste water, generally for the purpose of disinfection, but frequently for accomplishing other biological or chemical results.

Chronic Effect - An adverse effect on any living organism in which symptoms develop slowly over a long period of time, or recur frequently.

Clean Air Act (CAA) - The Federal Clean Air Act of 1970 and the 1990 Amendments provide regulatory control of both mobile and stationary sources of air pollution.

Clean Water Act - Extensive amendments in 1972 and 1977 replaced the original Federal Water Pollution Control Act of 1948. Goals of this act were to achieve zero discharge of pollutants by 1985 and to restore and maintain the chemical, physical and biological integrity of the nation's waterways. The Act requires establishment of technology-based effluent limitations to regulate discharges from point sources and authorized regulation of non-point sources. It established the National Pollutant Discharge Elimination System (NPDES) which requires a permit before any discharges of a pollutant can be made to U.S. waters. The Act does not regulate underground water unless it affects surface water.

Cleanup - Remedial actions that contain or eliminate pollutants at a site.

Closure - The procedure a landfill operator must go through when a landfill reaches its legal capacity for solid waste. It involves ceasing acceptance of solid waste and placing a cap on the landfill site.

Composite Sample - A series of water samples taken over a given period and weighted by flow race.

Compost - Relatively stable, decomposed organic material, often associated with agriculture or gardening soil enrichment.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) - Authorizes establishment of the Environmental Protection Agency's (EPA) Superfund money. Originally signed into law by the President on Dec. II, 1980, the Act was amended and reauthorized in 1986. Provides basic authority for the President to take response actions with respect to dangers resulting from hazardous substances at disposal or spill sites. Response actions must be performed in accordance with the National Contingency Plan developed by the EPA. Imposes far-reaching liability for costs of cleanup on waste generators, transporters, and current and past owners of disposal sites. Title II provides for $1.6 billion Response Trust Fund generated by petrochemical taxes; however, monies from this fund cannot be used by federal facilities.

Concentration - The relative amount of a substance mixed with another substance. Term is used to express the mass per unit volume of contaminants, usually expressed as parts per million or billion. An example is five ppm of carbon monoxide in air or one milligram per liter (1 mg/l) of iron in water.

Cone of Depression - A lowering in the water table that develops around a pumped well.

Consent Order - Essentially a negotiated document entered into to avoid either litigation or a unilateral enforcement order issued by a state or federal environmental enforcement agency. Both the regulator and the regulated agency agree to the terms of the order issued under authority of the director of the regulatory agency or an administrative law judge.

Construction and Demolition Waste - Waste building materials, dredging materials, tree stumps, and rubble resulting from construction, remodeling, repair and demolition

Waste Disposal Act of 1965, Calls for comprehensive regulation of designated hazardous waste from the time of generation to disposal (cradle to grave). The Environmental Protection Agency regulates generators and transporters and issues permits for treatment, storage and disposal facilities. The EPA has broad enforcement powers including administrative orders, injunctive relief, civil fines and criminal penalties. EPA can reach past waste disposal sites if they are "imminent" hazards to health or environment. Upon EPA approval, states may assume responsibility for permitting and enforcement. Regulation of underground storage tanks was mandated by 1984 amendment.

Responsiveness Summary - A written summary of responses to public inquiries and comments regarding installation environmental activities. Required as part of the remedial investigation and feasibility study process and the Community Activities Plan. It is prepared at the conclusion of the feasibility study public comment period.

Restoration - The application of containment or decontamination technologies to eliminate existing public hazards or to render the property acceptable for conditional or unconditional reuse.

Risk - A measure of the chance that damage to life, health, property and/ or the environment will occur as a result of a hazard.

Risk Assessment - An estimate of the chance that a given risk situation will occur, together with an estimate of the severity of its impact. Risk assessments use specific chemical information plus risk factors.

Risk Communication - The process of exchanging information about levels of health or environmental risks and the significance or meaning of those risks.

Risk Factor - A characteristic (e.g., race, sex, age, obesity) or variable (e.g., smoking, exposure) association with increased chance of toxic effects. Some standard risk factors used in general risk assessment calculations include average breathing rates (20 cubic meters/day), average weight (154 lbs.), and average human life span (70 years).

Rodenticide - A chemical or other material used to destroy rats and other rodents or to prevent them from damaging food, crops, etc.

Safe Drinking Water Act - Established regulatory program in 1974 to ensure safety of the nation's public drinking water and water supplies. Program was designed to establish standards for acceptable levels of contaminants in drinking water, to allow enforcement of these standards by the states, and to protect water supplies from underground injections.

Sanitary Water - Also known as gray water. Water discharged from rest rooms, showers, foods preparation facilities or other nonindustrial operations.

SARA - Superfund Amendments and Reauthorization Act of 1986. Title III of SARA includes provisions

monitoring and reporting activities are of the highest achievable quality.

Radioactive Waste - Any wastes which emit energy as rays, waves or streams of energetic particles. A highly hazardous waste, usually from nuclear reactors, research institutions or hospitals.

Raw Water - Untreated surface or groundwater.

RCRA - (See Resource Conservation and Recovery Act.)

Reactive Hazardous Wastes - Wastes which are normally unstable and readily undergo violent chemical change, but do not explode.

