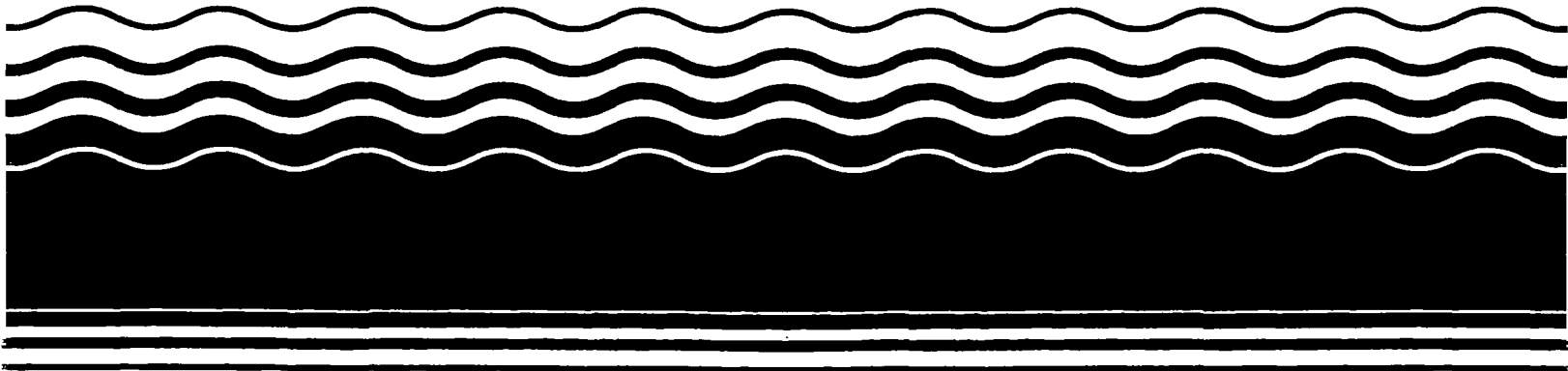


PB95-964415
EPA/ROD/R08-95/111
March 1996

EPA Superfund
Record of Decision:

F. E. Warren Air Force Base,
Operable Unit 5, Area 2, WY
11/3/1994



DECLARATION FOR THE RECORD OF DECISION FIRE PROTECTION TRAINING AREA 2 , OPERABLE UNIT 5

1.0 SITE NAME AND LOCATION

F. E. Warren Air Force Base
Cheyenne, Wyoming

2.0 STATEMENT OF BASIS AND PURPOSE

The selected remedy for Operable Unit 5 (OU5), Fire Protection Training Area 2 (FPTA2), at F.E. Warren Air Force Base (Base), in Cheyenne, Wyoming is NO ACTION. The selected action, the second at the Base, was chosen in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The selected remedy addresses only risks associated with soils at OU5, FPTA2. This decision is based on the Administrative Record for the site. The United States Environmental Protection Agency (EPA) and State of Wyoming Department of Environmental Quality (WDEQ), as oversight agencies, concur with the selected remedy. The United States Air Force is the lead agency for the site.

3.0 DESCRIPTION OF SELECTED REMEDY

The selected remedy for OU5, FPTA2 is that no remedial action is required. OU5 is the second of ten operable units to be investigated under terms of the Federal Facility Agreement (FFA). The others are: OU1 - Spill Sites; OU2 - Facility Ground water; OU3 - Landfills 3 and 6; OU4 - Acid Dry Wells; OU 6 - Open Burning/Open Detonation Area; OU7 - Firing Range(s); OU 8- Landfill 5; OU9- Landfills 2 and 4; and OU10- Landfill 7 and Fire Protection Training Area 1. All of the investigations are being conducted in accordance with the FFA. It is anticipated that the Record of Decision (ROD) for OU2 will be issued after the remedial investigation (RI) has been completed for the other operable units.

4.0 DECLARATION STATEMENT

The United States Air Force (USAF) has determined, with the concurrence of the Environmental Protection Agency (EPA), and the State of Wyoming (WDEQ), that no remedial action is required at the FPTA 2 area. The Baseline Risk Assessment (BRA) conducted in 1993, as part of the remedial investigation concluded that contaminants left in the soil pose no significant risk to human health or the environment. The BRA did not address ground water. Potential impact to ground water from FPTA 2 will be determined under OU2. Additional discussions regarding considerations made in arriving at this decision are contained in the Decision Summary for the Record of Decision - Fire Protection Training Area 2, Operable Unit 5 and the Responsiveness Summary, Record of Decision - Fire Protection Training Area 2, Operable Unit 5 which are attached to this declaration and are incorporated herein by reference.

CERCLA Section 121(c), 42 U.S.C. Section 9621(c), requires a five-year review in the event that hazardous substances, pollutants or contaminants remain on site. The USAF will conduct a review five years after issuance of this ROD.

