



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS 377TH AIR BASE WING (AFMC)

RECEIVED  
19 NOV 1993

FROM: 377 ABW/EM  
2000 Wyoming Blvd SE  
Kirtland AFB NM 87117-5659

SUBJ: Bernalillo County/Kirtland Air Force Base Environmental  
Working Group (BC/KAFB) Meeting Minutes

TO: Membership, BC/KAFB EWG

1. PLACE: BDM Bldg, 2301 Buena Vista SE, Albuquerque
2. DATE/TIME: 0930, 19 November 1993
3. CHAIRPERSON: Mr David Neleigh, Environmental Protection Agency (EPA Region 6)
4. ATTENDANCE: See Attachment 1

5. INTRODUCTION/ APPROVAL OF AUGUST MINUTES: Mr David Neleigh called the meeting to order at 0935. Copies of the August minutes were available to members and attendees at the meeting. Mr Paul Robinson noted that he represents the South West Research and Information Center (SWRIC), not SouthWest Organizing Project (SWOP). Mrs Garland Harris noted that on page 3, paragraph 3, ten groups had requested a site specific advisory board to address broader topics than environmental restoration. The minutes were corrected as noted.

6. PRESENTATION ON "GEOHYDROLOGIC FRAMEWORK AND HYDROLOGIC CONDITIONS IN THE ALBUQUERQUE BASIN, CENTRAL NEW MEXICO" REPORT. Mr Conde R. Thorn gave an informative hour-long presentation on the recently published report which was prepared in cooperation with the City of Albuquerque Public Works Department, Water Utility Division. The report indicates that the zone of highly productive aquifer, on which the City of Albuquerque and all other towns within the Albuquerque Basin have depended for their water supply, is much less extensive and thinner than was formerly assumed. From 1974 to the present, there has been a loss of 31,100 acre feet of water in storage in the Albuquerque Basin. The city will use this water gradient model study for management purposes.

7. RECURRING AGENDA ITEMS:

- a. KAFB Groundwater Monitoring Program.

(1) Mr Harry Davidson, KAFB/EM, reported on IRP activities that are underway or have been completed at Kirtland. The Stage 2A soils investigation of Appendix I sites was completed March 1993. Appendix I addresses base landfills. The report is due to the EPA

KAFB1344



December 1993. The Stage 2B workplan, which addresses Appendix II sites was approved by the EPA on 8 June 1993. Appendix II sites consist primarily of oil/water separators. Field work was started in September 1993 and is expected to be completed in August 1994. A report on the findings of this study will be submitted to the EPA in December 1994. The Stage 2C workplan addressing Appendix III sites is due to the EPA in January 1994. The final report is due to the EPA in December 1995. Haliburton NUS is the contractor executing the field work. Mr Paul Robinson, SWRIC, expressed interest in reviewing the Work Plans. Mr Davidson explained that the BC/EWG members receive a Work Plan concurrent with EPA review of the document which takes approximately 2 to 3 months, and that EPA includes comments submitted on the Work Plan.

(2) Mr David Neleigh, EPA, presented the EPA summary of the March/April split sampling results of 9 Kirtland monitoring wells, the fire training area, McCormick Ranch and Lake Christian. (See attachment 2). The EPA results were consistent with Air Force results.

(3) Mr Davidson reported on the public meeting which was held on 8 September 93 on proposed changes to Kirtland's Class III RCRA permit modification. One person attended the public meeting. The Air Force has submitted all comments received to the EPA. The EPA will provide a 30 day comment period after EPA review.

#### 8. NEW BUSINESS:

##### a. Federal Facilities Environmental Restoration (FFER) Committee Report Status

(1) Mr Robinson requested an update of the Federal Facilities Environmental Restoration (FFER) Report status. Lt Colonel George Pratt reported that direction from headquarters has been to continue to use existing satisfactory community forums. (Atch 3) As Mr Neleigh expressed in the August meeting, this has been one of the most successful community groups in Region 6. Mr Robinson expressed interest in developing a site specific advisory board (SSAB) to include both Department of Defense (DOD) and Department of Energy (DOE) activities.

(2) Ms Garland Harris, Citizens Against Radioactive Dumping (CARD), wants a SSAB to address budget consultation and priority planning for DOE and DOD. Mr Robinson asked what developments have occurred regarding the SSAB concept. Mr Neleigh explained that funding has been cut for EPA, and that the office implementing the SSAB concept has been reorganized and the EPA SSAB point of contact is leaving the EPA at the end of November. Marilyn Lull is the new point of contact. The EPA director is committed to the SSAB concept.

b. Ms Stephanie Stoddard, New Mexico Environment Department (NMED) had copies available at the meeting of the draft permit to DOE/Sandia National Labs for the Thermal Treatment Facility. The

draft permit is also at the TVI reading room.

c. November Agenda and Chairperson. The next meeting will be chaired by SWOP on 25 February 1994. SWOP has requested the meeting be held at the Mountainview Fire Station. The meeting room capacity may not be large enough for the meeting however. The DOE public meeting will be held on Thursday evening, 1830, 24 February 1994. Mr Neleigh requested agenda items for the February meeting. Mr Robinson asked for a review of the HNUS contract for installation restoration field work at Kirtland. SWOP will ask for a presentation from the city on the radioactive waste water policy. Mr Robinson asked for an update on the SSAB process. Agenda items for the February meeting should be sent to SWOP by 11 February and include name and telephone number of the requestor. This will enable the responder to contact the requestor to clarify concerns.

d. Meeting Adjournment. There being no further business, the meeting adjourned at 1200.