Receiving Waters or Receiving Stream - The stream or body of water into which treated or untreated waste waters are discharged.

Recharge Area - An area of land where there is a net annual transfer of water from the surface to groundwater.

Recommended Maximum Contaminant Level - Levels developed under the Safe Drinking Water Act and applicable drinking water supplies.

Recycling - Reusing materials and objects in original or changed forms, rather than discarding them as wastes.

Reference Dose (RD) - The particular concentration of a chemical which is known to cause health problems. A standard that may also be referred to as the ADI or acceptable daily intake.

Release - Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment of a hazardous or toxic chemical, or extremely hazardous substance.

Remedial Action - The actual construction or clean-up phase of a Superfund site cleanup.

Remedial Action Alternatives - Potential, comprehensive solutions to site problems, composed of one or more remedial action technologies that clean up or mitigate site-specific contamination problems. These alternatives are then developed and evaluated in detail in a feasibility study.

Remedial Investigation - Examination of air, soil, water, biota and facilities to determine concentration levels of pollutants, direction of movement and extent of contamination.

Removal Action - An immediate action taken over the short term to address a release or threatened release of a hazardous substance.

Reportable Quantity (RQ) - Amount of a hazardous or extremely hazardous substance that, if released, must be reported to the local emergency planning commission, the state emergency planning commission, and the Nuclear Regulatory Commission under Section 304 of the Community Right-to-Know Act of 1986.

Residual Risk -The risk associated with pollutants after the application of maximum achievable control technology or MACT.

Resource Conservation and Recovery Act of 1976 (RCRA) - Completely overhauled Solid

operations on houses, commercial buildings and other structures and pavement. May contain lead, asbestos, or other hazardous materials.

Containment - Preventing hazardous substances from migrating laterally and vertically using pit lining, clay caps, encapsulation, etc.

Contaminant - Any substance that degrades an environmental resource or makes the resource unfit or unsafe for its typical use.

Contaminant Standards - Limits on the concentrations of contaminants in water, soil, sediments or air established by federal, state or local law or regulation.

Continuous Discharge - A routine release to the environment that occurs without interruption, except for infrequent shutdowns for maintenance, process changes, etc.

Corrosive - A substance which eats or wears away materials gradually by chemical action.

Cost-Effective Alternative - Reasonable cost alternative that is technologically feasible, reliable and which effectively mitigates and minimizes damage to, and provides adequate protection of, public health, welfare, and the environment.

Cradle-to-Grave or Manifest System - A procedure, called for by EPA, in which hazardous wastes are identified as they are produced and are followed through further treatment, transportation and disposal by a series of permanent, linked, descriptive documents.

Criteria - Descriptive factors taken into account by EPA in setting standards for pollutants. For example, water quality criteria describe the concentration of pollutants that most fish can be exposed to for an hour without showing acute effects.

CWA - (See Clean Water Act.)

Decision Document - The documentation of the process for selecting the preferred alternative for Installation Restoration Program sites.

Deep Well Injection - A process by which waste fluids are injected deep below the surface of the earth.

Defense Environmental Restoration Program - The Department of Defense funding program for the Installation Restoration Program. The money comes out of the Defense Environmental Restoration Account (DERA).

Degradation - Chemical or biological breakdown of a complex compound into a number of simple ones.

Delist - Use of the petition process (1) to have a chemical's toxic designation rescinded, (2) to remove a site from the National Priorities List (NPL), or (3) to exclude a particular waste from regulation even though it is a listed hazardous waste.

Direct Discharge - The release of a waste directly from a facility to the environment through an outlet such as a pipe. (See Indirect discharge.)

Discharge Area - An area of land where there is a net annual transfer of water from the groundwater to

surface water, such as to streams, springs, seeps and wetlands. Surface water and groundwater are highly connected.

Discharge - The release of any waste stream to the environment. Usually refers to the release of a liquid waste into a body of water.

Dispersion Modeling - A mathematical prediction of how a gas or vapor from a discharge or emission source will be distributed in the surrounding environment under given conditions of wind, temperature, humidity and other environmental factors.

Disposal Facility - A landfill, incinerator or other facility which serves to receive waste and dispose of it. The facility may have one, many, or all of a large number of disposal methods available for use. Does not include waste water treatment.

Disposal - The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into the environment (land, surface water, groundwater and air).

Dissolved Oxygen (DO) - Oxygen that is freely available in water and which sustains the lives of fish and other aquatic organisms.

Dose - In terms of monitoring exposure levels, the quantity of a toxic substance to which a person is exposed over a given length of time.

Dose Response - How an organism responds to various amounts of a toxic substance. For example, a small dose of carbon monoxide may cause drowsiness; a large dose can be fatal.

DOT - Department of Transportation.

Dump - A land site where solid waste is deposited in a manner that does not protect the environment. Open dumping is an illegal form of waste disposal.

Ecology - The study of the relationships between all living things and their environment.

Ecosystem - The interacting system of living organisms and their environment.

Effluent Limitations - Limits on the amounts of pollutants which may be discharged by a facility. These limits are calculated so that water quality standards will not be violated even at low stream flows.

Effluent - Wastewater discharged from a point source, such as a pipe.