5.0 SIGNATURE OF AGENCY ACCEPTANCE OF REMEDY (EPA)

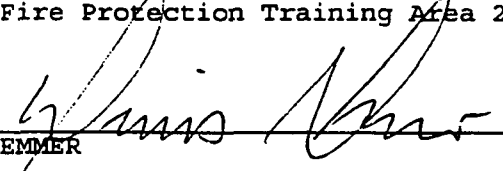
The undersigned representative concurs with this Record of Decision for Operable Unit 5, Fire Protection Training Area 2, at F. E. Warren AFB, Wyoming.

W. Yellowtail
WILLIAM P. YELLOWTAIL
Regional Administrator
EPA Region VIII

11/3/94
Date

5.0 SIGNATURE OF AGENCY ACCEPTANCE OF REMEDY (WDEQ)

The undersigned representative concurs with this Record of Decision for Operable Unit 5, Fire Protection Training Area 2, at F. E. Warren AFB, Wyoming.



DENNIS HEMMER
Director
Wyoming Department of Environmental Quality

11-4-94
Date

5.0 SIGNATURE OF AGENCY ACCEPTANCE OF REMEDY (USAF)

The undersigned representative concurs with this Record of Decision for Operable Unit 5, Fire Protection Training Area 2, at F. E. Warren AFB, Wyoming.



PATRICK P. CARUANA, LT GEN, USAF
Air Force Space Command
Peterson AFB CO

27 June 95
Date

DECISION SUMMARY FOR THE RECORD OF DECISION FIRE PROTECTION TRAINING AREA 2 , OPERABLE UNIT 5

1.0 SITE NAME, LOCATION, AND DESCRIPTION

F. E. Warren Air Force Base (Base), occupies approximately 5,866 acres immediately adjacent to the west side of the City of Cheyenne, Wyoming (Figure 1-Base Map).

The Base was placed on the National Priority List on February 21, 1990. Historically, the Base has served a number of military functions, including; cavalry outpost, quartermaster depot and intercontinental ballistic missile operations base. Operations began at the U. S. Army outpost named Fort D. A. Russell in 1867. The name was changed to Fort F. E. Warren in 1930. The Base was a major training facility during and after World War II. Fort F. E. Warren was transferred to the newly formed U. S. Air Force in 1947 and was subsequently named F. E. Warren Air Force Base. The Base underwent extensive renovation after World War II. The majority of the Army training facilities were torn down and not replaced. Construction since that time has centered on facilities for Air Force operations. Beginning in 1958, F. E. Warren Air Force Base became a Strategic Air Command (SAC) base. Since then, F. E. Warren Air Force Base has served as an operations center for, first, the Atlas Intercontinental Ballistic Missile (ICBM), followed by the Minuteman I and III and finally, the Peacekeeper (MX) ICBMs. The Base was part of Air Combat Command (ACC) from 1992 to 1993, and in July 1993, became part of Space Command.

F. E. Warren Air Force Base is bordered by agricultural land and rural or suburban residential areas. The Base contains 831 residential housing units and several unaccompanied personnel housing units (barracks), along with the services required by residents. The nearest residences to OUS, FPTA2, are in Carlin Heights, approximately 1,700 feet to the south; in "Sergeant's Row", approximately 2,000 feet to the northeast; and four unaccompanied-enlisted-personnel housing units approximately 1,500 feet to the southwest.

2.0 SITE HISTORY AND ENFORCEMENT ACTIVITIES

Operable Unit 5 (OUS), Fire Protection Training Area 2 (FPTA2) is bounded by Missouri Avenue, Old Glory Road, and Pronghorn Road. FPTA2 is about a quarter of a mile south of Crow Creek (Figure 2). Flammable substances such as waste oils, solvents, gasoline, and aviation fuel were used in the fire training exercises. During each training exercise, approximately 300-400 gallons of flammable liquids were poured on the ground in circular bermed area, ignited and then extinguished. From 1965 to 1974, various waste flammable liquids were used in the training exercises. In contrast, from 1975 to 1989, JP-4 (jet fuel) was used as the primary flammable liquid.

On September 26, 1991, a Federal Facility Agreement (FFA) was signed between the USAF, EPA, and WDEQ. The FFA is required by Section 120 of CERCLA. The FFA provides the framework for EPA and WDEQ oversight of continuing remedial investigations at the Base and further identifies USAF investigation activities and schedules. F. E. Warren Air Force Base submits work plans and reports to EPA and WDEQ for review and concurrence, in accordance with the FFA.

OUS is the second of ten operable units for which RODs will be prepared.