  
THOMAS A. NORRIS, Colonel, USAF  
Director  
Environmental Management Division

3 Atch  
1. List of Attendees  
2. EPA Split Sample Results  
3. HQ AFMC/PAV ltr 20 Oct 93

BERNALILLO COUNTY/KIRTLAND AFB ENVIRONMENTAL  
WORKING GROUP MEETING

DATE 19 Nov 1993

NAME (PLEASE PRINT)	ORGANIZATION/ADDRESS	TELEPHONE
Davidson, Harry M.	377 ABW/EM 2000 Wyoming Blvd SE Kirtland AFB, NM 87117-5659	(505) 846-2773
Corde' Thoms	USGS - 4501 Indian School Rd NE Alb, NM	(505) 262-5311
ginny garland	Sen. pet domenici 625 Silver SW ABQ	766-3481
Garland Harris	CARD 1100 Wilmore Rd SE, ABQ 87106	842-9710
Sue Umschler	DOE/KAO PO Box 5400 87185	505-845-6671
Bill McDonald	NMED/GWPRB/AIP	845-5825
Chris Tuttle	377 ABW/EM KAFB	846-2773
ANN NEWSTED	74 CAROLINA (ANYONE) Tijeras NM	281-9448
Denise A Underwood	377 ABW/JA Kirtland AFB	846-4217
H Col George K Pratt	377 ABW/EM Kirtland AFB	846-0003
Col Tom Noeks	377 ABW/EM KAFB	846-2751
GEORGE PEARCE	377 ABW/PA KAFB	846-5991
MICHAEL D. MARTIN	377 MED GP/SGPB KAFB	846-4193
JERRY SILLARD	377 ABW/EM	846-2773
Stephen Lee	377 ABW/EM	846-2773
Robin Brown	NMED, GWPRB, Santa Fe	827-2434
STEPHEN POLLEN	NMED, HRMB SANTA FE	827-4308

ATCH 1

BERNALILLO COUNTY/KIRTLAND AFB ENVIRONMENTAL  
WORKING GROUP MEETING

DATE 19 Nov 1993

5

NAME (PLEASE PRINT)	ORGANIZATION/ADDRESS	TELEPHONE
Radmacher, Steven	377 Mod Gp, Kirtland AFB	(505) 846-4193
Tucker, Janet	AFDTC/PAU Eglin AFB FL	(904) 882-4436
KRISHACK, JOHN	AFDTC/EMR EGLIN AFB FL	(904) 882-2824
Christopher DeWitt	377 ABW/EM Kirtland AFB	(505) 846-0053
DOROTHY STERMER	PO Box 5800 SANDIA NAT'L LABS, Albuquerque 87185-1347	(505) 848-0978
TIM MICHAEL	PO Box 26110 SF NM 87502	(505) 827-4308
Stephanie Stoddard	NMED/HEMB 525 Camino de los Marquez <sup>SF</sup> , NM 87102	(505) 827-4308
Ray Anglada	Albuquerque Env. Health Dept. P.O. Box 1293, Albuquerque 87103	(505) 768-2631
David Neleigh	EPA 1445 Ross Ave Dallas TX 75202	(214) 655-6785
Dan Moore	SWOP 211 16th St APO NM 87102	(505) 247-8032
WM. PAUL ROBINSON	SW RESEARCH PO Box 4524 APO NM 87105 <small>1981 5th St SE</small>	505-262-1862
Maj. Michael J. Rusden	377 MEDGP/SGPB Kirtland AFB	(505) 846-4259
Capt. Craig Adams	"	"

**KIRTLAND AIR FORCE BASE  
SPLIT SAMPLING RESULTS (GROUNDWATER)**

- Sampling conducted during three (3) separate events in March and April, 1993
- Nine (9) new monitoring wells were sampled. Areas sampled included Landfills 1, 2, 4, 5 and 6, the Fire Training Area, McCormick Ranch and Lake Christian:

Site 1	Landfill 1	Northwest part of KAFB 800 ft. south of Alb. Airport
Site 2	Landfill 2	Within the Tijeras Arroyo
Site 3	Landfill 4	25-acre inactive landfill
Site 3	Landfills 5 & 6	Inactive, cover about 25 acres total
Site 4	Fire Training Area	Located west of KAFB
Site 10	McCormick Ranch	Southwest of the KAFB boundary
Site 19	Lake Christian	South-central part of KAFB
- Samples were analyzed for Appendix IX constituents, nitrate plus nitrite, total petroleum hydrocarbons (TPH), and total and dissolved chromium. Samples from McCormick Ranch and Lake Christian were also analyzed for explosives (see Table 1).
- EPA's contractor, PRC Environmental Management, conducted oversight of the sampling practices of the USGS sampling team. In general, the USGS sampling methodology was professional and adhered to EPA sampling protocol.
- The analytical methods used by both laboratories yielded acceptable and comparable results.
  - ▶ No VOCs were found above the laboratory quantitation limit except 2-butanone (24  $\mu\text{g}/\text{l}$ ), 2-chloroethyl vinyl ether (14  $\mu\text{g}/\text{l}$  J) and acetonitrile (15  $\mu\text{g}/\text{l}$  J). All other detected VOCs were common lab contaminants and either were not found in corresponding split samples or were present in lab blanks.
  - ▶ The only SVOC detected was bis(2-ethylhexyl)phthalate. This compound is considered to be a common laboratory contaminant.
  - ▶ Two pesticides were found in the EPA sample from the Fire Training Area (estimated values only). The pesticides were not found in the corresponding USGS samples.
  - ▶ One herbicide was detected in the EPA sample from Landfill 1 (estimated value only). The herbicide was not found in the corresponding USGS sample.
  - ▶ Nitrate/nitrite was detected consistently in both EPA and USGS samples. The results compared well in all but one instance where the percent difference was 59%. All results were below MCL of 10  $\text{mg}/\text{l}$ .
  - ▶ The most persistent metals were arsenic, barium, chromium, lead and zinc.
  - ▶ Explosives, TPH and dioxins were not detected in any samples submitted by the USGS or EPA.

(Atch 2)

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TABLE 1

## SUMMARY OF ANALYTICAL METHODS BY LABORATORY

Parameter	USGS Laboratory	EPA/PRC Laboratory	
	Analytical Method		
	ERMA	PDP	SWLO
TDS	160.1 <sup>a</sup>	NA	NA
TSS	160.2 <sup>a</sup>	NA	NA
Chloride	300.0 <sup>a</sup>	NA	NA
Fluoride	300.0 <sup>a</sup>	NA	NA
Sulfate	300.0 <sup>a</sup>	NA	NA
Nitrate + Nitrite as N	353.2 <sup>a</sup>	9200 <sup>b</sup>	NA
TPH	418.1 <sup>a</sup>	418.1 <sup>a</sup>	NA
Metals	6010 <sup>b</sup>	6010 <sup>b*</sup>	NA
Arsenic	7060 <sup>b</sup>	7060 <sup>b</sup>	NA
Chromium	7191 <sup>b</sup>	7191 <sup>b</sup>	NA
Lead	7421 <sup>b</sup>	7421 <sup>b</sup>	NA
Mercury	7470 <sup>b</sup>	7470 <sup>b</sup>	NA
Selenium	7740 <sup>b</sup>	7740 <sup>b</sup>	NA
Thallium	7841 <sup>b</sup>	7841 <sup>b</sup>	NA
VOC	8260 <sup>b</sup>	8240 <sup>b</sup>	NA
SVOC	8270 <sup>b</sup>	8270 <sup>b</sup>	NA
Pesticides/PCBs	8080 <sup>b</sup>	8080 <sup>b</sup>	NA
Herbicides	8150 <sup>b</sup>	8150	NA
Dioxins and Furans	8,280 <sup>b</sup>	NA	NA
Explosives	UW 14/UW 27 <sup>c</sup>	NA	8330 <sup>b</sup>

## Notes:

ERMA	= Enesco-Rocky Mountain Analytical	TSS	= Total suspended solids
PDP	= PDP Analytical Services	TPH	= Total petroleum hydrocarbons
SWLO	= Southwest Laboratory of Oklahoma, Inc.	VOC	= Volatile organic compounds
NA	= Analysis was not performed at this laboratory	SVOC	= Semivolatile organic compounds
TDS	= Total dissolved solids	PCB	= Polychlorinated biphenyls

\*Samples tested for all metals except aluminum, calcium, iron, magnesium, manganese, molybdenum, potassium and sodium.

- Sources: a U.S. EPA. 1983. *Methods for Chemical Analysis of Water and Wastes*. EPA 600/4/79-020. Revised March 1983.  
 b U.S. EPA. 1986. *Test Methods for Evaluating Solid Waste, 3rd Edition*. September 1986.  
 c U. S. Army Toxic and Hazardous Materials Agency Methods. Aberdeen Proving Grounds, Maryland.

TABLE 2

## ANALYTICAL DATA COMPARISON OF GROUNDWATER SAMPLING RESULTS

Page 1 of 4

	SITE 1		SITE 1			SITE 2		SITE 2		SITE 3	
	USGS KAFB 0117	EPA KAS1L1 400	USGS KAFB 0114	EPA KAS1L1B 470	EPA-Duplicate KAS1L1C 450	USGS KAFB 0217	EPA KA S2L2 400	USGS KAFB 0218	EPA KAS2L2B 418	USGS KAFB 0311	EPA KA S3470
<b>Indicators</b>											
Total dissolved solids (TDS)	195.0	NA	192.0	NA	NA	375.0	NA	349.0	NA	298.0	NA
Total suspended solids (TSS)	5.2	NA	22.0	NA	NA	103.0	NA	1.6 J	NA	11.0	NA
Chloride	7.1	NA	6.4	NA	NA	15.8	NA	15.5	NA	16.5	NA
Fluoride	0.38	NA	0.4	NA	NA	0.31	NA	0.3	NA	0.4	NA
Sulfate	26.2	NA	26.3	NA	NA	78.9	NA	67.6	NA	31.2	NA
Nitrate/Nitrite	0.17	ND	ND	ND	ND	3.4	3.0 J	9.3	5.1 J	8.8	8.9 J
<b>Volatile Organics</b>											
Acetone	3.4 J	ND	0.94 J	ND	ND	ND	ND	ND	ND	ND	ND
Acetonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	24.0	ND	ND	ND	ND	ND	ND
Chloromethane	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	14.0 J	ND	ND	ND	ND	ND	ND
1, 2 Dichloropropane	ND	3.0 J	ND	2.0 J	4.0 J	ND	ND	ND	ND	ND	ND
2-Hexanone	3.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.35 J	ND	0.35 J	ND	ND	0.28 J	ND	0.29 J	ND	ND	ND
<b>Semivolatile Organics</b>											
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.0 J	ND
<b>Pesticides</b>											
delta BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Herbicides</b>											
2,4 D	ND	0.41 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