Emission Standards - Government standards that establish limits on the release of pollutants into the environment (usually in reference to air).

Emission - The release or discharge of a substance into the environment. Generally refers to the release of gases or particulates into the air.

Endangered Species - Animals, plants or other living organisms that are threatened with extinction by man-made or natural changes in their environment.

Environmental Assessment (EA) - A concise public document required by Federal law (NEPA) which

Polychlorinated Biphenyls (PCBs) - A group of toxic, persistent chemicals used as a flame retardant, or in electrical transformers and capacitors for insulating purposes, and in gas pipeline systems as a lubricant. Further sale and new use of PCBS were banned by law in 1979 when it became known that PCBs had problems of persistence (not easily degraded by microorganisms) and toxicity (suspected carcinogen). PCBs bind strongly to soils and move little or not at all in groundwater.

Potable Water - Raw or treated water that is safe for human consumption.

Potentially Responsible Party - Individual or company that is potentially responsible for or has contributed to a spill or other contamination at a Superfund site. Whenever possible, EPA requires these parties to clean up the sites they have contaminated.

POTW - Publicly-owned treatment works. A Municipal or public-service district sewage treatment system.

PPB - (See Parts per Billion.)

PPM - (See Parts per Million.)

PPT - (See Parts per Trillion.)

Preferred Alternative - The remedial alternative that is selected by Kelly AFB and presented in the proposal. After review and comment by regulatory agencies and the public, the preferred alternative may be modified or implemented as originally submitted, based on comment by regulatory agencies and the public. Preferred alternatives also are used in environmental assessments.

Preliminary Assessment - A record search to gather sufficient data to determine if further investigation is warranted.

Pretreatment - Methods used by industry and other non-household sources of waste water to remove, reduce or alter the pollutants in the waste water before it is discharged to a publicly owned treatment works.

Primary Treatment - First stage of waste water treatment in which solids are removed by screening and settling.

Process Wastewater - Any water which comes into contact with any raw material, product, by-product or waste.

Proposed Plan - Public summary of the preferred cleanup strategy, the rationale for the preference, review of alternatives presented in the detailed analysis of the remedial investigation and feasibility study, and explanation of any waivers to cleanup standards that may be proposed; usually accompanied by a fact sheet.

Public Water System - Any water system which regularly supplies piped water to the public for human consumption and serves at least an average of 25 individuals per day for at least 60 days per year, or which has at least 15 service connections.

Public - Citizens directly affected by a site and other interested citizens, parties or organized group.

Quality Assurance/Quality Control - A system of procedures, checks, audits and corrective actions to ensure that all technical, operational,

Parts per Billion (PPB) - A dilution ratio of one ounce in a billion ounces; equal to one drop in a competition-size swimming pool. Roughly equivalent to micrograms per liter (µg/l). For comparison, one ppb is comparable to one second in 11,600 days, or 31.8 years.

Parts per Trillion (PPT) - A dilution ratio of one ounce in a trillion ounces. Roughly equivalent to nanograms per liter (ng/l). For comparison, one ppt is comparable to one second in 32,000 years.

Pathogen - An organism capable of producing disease.

PCBs - (See Polychlorinated Biphenyls.)

Perchloroethylene - A colorless liquid industrial solvent with an odor like chloroform or ether. It is commonly used in the rubber, textile, printing, soap, dry cleaning and pharmaceutical industries.

Permeability - The ease with which water, or other fluid, passes through a substance.

Permit - A legal document which must be obtained from state and/or federal authorities by the owner or operator prior to operation of any facility, establishment, landfill or industrial complex which proposes to discharge any wastes to the environment. It contains a detailed description of the proposed activity and operating procedures which must meet the rules and regulations specified by law. The permitting process includes provisions for public comment.

Pesticide - Substance intended to repel, kill or reduce the harmful effects of any pest.

pH - The measure of acidity or alkalinity of a chemical solution, from 0-14. Neutral water, for example, has a pH of seven. Acids have a pH of less than seven, bases (alkaline) greater than seven.

Plume - A concentration of contaminants in air or water usually extending from a distinct source or hazardous waste site.

Point Source - Any distinct discharge of pollutants from pipes, ditches, containers, wells, stacks, etc.

Pollutant - A natural or man-made substance that degrades water quality to such an extent that the water is not suitable for agricultural, industrial or domestic use.

Pollution Prevention - The active process of identifying areas, processes and activities which create excessive waste and which can be substituted, altered or eliminated to prevent waste generation. Preventing the creation of waste prevents environmental harm.

Pollution - The presence of materials in water, soil or air of such character and in such amounts that the natural quality of the environment is degraded. The usefulness of a natural resource may be impaired or it may be made offensive to the senses of sight, taste or smell, and a health hazard may be created for humans or other organisms.

provides evidence and analysis of the environmental impacts of an action (construction, mission changes, etc.). Describes proposed action and alternatives to that action. Study will result in a "Finding of No Significant Impact" or determine a federal activity would significantly affect the environment and requires a more detailed Environmental Impact Statement (EIS) be prepared.

Environmental Impact Statement (EIS) - A document prepared by or for EPA which identifies and analyzes, in detail, environmental impacts of a proposed action. As a tool for decision-making, it describes positive and negative effects and alternatives for an undertaking such as development of a wildlife area. It is prepared in accordance with the National Environmental Policy Act of 1969 and Council on Environmental Quality Regulations (40 Code of Federal Regulations 1500-1508).