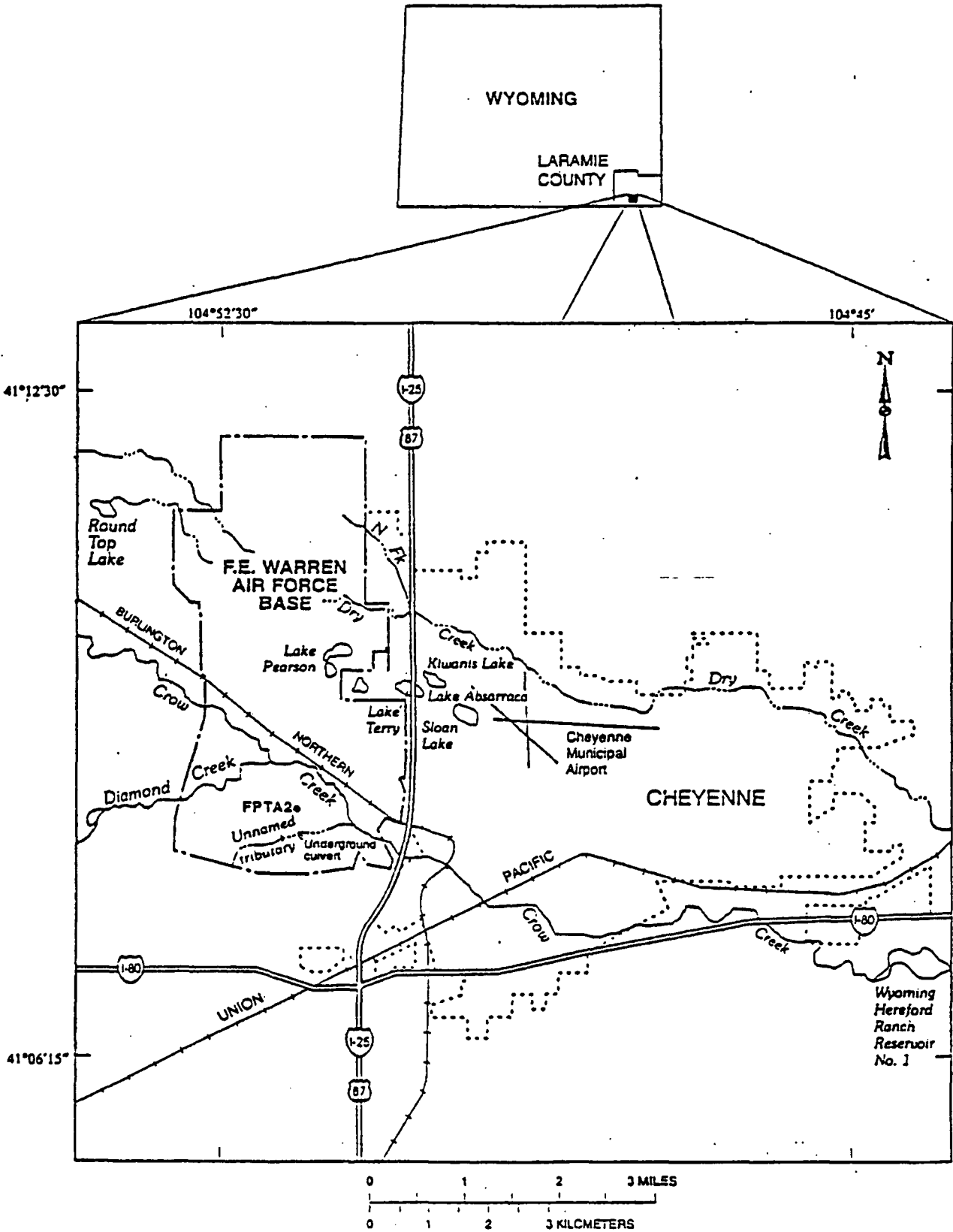


Figure 1

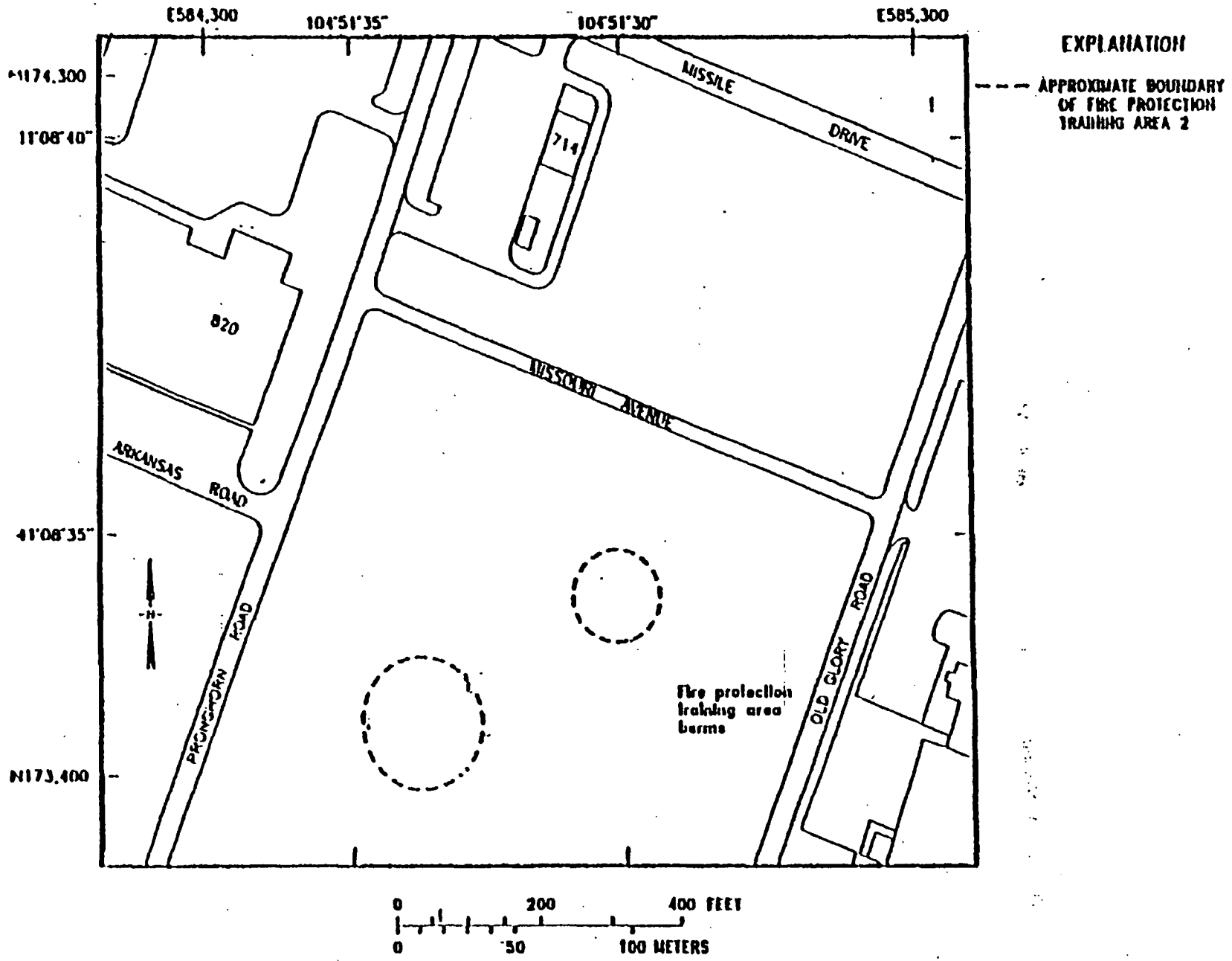


FIGURE 2

3.0 HIGHLIGHTS OF COMMUNITY PARTICIPATION

The USAF has prepared and implemented a community relations plan (CRP) in accordance with CERCLA requirements, and the FFA. The CRP describes community involvement activities the USAF will undertake during remedial activities at F. E. Warren Air Force Base. The USAF has followed the requirements of the CRP, including issuance of periodic fact sheets, holding public meetings, and providing the opportunity for public comment on the Proposed Plan throughout the OU5 investigation.

The Administrative Record has been established at an on-base location and at the Laramie County Public Library. The USAF has prepared and distributed fact sheets to all persons or groups identified on the CRP mailing list (approximately 1400).

The announcement of the commencement of the public comment period was made on January 16, 1994, through advertisements in the Wyoming Tribune-Eagle and in the Casper Star-Tribune. These advertisements announced and outlined the public comment period and public meeting. The public comment period was scheduled from January 31 to March 1, 1994. A public meeting was held at Cheyenne, Wyoming on February 10, 1994. Several verbal comments were presented and are summarized in the official transcript of the meeting. The transcript has been placed in the Administrative Record.

In addition to the newspaper announcements, the USAF issued press releases which resulted in articles published in the Wyoming Tribune on February 3, 1994 and Wyoming Eagle on February 4, 1994. An article appeared in the Base Sentinel Paper on January 21, 1994.