## Notes:

NA - not analyzed for

ND - not detected in sample

Units: aqueous organics - µg/l

aqueous inorganics - mg/l

J - Indicates an estimated concentration value. The result is to be considered qualitatively acceptable, but quantitatively unreliable.



TABLE 2 (Continued)

ANALYTICAL DATA COMPARISON OF GROUNDWATER SAMPLING RESULTS

Page 2 of 4

	SITE 4		SITE 10			SITE 10		SITE 19		MCL/SMCL <sup>a</sup>
	USGS KAFB 0417	EPA KA S4 467	USGS KAFB 1004	EPA KAS10 385	EPA-Duplicate KAS10B 385	USGS KAFB 1005	EPA KA S10C 400	USGS KAFB 1901	EPA KAS19 115	
<b>Indicators</b>										
Total dissolved solids (TDS)	205.0	NA	285.0	NA	NA	264.0	NA	583.0	NA	NE / 500
Total suspended solids (TSS)	52.0	NA	5.6	NA	NA	20.0	NA	5.2	NA	NE
Chloride	6.5	NA	8.8	NA	NA	8.8	NA	22.9	NA	NE / 250
Fluoride	0.34	NA	0.4	NA	NA	0.4	NA	3.9	NA	4.0 / 2.0
Sulfate	27.5	NA	37.0	NA	NA	40.8	NA	212.0	NA	NE / 250
Nitrate/Nitrite	ND	ND	7.2	7.0 J	7.0 J	3.1	3.1 J	0.26	0.2 J	NE / 10.0
<b>Volatile Organics</b>										
Acetone	ND	ND	0.44 J	ND	ND	ND	ND	ND	ND	NE
Acetonitrile	15.0 J	ND	ND	ND	ND	ND	ND	ND	ND	NE
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
1,2 Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Methylene Chloride	0.4 J	ND	0.23 J	ND	ND	0.21 J	ND	0.37 J	ND	5.0 / NE
<b>Semivolatile Organics</b>										
Bis(2-ethylhexyl)phthalate	2.0 J	ND	4.1 J	ND	ND	2.4 J	ND	ND	ND	NE
<b>Pesticides</b>										
delta BHC	ND	1.42 J	ND	ND	ND	ND	ND	ND	ND	NE
Endosulfan I	ND	0.259 J	ND	ND	ND	ND	ND	ND	ND	NE
<b>Herbicides</b>										
2,4 D	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE

Notes:

NA - not analyzed for

ND - not detected in sample

NE - not established

Units: aqueous organics - µg/l

aqueous inorganics - mg/l

J - Indicates an estimated concentration value. The result is to be considered qualitatively acceptable, but quantitatively unreliable.

a - Maximum contaminant levels (MCL) and secondary maximum contaminant levels (SMCL) according to national primary and secondary federal drinking water standards, 40 CFR 141 and 40 CFR 143.

TABLE 2 (Continued)