Environmental Carrying Capacity - The alternate uses a site is capable of supporting, especially after remedial actions. Appropriate land use following an environmental change.

Environmental Protection Committee - Kelly AFB committee chaired by the Air Logistics Center vice commander that reviews all environmental assessments and environmental impact statements. Acts as a multi-functional consulting body. Provides base-wide policy and coordination on environmental issues.

EPA - United States Environmental Protection Agency.

EPCRA - Emergency Planning and Community Right-to-Know Act of 1986 (SARA Title III).

Epidemiology - The field of medical science dealing with the relationships of various factors to the occurrence of disease in humans.

Erosion - The wearing away of land by wind or water which is increased by land clearing practices.

Estuary - Waters between fresh water rivers and near-shore ocean waters where fresh and salt water mix. These areas include bays, mouths of rivers, salt marshes and lagoons and are influenced by tides and river flow. Estuaries provide valuable habitat for marine life, birds and other wildlife.

Explosive Limits (chemical) - The amounts of vapor in air that form explosive mixtures. Explosive limits are expressed as lower and upper limits and give the range of vapor concentrations in air that will explode if an ignition source is present.

Exposure - Radiation or pollutants that come into contact with the body and present a potential health threat. The most common routes of exposure are through the skin, mouth or by inhalation.

Exposure Assessment - A determination of potential human exposure to and the resulting effects of contaminants on public health and welfare.

Extraction Wells - Wells used to pump contaminated water to the surface for treatment.

Feasibility Study - The development, description, evaluation and selection of remedial action alternatives.

Flammable - Describes any material that can be ignited easily and that will burn rapidly.

Flare - A control device that burns hazardous materials to prevent them from being released to the environment. Flares may operate continuously or intermittently and are usually found on top of a stack.

Flash Point - The lowest temperature at which evaporation of a substance produces enough vapor to form an ignitable mixture with air.

Floodplain - Mostly level land along rivers and streams that may be submerged by floodwater. A 100-year floodplain is an area which can be expected to flood once in every 100 years.

Freedom of Information Act (FOIA) - Federal and state laws which guarantee citizens access to documents in the public record.

Fugitive Emissions - Air pollutants released to the air other than those from stacks or vents. Typically small releases from leaks in plant equipment such as valves, pump seals, flanges, sampling connections, etc.

Fungicide - A pesticide used to control or destroy fungi.

Garbage - Food waste (animal and vegetable) resulting from the handling, storage, packaging, sale, preparation, cooking and serving of foods.

Generator - A facility or mobile source that emits pollutants into the air or releases hazardous wastes into water or soil.

Grab Sample - A single sample of soil or of water taken without regard to time or flow.

Greenhouse Effect - The warming of the Earth's atmosphere attributed to a build-up of carbon dioxide and other so-called "greenhouse gases."

Ground Cover - Plants grown to keep soil from eroding.

Groundwater - Water found below the surface of the land, usually in porous rock formations. Groundwater is the source of water found in wells and springs. Geologic units that yield appreciable amounts of water to wells are termed aquifers; intervening units with little or no water are called aquitards or confining units. Top of the zone of complete saturation is called the water table.

Hazardous Chemical - EPA's designation for any hazardous material that requires an MSDS (See Material Safety Data Sheet) under OSHA's Hazard Communication Standard. Such substances are capable of producing adverse physical effects (fire, explosion, etc.) or adverse health effects (cancer, dermatitis, etc.)

Hazardous Waste Landfill - An excavated or engineered area at which hazardous waste is deposited and covered. Proper protection of the environment from the materials to be deposited in such a landfill requires careful site selection, the cataloging of types of wastes, good

by EPA for an air pollutant (not covered by NAAQS) that may cause an increase in deaths or serious, irreversible or incapacitating illness. Primary standards are designed to protect human health, secondary standards to protect public welfare.

Neutralization - The chemical process in which the acidic or basic characteristics of a fluid are changed to those of water (pH = 7).

NIMBY - "Not In My Back Yard." A phrase which describes a common, negative public reaction to any industrial or waste facility siting near a home, water supply or community.

NOAEL OR NOEL - No Observed Adverse Effect Level or No Observed Effect Level. A level of acceptable exposure which does not cause observable harm.

Non-attainment - Refers to areas of the United States that have not set air standards for human health by deadlines set in the Clean Air Act.

Non-Point Source - Any source of pollution not associated with a distinct discharge point. Includes sources such as rainwater, runoff from agricultural lands, industrial sites, parking lots and timber operations, as well as escaping gases from pipes and fittings.

NPDES- (See National Pollutant Discharge Elimination System).

On-site - On the same, or adjacent, property.

Open Dump - A land site where solid waste is disposed in a manner that does not protect the environment. Problems associated with open dumps include multiplication of disease-carrying organisms, fires, air pollution, water pollution, unsightliness, wasted land, pests and accidents to people, such as cuts and falls.

Organism - Any living being, whether plant, animal or microbial.

OSHA - Occupational Safety and Health Administration.