One written comment was received during the public comment period. Responses to all comments on the Proposed Plan are presented in the Responsiveness Summary of this ROD.

4.0 SCOPE AND ROLE OF OPERABLE UNIT

F. E. Warren Air Force Base has been divided into ten operable units (OUs). These are: OU1-Spill Sites; OU2-Facility Ground Water; OU3-Landfills 3 & 6; OU4-Acid Dry Wells; OU5-Fire Protection Training Area 2; OU6-Open Burning/Open Detonation Area; OU7-Firing Range(s); OU8-Landfill 5; OU9-Landfills 2 and 4; and OU10-Landfill 7 and Fire Protection Training Area 1. OU5 is the second of the ten OUs to be investigated under the FFA. The OU5 Baseline Risk Assessment (BRA) demonstrated no significant risk to human health or the environment from the contaminants found in the soil at this OU. Ground water beneath OU5, FPTA2 will be addressed as part of OU2.

5.0 SITE CHARACTERISTICS

Operable Unit 5 (OU5), Fire Protection Training Area 2 (FPTA2) is bounded by Missouri Avenue, Old Glory Road, and Pronghorn Road. FPTA2 is about a quarter of a mile south of Crow Creek (Figure 2). Flammable substances such as waste oils, solvents, gasoline, and aviation fuel were used in the fire training exercises. During each training exercise, approximately 300-400 gallons of flammable liquids were poured on the ground in circular bermed area, ignited and then extinguished. From 1965 to 1974, various waste flammable liquids were used in the training exercises. In contrast, from 1975 to 1989, JP-4 (jet fuel) was used as the primary flammable liquid.