## ANALYTICAL DATA COMPARISON OF GROUNDWATER SAMPLING RESULTS

Page 3 of 4

	SITE 1		SITE 1			SITE 2		SITE 2		SITE 3	
	USGS KAFB 0117	EPA KAS1L1 400	USGS KAFB 0114	EPA KAS1L1B 470	EPA - Duplicate KAS1L1C 450	USGS KAFB 0217	EPA KA S2L2 400	USGS KAFB 0218	EPA KAS2L2B 418	USGS KAFB 0311	EPA KA S3470
<b>Metals</b>											
Aluminum	0.1 J / ND	NA	0.32 / ND	NA	NA	1.5 / ND	NA	ND	NA	0.42 / ND	NA
Arsenic	0.0014 J / 0.0015 J	0.006 / 0.005	0.014 / 0.0011 J	ND	0.005 / ND	ND	ND	ND	ND	ND	ND
Barium	0.097 / 0.087	0.082 / 0.079	0.13 / 0.1	0.096 / 0.097	0.092 / 0.093	0.084 / 0.052	0.068 / 0.050	ND	0.044 / 0.05	0.13 / 0.13	0.125 / 0.120
Beryllium	ND	ND	ND	ND	ND	ND	ND	0.051 / 0.053	ND	ND	ND
Calcium	30.7 / 31.7	NA	30.7 / 31	NA	NA	69.8 / 71.0	NA	67.1 / 71.5	NA	55.7 / 58.3	NA
Chromium	0.01 J / 0.019	0.011 / 0.012	0.01 J / 0.0033 J	0.006 / ND	0.005 / ND	0.008 J / 0.003 J	0.018 / ND	0.0047 J / 0.0054 J	ND	0.0089 J / ND	0.02 J / ND
Copper	ND	ND	0.0058 J / ND	ND	ND	0.005 J / ND	ND	ND	ND	0.0055 J / ND	ND
Iron	0.12 / ND	NA	0.4 / ND	NA	NA	1.5 / ND	NA	ND	NA	0.34 / ND	NA
Lead	ND	ND	0.0031 J / ND	ND	ND	0.002 J / 0.0023 J	ND	0.0026 J / ND	ND	ND	ND / 0.008
Magnesium	4.5 / 4.8	NA	5.0 / 5.1	NA	NA	12.3 / 12.8	NA	12.3 / 13.4	NA	10.5 / 10.9	NA
Manganese	0.0096 J / ND	NA	0.04 / ND	NA	NA	0.078 / ND	NA	0.0042 J / ND	NA	0.017 / ND	NA
Molybdenum	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA
Potassium	2.3 J / 3.0 J	NA	2.8 J / 2.9 J	NA	NA	3.4 J / 3.3 J	NA	2.7 J / 3.6 J	NA	2.8 J / 2.6 J	NA
Selenium	ND	ND	ND	ND	ND	0.003 J / ND	ND	ND / 0.0024 J	ND	ND / 0.0029 J	ND
Sodium	21.1 / 24.2	NA	21.7 / 22.6	NA	NA	27.2 / 28.3	NA	25.8 / 26.9	NA	23.2 / 23.3	NA
Vanadium	0.0071 J / 0.0084 J	ND	0.01 J / 0.0073 J	ND	ND	0.006 J / ND	ND	ND / 0.0088 J	ND	0.0068 J / 0.007 J	ND
Zinc	0.056 / ND	0.085 / 0.027	0.044 / ND	0.048 / ND	0.046 / 0.026	0.074 / 0.029	0.11 / 0.046	0.025 / 0.038	0.029 / 0.057	0.027 / 0.014 J	0.075 / ND

Notes:  
 NA - not analyzed for  
 ND - not detected in sample  
 Units: aqueous organics - µg/l  
       aqueous inorganics - mg/l  
 0.1 / ND - denotes total metals/ dissolved metals results  
 J - Indicates an estimated concentration value. The result is to be considered qualitatively acceptable, but quantitatively unreliable.

TABLE 2 (Continued)

## ANALYTICAL DATA COMPARISON OF GROUNDWATER SAMPLING RESULTS

Page 4 of 4

	SITE 4		SITE 10			SITE 10		SITE 19		MCL / SMCL <sup>a</sup>
	USGS KAFB 0417	EPA KAS4 467	USGS KAFB 1004	EPA KA S10 385	EPA - Duplicate KAS10B 385	USGS KAFB 1005	EPA KAS10C 400	USGS KAFB 1901	EPA KAS19 115	
<b>Metals</b>										
Aluminum	0.65 / ND	NA	0.22 J / ND	NA	NA	.42	NA	0.11 J / ND	NA	NE
Arsenic	0.0025 J / 0.002 J	ND	0.0026 J / 0.0026 J	ND	ND	0.0025 J / 0.0016 J	ND	0.0013 J / 0.0026 J	ND	.05 / NE
Barium	0.12 / 0.084	0.115 / 0.086	0.094 / 0.084	0.092 / 0.075	0.093 / 0.085	0.054 / 0.049	0.054 / 0.048	0.022 / .02	0.024 / 0.022	1.0 / NE
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.0 / NE
Calcium	32.7 / 31.5	NA	33.3 / 34.6	NA	NA	36.8 / 43.3	NA	79.2 / 87.9	NA	NE
Chromium	0.016 / 0.0031 J	0.012 J / 0.005 J	0.0077 J / 0.0043 J	0.005 J / ND	0.005 J / 0.005 J	0.0093 J / 0.0034 J	0.007 J / ND	0.0065 J / 0.0027 J	ND / 0.006 J	.05 / NE
Copper	ND / 0.0077 J	ND	0.0056 J / ND	ND	ND	0.0063 J / ND	ND	ND	ND	NE / 1
Iron	0.67 / ND	NA	0.26 / 8.2	NA	NA	0.48 / ND	NA	0.14 / ND	NA	NE / 0.3
Lead	ND	0.008 / 0.009	ND	0.017 / 0.007	0.005 / 0.011	0.0022 J / ND	0.006 / 0.005	0.0064 / ND	ND	0.5 / NE
Magnesium	4.9 / 4.8	NA	8.0 / ND	NA	NA	8.7 / 10.7	NA	15.8 / 18.4	NA	NE
Manganese	0.047 / ND	NA	0.015 / ND	NA	NA	0.031 / 0.011	NA	0.01 J / ND	NA	NE
Molybdenum	ND	NA	ND	NA	NA	ND	NA	0.021 J / 0.029 J	NA	NE / .05
Potassium	2.8 J / 3.0 J	NA	3.5 J / 3.2 J	NA	NA	3.1 J / 3.9 J	NA	ND / 4.3 J	NA	NE
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	.01 / NE
Sodium	20.8 / 22.9	NA	29.7 / 32.5	NA	NA	24.0 / 25.4	NA	74.4 / 78.2	NA	NE
Vanadium	0.008 J / 0.013 J	ND	0.011 J / 0.0098 J	0.011 / ND	ND	0.0068 J / 0.0088 J	ND	ND	ND	NE
Zinc	0.043 / ND	0.04 / ND	0.025 / ND	0.022 / ND	0.044 / ND	0.033 / ND	0.035 / ND	0.049 / 0.032	0.023 / 0.041	NE / 5.0