OSWER - Office of Solid Waste and Emergency Response of EPA.

Oxidant - A substance, often containing oxygen, which reacts chemically with other materials to produce new substances. Oxidants are the primary ingredients in photochemical smog.

Ozone - Three molecule oxygen compound (0_3) found in two layers of the earth's atmosphere. A layer of beneficial ozone occurs at seven to ten miles above the surface and shields the earth from ultraviolet light. Harmful ozone (in high concentrations) occurs at the surface as a result of a reaction between byproducts of fossil fuel combustion and sunlight. High levels of near-surface ozone may have harmful health effects on humans and the environment.

Particulates - Fine liquid or solid particles such as dust, smoke, mist or smog found in air emissions.

Parts per Million (PPM) - A dilution ratio of one ounce in a million ounces. Roughly equivalent to milligrams per liter (mg/l). For comparison, one ppm is comparable to one second in 11.6 days.

a number of other organisms. Most are beneficial, but some produce disease. Others are involved in composting and sewage treatment.

Migration - Movement of contaminants by means of air, surface water or groundwater.

Milligrams per liter (mg/l) - A measure of concentration roughly equivalent to parts per million (ppm).

Minimization - A comprehensive program to minimize, eliminate or reduce wastes. Usually applied to wastes at their point of origin.

Mitigation - Measures taken to reduce adverse or unhealthy effects on the environment.

Monitoring Wells - Special wells drilled at specific locations on or off a hazardous waste site. Purpose of the wells is to sample groundwater at selected depths to determine the direction the water is flowing and the types and amounts of any contaminants present.

Morbidity - Rate of incidence of disease.

Mortality - Death rate.

Mutagenicity - The property of a chemical that causes the genetic characteristics of an organism to change in such a way that future generations are permanently affected.

National Priorities List (NPL) - A list of sites ranked in order of priority for hazardous waste cleanup under Superfund.

National Response Center (NRC) - A U.S. government communications center operated by the U.S. Coast Guard for the report of spills and other unexpected releases to the environment. The NRC relays information to the appropriate federal agency.

National Environmental Policy Act of 1969 (NEPA) - Public Law 91-90, which declares a national policy that encourages productive and enjoyable harmony between man and his environment, establishes the Council on Environmental Quality and states the requirements for environmental impact statements.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP) - Codified in 40 CFR 300. The NCP establishes procedures and standards for responding to releases of hazardous substances, pollutants, and contaminants.

National Pollutant Discharge Elimination System (NPDES) - The primary permitting program under the Clean Water Act which regulates all discharges to surface water in the United States.

National Priorities List - Environmental Protection Agency's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial response using money from the Trust Fund. The list is based primarily on the score a site receives on the Hazard Ranking System. EPA is required to update the list at least once a year. None of Kelly's sites are on the National Priorities List.

NESHAP - National Emissions Standards for Hazardous Air Pollutants. Emission standards set

design, proper operation, leachate collection and treatment, and thorough final closure.

Hazardous Wastes - Solid wastes that pose fire hazards, are highly reactive, corrosive or explosive, or otherwise pose threats to human health or the environment. A solid waste is a hazardous waste if it is not specifically excluded from regulation and it meets any of the following criteria:

- It is specifically listed as a hazardous waste by EPA;
- It exhibits one or more of the characteristics of hazardous wastes (ignitability, corrosiveness, reactivity and/or toxicity);
- It is created by the treatment of hazardous waste; or
- It is contained in a hazardous waste.

Hazardous Substance - Any material that poses a threat to public health or the environment. Typical hazardous substances are materials that are toxic, corrosive, ignitable, explosive, chemically reactive or carcinogenic.

Heavy Metal - Metallic elements with high atomic weights. Most can damage organisms at low concentrations and tend to accumulate in the food chain. Examples include: chromium, lead, mercury, cadmium, copper, zinc and iron. Some are believed to cause cancer or abnormal growth.

Herbicide - A chemical that controls or kills plants such as weeds and grasses. Some herbicides are specifically designed to kill certain types of plants while others will kill all plants.

HSWA - The federal Hazardous and Solid Waste Amendments. The 1984 amendments to RCRA which required phasing out land disposal of hazardous waste. Some of the other mandates of this strict law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.

Hydraulic Gradient - In general, the direction of groundwater flow due to changes in the depth of the water table.

Hydrocarbon - A chemical substance derived from living organisms that contains primarily hydrogen and carbon. Hydrocarbons contribute to air pollution problems like smog.

Hydrology - Science dealing with the properties, movement and effects of water on the Earth's surface, in the soil and rocks below and in the atmosphere.

Impervious - A material that does not allow another substance to penetrate or pass through.

Impoundment - A body of water created by a dam, dike, floodgate or other barrier.

In Situ Treatment - Treatment of soils or groundwater in place; pumping or excavation is not required.

Incineration - The burning of solid, liquid, or gaseous combustible wastes by controlled flame in an enclosed compartment. Hazardous organic compounds are burned and converted to carbon dioxide and

water and perhaps other gases if combustion is not complete. Burning detoxifies the incinerated organics, reduces the volume of waste and converts wastes to solids by vaporizing water and other liquids in the wastes. The residue ash produced contains little or no combustible material. It may contain some hazardous material, such as noncombustible heavy metals, concentrated from the original waste.