A remedial investigation of FPTA2 was initiated in September 1992. The USAF characterized the operable unit, hydrologically and in terms of contamination, with analytical results from soil and ground water sampling. The results of those sampling efforts, and risk assessment, are contained in the Final Remedial Investigation Report, dated December 17, 1993.

The contaminants of concern (COC) for subsurface are ethylbenzene and total xylenes. The COCs for surface soil were ethylbenzene, lead, octachlorodi-benzop-dioxins, total xylenes and zinc. Acetone was found in three soil samples at 0.18 to 13 milligrams per kilogram. Ethylbenzene was detected in two soil samples at concentrations of 22 to 33 milligrams per kilogram. Total xylenes were detected in five samples from one soil boring, ranging from 0.13 to 28 milligrams per kilogram.

6.0 SUMMARY OF SITE RISKS

As part of the remedial investigation, the USAF prepared a Baseline Risk Assessment (BRA) which evaluated the risks associated with the contamination at the FPTA2. The BRA consisted of human health and ecological risk assessments, including the identification of potential contaminants of concern, exposure assessments, toxicity assessments, risk characterization, and uncertainty analysis. The BRA evaluated risks associated with soil contamination only. Risks associated with contaminants present in ground water, surface water, and streambed sediments at OU5, FPTA2, will be evaluated in the OU2 BRA.

RESULTS OF THE BASELINE RISK ASSESSMENT

The most conservative (highest) estimated lifetime cancer risk for the current adult worker population under the Reasonable Maximum Exposure (RME) assumption is 8×10^{-10} (eight in ten billion), which is below the EPA target risk range of 10^{-4} to 10^{-6} . Under the future exposure scenario the highest (RME) exposure were associated with predicted cancer risks to residents of 2×10^{-9} . The noncancer hazard indices (HIs) calculated for both the current and future exposed populations are all below 1.0, the level that could be associated with the occurrence of adverse noncancer health effects. Assuming the most conservative scenario, the RME HIs for the current adult worker population and future child resident are 3×10^{-5} and 1×10^{-3} , respectively.

ECOLOGICAL RISK ASSESSMENT

The risk characterization identified likely exposed biota and referenced toxicity values to estimate risks to biota at the site. Biota that burrow in the soil and feed on vegetation and soil invertebrates have the greatest exposure potential. The results of the risk estimation indicated no measurable ecological adverse effects are likely to occur at FPTA2. Although not all Total Petroleum Hydrocarbons (TPH) components were identified, the limited distribution of high TPH concentrations indicate the likelihood of exposure and adverse effects is small. The observed differences in vegetation between disturbed and undisturbed areas are attributed to differing patterns of yearly growths and not to chemical exposures.

UNCERTAINTY WITHIN THE RISK ASSESSMENT FRAMEWORK

Uncertainty is always part of the risk assessment process. Because of this fact, all input parameters are biased on the conservative (worst-case) side. TPH and Tentatively Identified Compounds (TICs) are two areas of potential uncertainty because they lack specific toxicity values and therefore cannot be evaluated. The level of certainty in the identification of TICs was uniformly low.

The location of TPH detections in soil at FPTA2 parallels the location of organic TICs detected in soil. The maximum measured TPH concentration in soil samples

was 6,680 mg/kg. TPH concentrations ranged from 45 mg/kg to 6,680 mg/kg and were detected in eight samples. These findings are consistent with isolated contamination with petroleum-derived hydrocarbons.

The most likely composition of the material present is heavier fractions of either jet fuels (JP-4 or JP-5) or diesel fuels, although automotive or aviation gasolines cannot be conclusively ruled out. These fuels are generally of low to moderate human toxicity. It is possible, however, that long-term exposures to the maximum concentrations of TPH seen at the site could be associated with adverse effects on human health. However, such effects are unlikely to occur under the conditions of exposure at FPTA2 as the area of elevated hydrocarbon concentrations at OU5 appear to be quite limited.

7.0 EXPLANATION OF SIGNIFICANT CHANGES

The Proposed Plan was released for public comment in January 1994. The preferred alternative was that no remedial action is needed for soils and that this action is protective of human health and the environment. The USAF, EPA, and WDEQ reviewed all written and verbal comments submitted during the public comment period. It was determined that no significant changes were necessary to the preferred alternative in the Proposed Plan.

**RESPONSIVENESS SUMMARY
RECORD OF DECISION
FIRE PROTECTION TRAINING AREA 2
OPERABLE UNIT 5**

INTRODUCTION

The responsiveness summary is organized into sections as follows:

- A. Overview
- B. Background on Community Involvement
- C. Summary of Comments Received
- D. State Concerns

Attachment: Community Relations Activities at F. E. Warren Air Force Base

A. OVERVIEW

At the time of the public comment period, the preferred alternative for the Fire Protection Training Area 2, Operable Unit 5, at F. E. Warren Air Force Base, had been selected by the Air Force, with EPA and Wyoming DEQ concurrence and was presented in the Proposed Plan. The preferred alternative is that no remedial action is required.

Based on the public's response and comments received during the public comment period, there are no significant objections to the preferred alternative.