## Notes:

NA - not analyzed for

ND - not detected in sample

NE - none established

Units: aqueous organics - µg/l

aqueous inorganics - mg/l

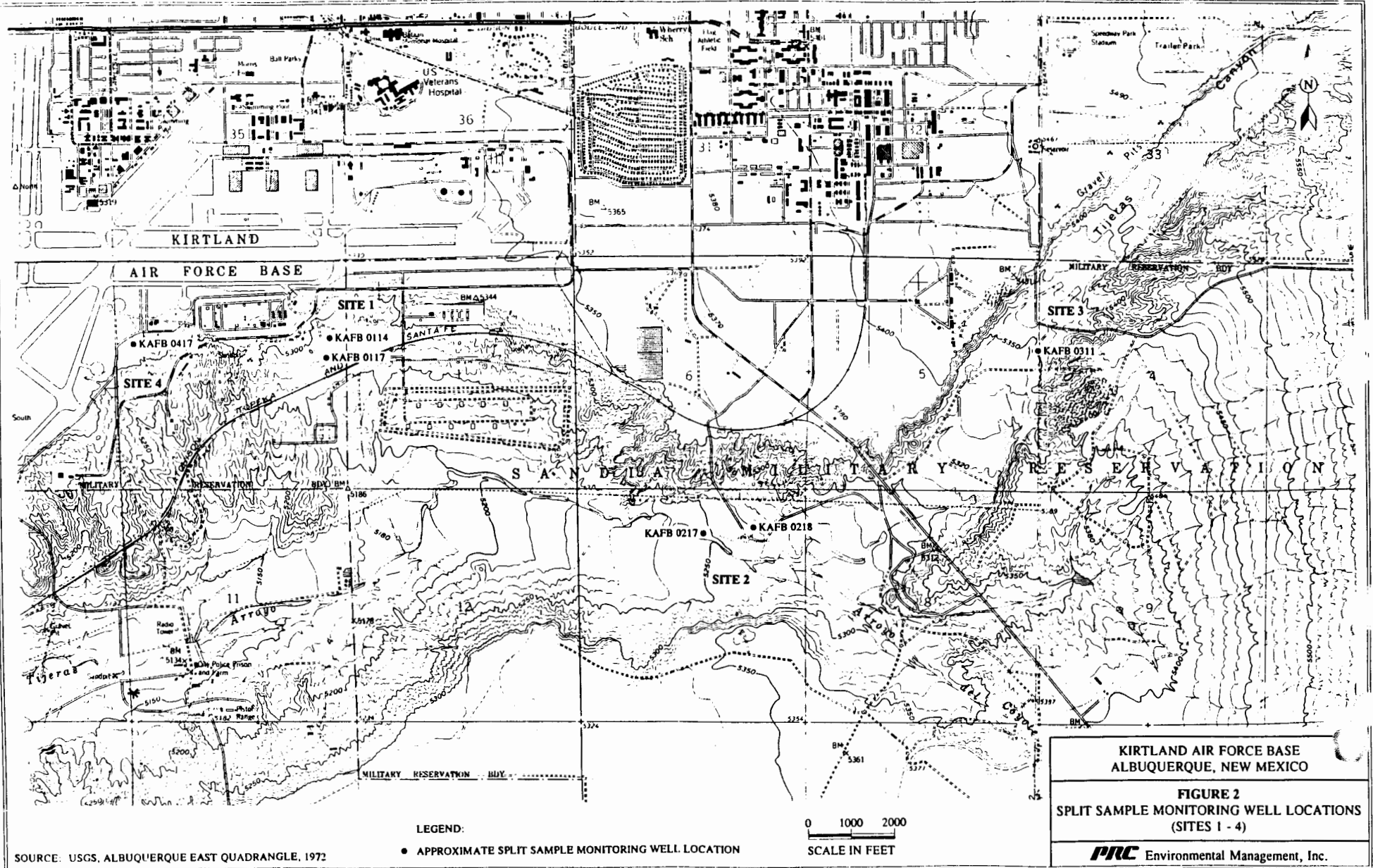
0.1 / ND - denotes total metals/dissolved metals results

J - Indicates an estimated concentration value. The result is to be considered qualitatively acceptable, but quantitatively unreliable.