Incinerator - A device for the routine burning of waste materials using controlled flame combustion.

Incompatible Waste - A waste unsuitable for mixing with another waste or material. These may react to form a hazard.

Indirect Discharge - The introduction of a waste to a publicly owned sewage system for treatment before release into the environment. Facilities which use indirect discharge often must pre-treat the waste before sending it to the sewage treatment plant.

Industrial Waste - Unwanted materials produced in or eliminated from an industrial operation. They may be categorized under a variety of headings, such as liquid wastes, sludge wastes, solid wastes and may include hazardous wastes.

Information Repository - Files containing current information, technical reports and reference documents. Kelly AFB's Information Repositories are located in the science and technology section of the Main San Antonio Public Library and at the Kelly AFB Library.

Installation Restoration Program - Department of Defense program that identifies and cleans contamination from past hazardous waste disposal sites on present or former military-owned property.

Interagency Agreement - An agreement between the U. S. Environmental Protection Agency and federal facilities as required by the 1986 Superfund amendments for the expeditious cleanup of National Priorities List sites. States are encouraged to be a party to these agreements.

Irritant - A substance which can cause irritation of the skin, eyes or respiratory system. Effects may be acute from a single high-level exposure, or chronic from repeated low-level exposures. Some examples of irritants are chlorine, nitrogen dioxide and nitric acid.

JP-4/JP-8 -A kerosene-like fuel for jet engines.

Karst - A geologic formation of irregular limestone deposits that contain sinks, underground streams and caverns.

Lagoon - A shallow pond where sunlight, bacterial action and oxygen work to purify waste water.

Land Ban - Mandated by the 1984 amendments to RCRA, a phaseout of land disposal of most untreated hazardous wastes.

Landfill - A method for final disposal of solid waste on land. The refuse is spread and compacted and a cover of earth applied so that effects on the environment (including public health and safety) are minimized. Under current regulations, landfills are required to have liners and leachate treatment systems to prevent contamination of groundwater and surface waters.

- **Municipal** - A landfill which disposes of domestic waste including garbage, paper, etc. This waste may include toxins that are used in the home, such as insect sprays and powders, engine oil, paints, paint thinner and weed killers.
- **Industrial** - A landfill which disposes of non-hazardous industrial wastes.

LC 50 - Lethal Concentration. A concentration of a pollutant or effluent at which 50% of the test organisms die. Common measure of acute toxicity.

LD 50 - Lethal Dose. The dose of a toxicant that will kill 50% of test organisms within a designated period of time. The lower the LD 50, the more toxic the compound.

Leachate - Liquid (mainly water) that percolates through a landfill and has picked up dissolved, suspended and/or microbial contaminants from the waste. Leachate can be compared to coffee where water has percolated through the ground coffee and filter. Leaching may result in hazardous substances entering soil, surface water or groundwater.

Liner - Structure of natural clay or manufactured material (plastic) which serves as a barrier to restrict leachate from reaching or mixing with groundwater in landfills, lagoons, etc.

Long-Term Monitoring - A program of water, soil or sediment analysis intended to track migration of contaminants.

Manifest System - Tracking of hazardous waste from "cradle to grave" (generation through disposal), with accompanying documents known as "manifests."

Material Safety Data Sheet (MSDS) - Printed material concerning a hazardous chemical, or Extremely Hazardous Substance, including its physical properties, hazards to personnel, fire and explosion potential. safe handling recommendation, health effects, fire fighting techniques, reactivity and proper disposal. Originally established for employee safety by OSHA.

Maximum Contaminant Level (MCL) - The maximum level of certain contaminants permitted in drinking water supplied by a public water system as set by EPA under the federal Safe Drinking Water Act.

Maximum Contaminant Level Goal (MCLG) - The maximum level of a contaminant that is associated with no adverse health effects from drinking water containing that contaminant over a lifetime. For chemicals believed to cause cancer, the MCLGs are set at zero. MCLGs are not enforceable, but are ideal, health-based goals which are set in the National Primary Drinking Water Standards developed by EPA. MCLs are set as close to MCLGs as possible, considering costs and technology.

Metal Plating - An electrically driven process that coats metal objects with a new layer of plating metal.

Microorganisms - Generally, all living things that are microscopic in size, including bacteria, yeasts, simple fungi, algae, protozoans and

KELLY AFB RESTORATION ADVISORY BOARD

PUBLIC CONTACT PREFERENCES

All members of the Restoration Advisory Board must be available to the public to answer questions and to relay ideas and concerns from the public to the other board members. To ensure public access, the names, addresses and phone numbers of Restoration Advisory Board members will be made available to the public in the Information Repositories, via direct mailouts and newspaper advertisements.

Please indicate below how you would like this information listed.

How would you like your name to appear?

_____

Do you wish to include an affiliation with a community or environmental group, government agency, employer, etc.? If so, please list:

_____
_____
_____

What address do you want to use? Please include the full address and zip code:

_____
_____
_____
_____

What telephone number or numbers do you want to use? Please include the area code and whether the number is at work or home and the days and times you can be reached at the numbers:

_____
_____
_____

Do you want to include a fax number or computer address, such as on the Internet? If so, please list:

_____
_____

If you have selected an alternate, please provide that person's name, address and phone number. This information will not be released to the public without prior approval of the alternate.