B. BACKGROUND ON COMMUNITY INVOLVEMENT

Community interest in CERCLA/IRP (Installation Restoration Program) activities at F. E. Warren Air Force Base has waxed and waned over the years since the records search and interviews conducted for the Air Force in September 1985. No specific individuals or organizations have been consistently involved over this period, although numerous groups and persons have been involved from time to time. There were no concerns expressed during the OU5, Fire Protection Training Area 2, Remedial Investigation, prior to the public comment period.

C. SUMMARY OF COMMENTS RECEIVED

The public comment period on the Proposed Plan for the Fire Protection Training Area 2, Operable Unit 5, at F. E. Warren Air Force Base was held from January 31 to March 1, 1994. Comments received during this time are summarized below. Similar comments have been combined where possible to prevent duplication of responses. There were no specific legal or technical questions.

One commentor asked: What levels of these compounds are you finding in comparison to what the EPA limits are?

RESPONSE: The contaminants of concern (COC) for subsurface are ethylbenzene and total xylenes. The COCs for surface soil were ethylbenzene, lead, octachlorodibenzo-p-dioxins, total xylenes and zinc. Acetone was found in three soil samples at 0.18 to 13 milligrams per kilogram. Ethylbenzene was detected in two soil samples at concentrations of 22 to 33 milligrams per kilogram. Total xylenes were detected in five samples from one soil boring, ranging from 0.13 to 28 milligrams per kilogram.

So what we're looking at are very low levels of the volatiles that we encountered. The highest level of contaminants were the total petroleum hydrocarbons, and they were not identified as a contaminant of concern for the risk assessment.

One commentor asked: Based on your knowledge of these compounds and the type of soils you have and the geology, that what you're saying is there's no risk for vertical or horizontal movement? Say, like in a case of storm water, runoff-type thing.

RESPONSE: There's a potential for it to move, undoubtedly. It's not confined. It sticks to the soil somewhat, but you know, gravity and precipitation have a tendency to move the contaminants around. So it's not like that they're bound.

There's a potential for mobility, but, you know, driven by precipitation and the amount of precipitation we have, the level of concentration that we have, it didn't calculate to be significant risk.

The Administrative Record contains all the methods and data that we use to arrive at determinations at the Laramie County Library and at F. E. Warren Air Force Base.

One commentor asked: Your risk assessment, is that mainly an assessment to human health? And is this, F. E. Warren, is it obligated to be, I guess, in compliance with the Fish and Wildlife Coordination Act? And what I'm saying is that if you got a bunch of birds or something like that lands on this particular place.

RESPONSE: There are two basic elements to the Baseline Risk Assessment. One of them is for human and one is for ecological. This Risk Assessment Fact Sheet for Operable Unit 5 was read as to clarify the ecological assessment process and findings.

One commentor from the Wyoming Game and Fish Department stated that their agency had reviewed the Proposed Plan for Operable Unit 5 and concurred with the preferred alternative and had no specific comments or concerns.

D. STATE CONCERNS

The State of Wyoming is concerned that contaminants left in place at Operable Unit 5 could leach into the ground water at the operable unit hence, degrading the ground water for a Class I aquifer. The potential impact to ground water from the contaminants and the by-products of degradation at Operable Unit 5 will be evaluated in the remedial investigation of OU2.

ATTACHMENT A
COMMUNITY RELATIONS ACTIVITIES
At
F. E. WARREN AIR FORCE BASE

OVERVIEW

The unique community involvement needs of F. E. Warren Air Force Base IRP/CERCLA activities are addressed in the Community Relations Plan (CRP). In late 1990, during plan development, interviews were held with 56 people representing F. E. Warren Air Force Base, other Federal agencies, State, city and county agencies, community groups, wellowners, and other individuals. The most significant issues identified in the interviews were concerns about potential drinking water contamination and about the community involvement process. A brief description of each of the activities which have been developed to address the unique F. E. Warren Air Force Base situation is contained in this attachment.

HISTORY OF COMMUNITY INVOLVEMENT

News releases and articles in the Cheyenne and F. E. Warren Air Force Base newspapers have been part of the IRP process since 1985. Briefings were provided to congressional staffs, the Governor, and mayor in addition to Federal agencies, Wyoming State departments, and local government officials directly responsible for resources potentially affected by the IRP process. Presentations were made to various community groups such as Optimist Club, Military Affairs Committee, Civilian Advisory Council, Society of American Military Engineers, and Wyoming Against MX. Information was disseminated at F. E. Warren Air Force Base through the Commanders Call which reaches all enlisted personnel through the command structure.

The Technical Review Committee was established as part of the IRP/Superfund process and had its first meeting in May of 1988. The three initial public members were nominated by the Governor of Wyoming, Mayor of Cheyenne, and Laramie County Commission. This committee's membership and a general knowledge of the community, served as the initial basis for the selection of people to be interviewed. One of the peripheral goals of the interview process was to provide a list of potential candidates for the public representatives on the TRC.

An environmental display was presented in July 1990 in the Base Exchange Mall. Pictures of all IRP sites were displayed. Site specific fact sheets, environmental brochures, and EPA literature were made available.