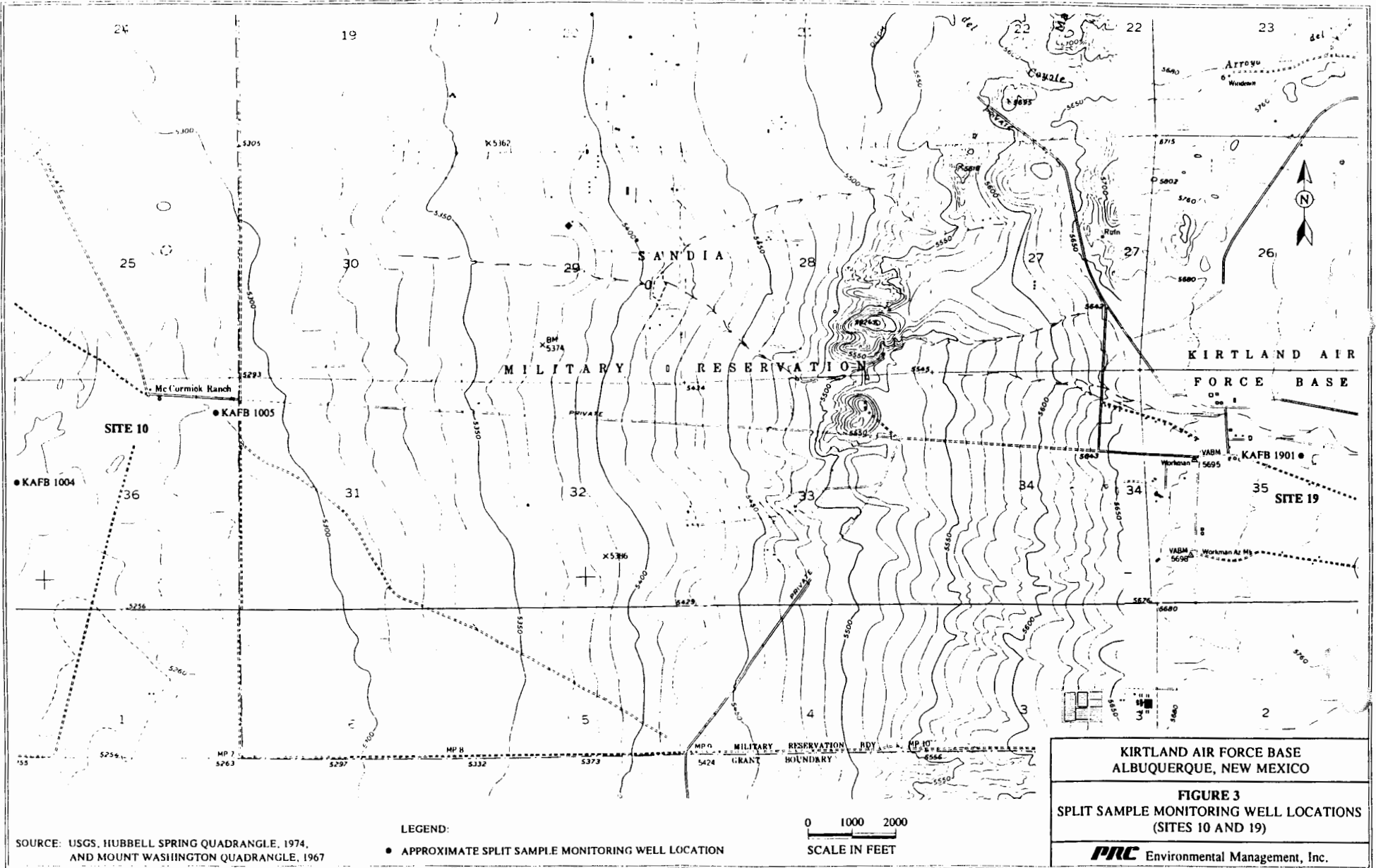
a - Maximum contaminant levels (MCL) and secondary maximum contaminant levels (SMCL) according to national primary and secondary federal drinking water standards,

40 CFR 141 and 40 CFR 143.

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DEPARTMENT OF THE AIR FORCE  
QUARTERS AIR FORCE MATERIEL COMMAND  
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

*ml 25 Oct*

20 OCT 1993

FROM: HQ AFMC/PAV  
4375 Chidlaw Rd Ste 6  
Wright-Patterson AFB OH 45433-5006

SUBJ: Federal Facilities Environmental Restoration Dialogue Committee (Keystone Dialogue)

TO: SEE DISTRIBUTION

1. During 1992, a group of forty representatives of federal agencies, tribal and state governments and associations, local and national environmental, community, and labor organizations was established by the Environmental Protection Agency. What became known as the Keystone Dialogue was organized to develop policy recommendations aimed at improving the Federal Facility Environmental Restoration (FFER) decision making process and to ensure that clean-up decisions reflect the priorities and concerns of all stakeholders.
2. A number of recommendations came from these meetings and are discussed in the Interim Report of the Federal Facilities Environmental Restoration Dialogue Committee (Atch 1). DOD has reviewed these recommendations and developed implementation concepts (Atch 2). At this time, there is no Air Force implementation guidance.
3. Due to a strong environmental public affairs program in this Command, recommendations of the Keystone Dialogue are in place at most of our installations. The major component which is missing is the site specific advisory boards (Atch 1, Section 3). Once adopted by the Air Force, we believe the SSAB will become the centerpiece of the environmental public affairs program. Site specific advisory boards have three goals: 1) provide consistent opportunity for public involvement; 2) provide regular, early, and effective public participation in federal clean-up programs; and 3) consolidation of the many public involvement initiatives addressing cleanup.
5. As with all other community involvement initiatives, input from the environmental management team is integral to the success of the program. At this time, DOD and Air Force implementation plans seem to be leaning toward modifying the technical review committees to more closely match the objectives of the advisory boards. When Air Force guidance on this issue becomes available we will pass it on. If we can be of further assistance please contact me at DSN 787-6946.

*Donna L. Christian*

DONNA L. CHRISTIAN  
Chief, Environmental Issues Division  
Office of Public Affairs

- 2 Atch  
1. Interim Report, Feb 93  
2. DOD Implementation Concepts

cc: HQ AFMC/JAV/CEVR

## KEYSTONE IMPLEMENTATION CONCEPTS

### RECOMMENDATION #1: Improving the Process of Disseminating and Exchanging Information with Affected Stakeholders

- o Develop agency information dissemination policies
- o Encourage affected stakeholders to portray accurately the status of documents or other information that they receive in draft form
- o Establish a central point of contact within agencies for assisting in disseminating information.

### DOD IMPLEMENTATION CONCEPTS

- o Make draft documents that are considered deliverables under federal facility agreements, permits or other regulatory instruments available to the public at the same time that they are submitted for formal review to regulatory agencies. Announce availability in newspaper. #
- o Establish and maintain an administrative record at each installation that is available for public review.
- o Ensure that technical information about cleanup activities is communicated in understandable terms.
- o Document minutes of Restoration Advisory Board (RAB) meetings; summarize and publish in local newspaper. #
- o Maintain mailing list of interested citizens.
- o Hold public meetings at key decision points in the process, send announcements to interested citizens included in mailing list.
- o Produce bulletins on clean up activities and progress and distribute to mailing list.
- o Identify information point of contact at installations, and phone number. Also identify point of contact at higher headquarters for problem referral/resolution.
- o Make telephonic contact with information requestors, where appropriate.
- o Establish regional environmental offices to coordinate efforts with regulatory agencies.

KEYSTONE IMPLEMENTATION CONCEPTS

RECOMMENDATION #2: Improving the Process of Soliciting Input From Affected Stakeholders

- o Establish Site Specific Advisory Boards to provide policy and technical advice to the regulated and regulating agencies on clean up decisions. SSAB features:
  - independent public bodies;
  - need established through government request or citizen petition;
  - ★-balanced membership, members nominated by regulatory agencies;
  - regulatory and regulated agencies are "ex-officio" members.
- o Agencies provide administrative and technical assistance funding.

DOD IMPLEMENTATION CONCEPTS

- o Expand existing Technical Review Committees (TRCs) to more closely match SSAB concept:
  - Rename Restoration Advisory Boards (RABs);
  - Role will continue to be advisory; not decision making;
  - Establish co-chairs: DoD and community representatives;
  - Accept member nominations from regulatory agencies;
  - All members are full partners; no "ex officio members";
  - Include more community representatives (10-12);
  - Make meetings open to public; ensure that meeting time and location will permit public attendance;
  - Announce meetings in newspaper, summarize minutes in newspaper, announce availability of documents.
- o Establish RABs at installations where they do not currently exist and where the need is demonstrated by governmental request or citizen petition.
- o Provide administrative support, but not funding.



## KEYSTONE IMPLEMENTATION CONCEPTS

### RECOMMENDATION #3: Improving Accountability Through Enhanced Stakeholder Involvement Throughout the Federal Budget Process

- o Enhanced communication among stakeholders recommended at these key points in the process:
  1. Initial field level development of site level requirements;
  2. Submission of President's Budget to Congress;
  3. Presidential/Congressional appropriation and agency allocation;
  4. Completion of the budget-year execution.

- o Under insufficient appropriations, allocate funds according to these principles:
  - Fair share allocation for sites subject to outside supervision (regulated sites). Apply cut to each installation. Regulatory relief if milestones missed.
  - Fair share allocation for sites not subject to outside supervision (unregulated sites). Apply to sites as a group.

- o Under unanticipated program growth shortfalls, allocate funds according to these principles:
  - Absorb shortfall within installation;
  - Consult with stakeholders on what projects can be deferred.

### DoD IMPLEMENTATION CONCEPTS

- o Use Restoration Advisory Boards (RABs) as focal point for consultation with stakeholders.
- o Consult with RAB on field level identification and refinement of project requirements (scope of actions to be taken) and priority.

Goal is to encourage RAB participation in development and implementation of installation action plans which describe work to be accomplished, priority, and timing. This would be a continuous consultative process. DoD managers would communicate regularly with RAB on project status, and factors that could affect execution such as fund allocation, regulatory concurrence, contracting. When funds are allocated, DoD would carry out the jointly developed work plan.

- o Throughout budget year execution, DoD will report to RAB on work accomplished, and communicate any major decisions which affect funding or scope.

RECOMMENDATION #3, D.D. IMPLEMENTATION CONCEPTS, ON'T.

o Distribute funding shortfalls on a fair share basis across the Services. At the Service level, shortfalls will be distributed based on risk management decisions in consultation with stakeholders. Risk management considers health and environmental risk, regulatory requirements, execution constraints, and stakeholder concerns. To expedite the process, consultation on relative project priorities and how cuts will be managed will be conducted in advance of the execution year.