_____
_____
_____
_____
_____

Kelly Air Force Base

Restoration Advisory Board Charter

I. Name

A. This organization shall be known as the Kelly Air Force Base Installation Restoration Program Restoration Advisory Board. The Kelly Restoration Advisory Board will fulfill all requirements of 10 U.S.C. 2705(c) for Technical Review Committees at U.S. Department of Defense installations.

B. The Restoration Advisory Board charter, herein referred to as "the Charter," is entered into by Kelly Air Force Base and the Restoration Advisory Board.

II. Purpose and Function of the Restoration Advisory Board

A. The purpose of the Restoration Advisory Board is to ensure public input into the planning and implementation of environmental restoration activities at Kelly Air Force Base. Board Members promote community awareness and obtain constructive community review and comment on environmental restoration actions to accelerate the overall cleanup and potential community reuse of portions of Kelly Air Force Base. The Restoration Advisory Board will facilitate communication and disseminate information about the Installation Restoration Program; ensure opinions about environmental restoration reflect diverse interests within the community by providing an opportunity for comment on actions and proposed activities taken by Kelly Air Force Base under the Installation Restoration Program; and facilitate regulatory and public participation consistent with applicable laws. The Restoration Advisory Board serves in an advisory capacity to Kelly Air Force Base, the U.S. Environmental Protection Agency (Region 6), and the Texas Natural Resource Conservation Commission.

B. Kelly Air Force Base shall consult with and seek the advice of the Board Members on the following issues:

a. Identifying environmental restoration activities and projects at Kelly Air Force Base.

b. Monitoring progress on these activities and projects.

c. Collecting information regarding restoration priorities at Kelly Air Force Base.

d. Addressing land use, level of restoration, acceptable risk and waste management and technology development issues related to environmental restoration at Kelly Air Force Base.

e. Developing environmental restoration strategies for Kelly Air Force Base.

C. The Air Force has developed a Public Involvement Plan which outlines the community involvement program. The Restoration Advisory Board supplements the community involvement program. A copy of the plan is available at the information repositories established at the

San Antonio Central Library and the Kelly Air Force Base Library.

III. Basis and Authority for Charter

The basis and authority for this charter are contained in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, particularly Sections 120(a), 120(f), and 121(f), and 10 U.S.C. 2705, enacted by Section 211 of SARA.

IV. Membership

A. Individual community Members must reside or work in Bexar County or currently work or live on Kelly Air Force Base.

B. Members shall serve without compensation. All expenses incident to routine travel and review inputs shall be borne by the respective Members or their organizations. Subject to the availability of funds, Kelly Air Force Base will fund per diem and travel expenses for Board Members attending training courses or seminars on environmentally-related matters relevant to Members' duties on the Board.

C. Members are expected to attend all Restoration Advisory Board meetings or send an alternate. If a Member fails to attend or send an alternate to two consecutive meetings, the Restoration Advisory Board on a majority vote may revoke the membership of the absent Member.

D. Members unable to continue to fully participate shall submit their resignations in writing or by orally notifying either of the Restoration Advisory Board co-chairs. Resigning Members may nominate new Members to replace them for a full two-year term.

E. Members should be willing to promote public input into the planning and implementation of environmental restoration activities at Kelly Air Force Base and to communicate with the local community members and interest groups concerned with specific base cleanup issues. Members will serve as a direct and reliable conduit for information flow to and from the community. To improve communication between the public and Restoration Advisory Board, Members' names, addresses and telephone numbers will be made available to the public and listed in meeting minutes.

F. Government agencies, community groups, citizens, and special interest groups may apply for membership to the Restoration Advisory Board. Once accepted to the Restoration Advisory Board, a term of two (2) years is required. After two years, Members may continue to serve additional two-year terms, if nominated and appointed, until the Restoration Advisory Board is terminated (as long as they continue to meet the criteria stated in Section IV of this Charter). Additional membership applications can be accepted at any time; however, priority will be given those applicants who clearly enhance the diverse nature of the membership. Applications are approved by a majority vote of the Restoration Advisory Board Members present. Applicants must be present at the meeting at which the vote is taken.

V. Restoration Advisory Board Structure

A. The Restoration Advisory Board shall be co-chaired by the San Antonio Air Logistics Center Director of Environmental Management and a community member. The responsibility for presiding over each meeting will be alternated between Co-chairs. The Co-chairs or their alternates should attend all meetings and ensure that all Restoration Advisory Board Members have an opportunity to provide input into

the planning and implementation of environmental activities.

B. The Community Co-chair will be selected by a majority vote of the Restoration Advisory Board community Members. The alternate for the Community Co-chair shall also be designated by the community Members of the Board by a majority vote. The Restoration Advisory Board Community Co-chair will serve a 12-month term. A Co-chair may serve more than one term, if approved by the Restoration Advisory Board community Members.

C. The Restoration Advisory Board membership is responsible for terminating the Community Co-chair if that person is found to be ineffective or detrimental to the progress of the Restoration Advisory Board. Co-chair removal is determined by majority vote of the Restoration Advisory Board community Members present at the meeting following the one at which removal is proposed.