The process designed to tailor the CRP to local concerns, needs, and conditions began in February 1990 with interviews of a former base commander and a concerned citizen who are both involved in a variety of groups within the community. Interviews were also held at the regular March meeting of Wyoming Against MX, attended by 4 Air Force, 2 EPA, and 1 State official working on the IRP/Superfund process, in addition to 10 members of the group itself. These initial public contacts focused on identifying critical public concerns.

The purpose of the community interviews was to identify groups and issues which may relate to the F. E. Warren Air Force Base IRP/Superfund process. Thirty-four interviews were conducted with 56 people, either representing themselves or 20 groups within the area. The Wyoming Department of Environmental Quality and City/County Health were particularly helpful in accompanying interviewers.

Among the people interviewed were congressional staffers, an official Air Force representative, F. E. Warren Air Force Base housing residents, non-DOD Federal agencies and state and local government agencies. Among community groups a wide range of interests were sampled. There were three individuals identified as involved with a variety of groups, but viewed as reputational leaders beyond their group membership.

Special emphasis was placed on interviewing those who rely on private wells adjacent to F. E. Warren Air Force Base for drinking water. An introductory letter, Fact Sheet, and discussion guide were prepared for the interviews. The Fact Sheet was actually a status report on the IRP/Superfund process with a brief description of each of the sites. The purpose of the status report was to provide information and a basis of discussion for those who might not have heard of the program and included an installation map with the sites and key features of F. E. Warren Air Force Base and immediate surrounding area designated. These fact sheets and the introductory letter were made available for distribution to all interested parties.

Interviews took place in October and November 1990, with a few follow-up interviews and phone conversations continuing into December.

During the interview process it was recognized that the neighborhood located on the south boundary of F. E. Warren Air Force Base depends on domestic wells for drinking water. An agreement was made with the City/County Health Department and Wyoming Department of Environmental Quality to process a small number of water samples, if residents requested it. Sample collection was done December 4th and 5th, 1990, by a conjunctive effort of DEQ, City/County Health, and EPA personnel.

ISSUES AND CONCERNS

Based on the community interviews, IRP/Superfund activities are not a source of significant concern to the greater Cheyenne community. This is due primarily to the fact that the contamination is seen as being contained within F. E. Warren Air Force Base. The potential for drinking water contamination is the most significant issue associated with the IRP/Superfund process. Awareness of this issue beyond those who were involved with the process was practically nonexistent.

None of the drinking water well users contacted in the interviews were aware of the IRP/Superfund process or the potential contamination. The initial reaction of wellowners was extreme concern. However, after being provided information about the IRP/Superfund activities and an opportunity to have wells tested by City/County Health and the Wyoming Department of Environmental Quality, their concern decreased. They continue to have a high level of interest and awareness, and want to be kept informed on a regular basis.

The need to keep the community informed and involved was mentioned frequently in the interviews. In the business community, there was confidence in the Air Force's ability to solve the problem. Other groups, such as Wyoming Against the MX, and the potentially affected neighborhoods, indicated a need for greater community information and involvement than had been provided prior to the interviews and adoption of the Community Relations Plan.

The community relations program for the IRP/Superfund activities is designed to inform the public about, and provide opportunities for participation in, the process. To be effective, the community relations program will be responsive to the level of interest expressed by the community. At this time, the primary need voiced by the public is to be kept well informed of the status of activities and to be involved in the decision making process.

The potential for TCE contamination in the ground water surrounding F. E. Warren Air Force Base is the most sensitive issue identified in the community interviews associated with the entire IRP/Superfund process. Continuation of the arrangements for individual well sampling provides an immediate response to public concerns.

SPECIAL CONSIDERATIONS

Interviews with residents in the Knob Hill and Fair Acres neighborhoods revealed that direct contact with members of the neighborhood is the most effective method of providing necessary information.

ADMINISTRATIVE RECORD REPOSITORY

An Administrative Record Repository containing documentation of the IRP/CERCLA process was established in October 1989 and is maintained at the following locations to insure accessibility.

Laramie County Library	90 CES/CEVR
Reference Section	Environmental Restoration Section
2800 Central Avenue	300 Vesle Drive
Cheyenne WY 82001	F. E. Warren AFB WY 82005-2788
Phone (307) 634-3561	Phone (307) 775-3468

This record is maintained according to EPA guidelines, by the Environmental Restoration Flight, and is updated at least quarterly. The Administrative Record Repository also functions as the required information repository. A copy of the Administrative Record is housed in the Laramie County Library reference section to insure public access.

TECHNICAL REVIEW COMMITTEE

Procedures to establish the TRC began in November 1987. Actual meetings began in May of 1988. They are held quarterly, generally on the fourth Wednesday in January, April, July, and October. TRC public members were nominated by the Governor of Wyoming, Laramie County and the city of Cheyenne, Wyoming. The purposes of the committee are as follows:

1. The purpose of the TRC is to review and comment on Department of Defense actions and proposed actions with respect to releases or threatened releases of hazardous substances into the environment at F. E. Warren Air Force Base, as well as to ensure open communication and exchange of ideas relating to the F. E. Warren Air Force Base IRP and Comprehensive Environmental Response, Compensation, and Liability Act - CERCLA, 1980, Superfund Amendments and Reauthorization Act, 1986.

2. All TRC members understand and agree that the primary purpose and function of the TRC is informational, specifically to foster community and interagency awareness and understanding of F. E. Warren Air Force Base actions with respect to the IRP remedial actions related to the releases or threatened releases of hazardous substances at F. E. Warren Air Force Base, Wyoming, and to inform F. E. Warren Air Force Base of community attitudes. The TRC also serves as the entity to deal with public concerns regarding hazardous substance releases and the IRP.

MAILING LIST

A major part of the public relations activities is the mailing list. In an attempt to proactively contact the 2,300 wellowners identified in the EPA Superfund ranking, F. E. Warren sent a general mailing to wellowners within a 3-mile radius. The Wyoming State Engineer's Office provided the mailing list of wellowners. The mailing included a brief status report and a coupon to be mailed back if the well owner wanted to be added to the mailing list for distribution of later status reports. This activity resulted in the current list that has about 1450 names on it. The mailing list is maintained in the F. E. Warren Air Force Base Public Affairs Office. Status Reports or Fact Sheets are mailed on

a quarterly basis. Anyone who desires to be included on the list should contact either of the following offices.

90 MW/PA
5305 Randall Ave
F. E. Warren AFB WY 82005-2271
Phone (307) 775-3381

90 CES/CEVR
300 Vesle Drive
F. E. Warren AFB WY 82005-2788
Phone (307) 775-3468

INFORMATION CONTACT

An information contact person has been designated within the F. E. Warren Air Force Base Environmental Restoration Section to maintain regular contact with the community. This person will be responsible for responding to requests for information and planning and scheduling activities included in the plan. The preparation of materials for public distribution will be coordinated with the Public Affairs Office. General public information requests should be directed to (307) 775-3468. The media contact for F. E. Warren Air Force Base is the Public Affairs office at (307) 775-3381.

DRINKING WATER WELL SAMPLING

City/County Health Department has been sampling wells south of F. E. Warren Air Force Base since 1988. At the outset of the interview process, it became evident that owners of private drinking water wells south of F. E. Warren Air Force Base were not aware of the IRP/Superfund process or any potential contamination. Air Force concern prompted an agreement for water sampling made with City/County Health and Wyoming State Department of Environmental Quality, Water Quality Section (WDEQ) to provide for the testing of wells for concerned citizens. The agreement was to cover less than 10 wells. During the interview process, some concerns bordering on alarm were encountered. Such concerns were lowered with the testing procedure. The testing was not part of the technical scientific sampling done for the IRP/Superfund process because the criteria for sampling was solely based on individual citizen concerns. The testing took place on December 4 and December 5, 1990. In addition to the City/County Health and DEQ personnel, two EPA staff from the Denver Office assisted. Sampling was also conducted during June 1991 through July 1992.

In some cases, nitrate concentrations were found to exceed the Federal Drinking Water Standard of 10 milligrams per Liter. No significant concentrations of contamination were detected. The test results were presented by individual meetings with all well owners whose wells were tested. These meetings were held by WDEQ with an EPA toxicologist present. Courtesy copies of the test results were provided by WDEQ to all involved agencies including the Air Force. USAF, WDEQ, and EPA scheduled an availability session to provide an opportunity for Nob Hill and Fair Acres residents to discuss the WDEQ testing.

OU5 RELATED ACTIVITIES

Operable Unit 5 has been addressed in Fact Sheets, Status Reports, newspaper advertisements and articles since Fact Sheet 1 was prepared, by the Air Force, in October 1990 for the initial interviews. Fact Sheet 1 was mailed in May 1991. After the Federal Facility Agreement became effective, a Status Report update was distributed on December 12, 1991, with information on all of the operable units. On September 10, 1992, another Fact Sheet was issued with OU5 Remedial Investigation/Feasibility Study information. The Status Report update dated January 29, 1993, discussed the bioventing project at FPTA 1. The Status Report update dated April 30, 1993, contained information on moving FPTA 1 to OU10.

On November 3, 1993, a third Status Report update provided additional OU5 information.

The Proposed Plan for OU5 was prepared in January, 1994. A display advertisement concerning the Proposed Plan and the public meeting was placed in the Wyoming Tribune-Eagle on January 16, 1994. Another public announcement was placed in the Casper Star-Tribune on August 11, 1994, and a copy of the Proposed Plan was sent to all persons on the mailing list. A copy of the Proposed Plan was placed in the Administrative Record and the Laramie County Library Records Repository on January 31, 1994. All of the newspaper advertisements and the mailings were coordinated between the Air Force, EPA and Wyoming DEQ before publication or distribution. In addition to the paid advertisements, the Air Force issued press releases which resulted in articles published in the Wyoming Eagle on February 3 and 4, 1994, and the F. E. Warren Air Force Base Sentinel on January 21, 1994.