D. The Restoration Advisory Board shall meet quarterly at formally advertised times and locations, preferably at an off-base location. More frequent formal meetings may be held, if deemed necessary by the Restoration Advisory Board. The minimum number of members required to be present before the Board can transact business is 50 percent of the membership.

E. Agenda items will be compiled by the Co-chairs. Suggested topics from Restoration Advisory Board Members and Kelly Air Force Base staff will be given to the Co-chairs not later than two (2) weeks prior to the meeting. Base personnel shall be responsible for providing written notification to all Restoration Advisory Board Members of the upcoming agenda, date, time, and place of the scheduled Restoration Advisory Board meetings. All Restoration Advisory Board meetings will be open to the general public and to the news media.

F. Base personnel shall be responsible for recording and disseminating meeting minutes in both English and Spanish. A written list of attendees at each meeting will be recorded and incorporated into meeting minutes. Action items will be included in the minutes for the Restoration Advisory Board meeting at which they are assigned. Progress on each action item will be briefed at each Restoration Advisory Board meeting. Until an action item is closed, the written response/progress will be included in meeting minutes.

G. A copy of the Restoration Advisory Board meeting minutes will be sent to all Restoration Advisory Board Members and will be available for public review in the information repositories established at the San Antonio Central Library and the Kelly Air Force Base Library.

H. In order to ensure public input into the planning and implementation of environmental restoration activities, Restoration Advisory Board Members will be asked to review and comment on various environmental restoration documents. Restoration Advisory Board Members should submit any written comments to either the Community Co-chair or individually to the base community involvement coordinator on the subject documents within the time frame specified (30-60 days). The Community Co-chair will consolidate comments from the Members who wish to have him submit them on their behalf. In addition, Restoration Advisory Board Members are encouraged to participate in the mandatory public meetings during the 30-day public comment period on Proposed Plans.

I. Final documents, Member's comments reviewed by the Restoration Advisory Board, responses to action items, and Restoration Advisory Board meeting minutes will become part of the Administrative Record.

J. Kelly Air Force Base has established two

information repositories for all public documents relating to restoration activities. These repositories are located at the San Antonio Central Library and the Kelly Air Force Base Library. Board Members are authorized access to any documents, studies, or information which have been placed in the public repositories or distributed at Restoration Advisory Board meetings. In addition, the Kelly Air Force Base Community Involvement Coordinator will make available to the Restoration Advisory Board Members three complete copies of draft preliminary assessment/site investigation, remedial investigation, focused feasibility study, and feasibility study documents for review and/or dissemination at the same time they are provided to state and federal regulators. One copy of all other documents will be available through the Community Involvement Coordinator at the same time they are provided to the regulators.

K. In keeping with the intent of the Emergency Planning and Community Right-To-Know Act and other federal environmental acts, the Restoration Advisory Board, at its discretion, may appoint a committee to be notified via telephone by Kelly Air Force Base personnel of any reportable releases or significant environmental incidents involving hazardous substances. Such notification will occur as soon as practical after regulatory agencies have been notified. In addition, a listing of any reportable releases or incidents as described above and a summary of remedial actions taken or planned will be made available to Members at the Restoration Advisory Board meeting following the release or incident. The Restoration Advisory Board will be notified of all reportable spills prior to a review of the meeting minutes. To ensure that proper focus on Installation Restoration Program activities is maintained, any discussion of a release or incident will be tabled until all other agenda topics have been addressed.

VI. Effective Date and Amendments

A. The effective date of this Charter shall be the date the Base and Community Co-Chairs sign this Charter.

B. This Charter may be amended by a two-thirds majority vote of the Members present at the meeting following the one in which the amendment was proposed. Amendments must be consistent with Kelly Air Force Base agreements with state and federal regulatory agencies and statutes stated in Section II of the Charter (Basis and Authority of Charter).

VII. Termination

This Charter will be terminated upon completion of requirements as stated in applicable state and federal agreements. However, after implementation of the final remedial design, it may be terminated earlier upon a two-thirds majority vote of the Restoration Advisory Board membership.

VIII. Signatories to the Restoration Advisory Board Charter

IN WITNESS WHEREOF, we have set our hand this 11th day of December, 1995.

Allan Hagelthorn, Restoration Advisory Board Community Co-chair

Larry Bailey, San Antonio Air Logistics Center Director of Environmental Management, Base Co-chair

Mr. Bailey,

Some discussion points to remember for this evening:

1. The RAB charter was changed to correct an error. The reference to 211 of CERCLA 211 in section III was changed to 211 of SARA. All RAB members have copies of the corrected charter in their folders.

2. We need each RAB member to tell us how they want their names, addresses and phone numbers to appear in the public listings. A special form has been provided in the folders that they should fill out and return to us this evening.

3. We need to schedule a tour of selected IRP sites and cleanup facilities in addition to the next regular meeting. Might have to offer several tours to meet everyone's needs.

4. News media. We do not know if any media will show up tonight. In any case, we need to let the RAB members know that they can call upon Kelly's public affairs officers for assistance in talking to the news media. This is strictly voluntary, but we would be happy to help anyone in preparing for or conducting a media interview.

A copy of the handout materials is attached.

Mike Estrada

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE