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LETTER REGARDING U S AIR FORCE RESPONSE TO U S EPA REGION VI COMMENTS ON OFFSITE WEAPONS STORAGE AREA BACKGROUND STUDY NAS FORT WORTH TX
3/13/1998
AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE

File: 17G
A.F.

NAVAL AIR STATION
FORT WORTH JRB
CARSWELL FIELD
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 421

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE
BROOKS AIR FORCE BASE TEXAS

File: 17A-76
A.F.
421

13 Mar 98

MEMORANDUM FOR TNRCC
INDUSTRIAL AND HAZARDOUS WASTE DIVISION
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12015 N. IH-35
AUSTIN, TX 78753

FROM: HQ AFCEE/ERB
3207 NORTH ROAD, BLDG 532
BROOKS AFB, TX 78235-5363

SUBJECT: Offsite Weapons Storage Area Background Study, Jan 98, Project 96-8105, Contract 41624-94-D-8046/0021, Carswell AFB

1. Attached are the response to EPA Comments (attachment 1) and the Appendix E cross reference table for raw data results (attachement 2) for the Final Weapons Storage Area Background Study Report, January 1998, for Carswell AFB. Please insert attachement to into the back of Appendix E.

2. The Air Force concurs with the recommendations in the attached report. Please provide your approval for Risk Reduction Standard 1 Closure for SWMU 60 by 16 Apr 98. If you have any questions or comments concerning this effort please call me at (210) 536-6452.

CHARLES A. RICE
Team Chief
Base Closure Restoration Division

Atch: 2
1. Response to EPA Comments
2. Appendix E cross reference table

DISTRIBUTION

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RESPONSES TO COMMENTS ON WEAPONS STORAGE AREA BACKGROUND STUDY
By U.S. EPA
(Responses revised 20 February 1998 - revisions are in italics)

ITEM	COMMENT	RESPONSE
1	There is no cross reference for raw data with results used in the Statistical Calculations Support Tables in Appendix E.	A cross-reference table will be added to Appendix E identifying which control numbers (the CR-A numbers) correspond to which samples. *The cross-reference table was inadvertently omitted from the final document, and is submitted under separate cover for insertion into the final document.*
2	On page 12 of 12 in Appendix E the analytical results used for Rudyswell-01 is from sample CR-A158701. The results used for the other two wells came from samples CR-A158601 and CR-A158602. The same system of numbering (01,02 and 03) was used for all other sampling rounds except this one. Verify that CR-A158701 is the correct sample. Assuming that CR-A158603 should have been used the results for this sample are below the detection limit.	CR-A158701 is the correct control number for sample Rudyswell-01. Control number CR-A158603 is an equipment blank sample. *The cross-reference table confirms the correct sample numbers. The control numbers are assigned randomly, and are not intended to indicate a consecutive sequence of sampling. If they are consecutive, it is merely due to coincidence. The purpose of the control numbers is to provide a blind sample identification to the laboratory so they will not know which samples are quality control samples (i.e., trip blanks, field duplicates, etc.).*
3	Sample numbers CR-A158701 to 704 and CR-A161804 to	The cross-reference table which will be added

	807 are not referenced to any well, what were these samples for?	to Appendix E will identify the samples which correspond to these control numbers. *See response to comment 1 above.*
4	There is not a chain of custody for samples CR-A158701 to 704 included in the document.	A chain of custody for samples CR-A158701 to 704 will be included in the final document. *This chain of custody was added to the final document.*
5	Appendix D indicates the well screens on the two new wells are 169 feet and 120 feet. Monitoring well screens should normally be kept to a maximum length of 10 feet. Long screens lead to diluted water samples, mixing of aquifer zones, and wrong potentiometric surface values. Why were such long screens installed?	The two new Paluxy background monitoring wells were constructed with very long screened intervals in order to replicate the section of aquifer intersected by the existing water supply wells where the radium was originally detected. *This approach to installing the screens on the two new wells was presented in Section 3.3.2.5, paragraph 1, page 3-11 of the Final Work Plan for this project, dated September 1996. This approach was approved by the TNRCC in a letter dated 24 October 1996, item #2.*

APPENDIX E

Laboratory Control Number to Sample Location Cross-Reference
Weapons Storage Area Background Study

CONTROL NUMBER	SAMPLE ID	METHOD	QC SAMPLE TYPE
CR-A156601	BJETA901-A	E418.1	
CR-A156603	BJETA902-A	E418.1	
CR-A156604	BJETA902-B	E418.1	
CR-A156605	BJETA903-A	E418.1	
CR-A156606	BJETA903-B	E418.1	
CR-A156607	EB961106	E418.1	Equipment Blank
CR-A156608	EB961107	E418.1	Equipment Blank
CR-A156701	BJETA904-A	E418.1	
CR-A156703	BJETA905-A	E418.1	
CR-A156704	BJETA905-B	E418.1	
CR-A156705	BJETA906-A	E418.1	
CR-A156706	BJETA906-B	E418.1	
CR-A156801	BJETA907-A	E418.1	
CR-A156802	BJETA907-B	E418.1	
CR-A156803	BJETA908-A	E418.1	
CR-A156804	BJETA908-B	E418.1	
CR-A156805	BJETA909-A	E418.1	
CR-A156806	BJETA909-B	E418.1	
CR-A156901	BJETA910-A	E418.1	
CR-A156902	BJETA910-B	E418.1	
CR-A156904	BJETA911-B	E418.1	
CR-A156905	BJETA912-A	E418.1	
CR-A156906	BJETA912-B	E418.1	
CR-A157001	BJETA913-A	E418.1	
CR-A157002	BJETA913-B	E418.1	
CR-A157003	BJETA914-A	E418.1	
CR-A157004	BJETA914-B	E418.1	
CR-A157006	BJETA915-B	E418.1	
CR-A157007	BJETA914-BFD	E418.1	Field Duplicate
CR-A157101	BJETA916-A	E418.1	
CR-A157103	BJETA917-A	E418.1	
CR-A157104	BJETA917-B	E418.1	
CR-A157105	BJETA918-A	E418.1	
CR-A157106	BJETA918-B	E418.1	
CR-A157201	BJETA919-A	E418.1	
CR-A157202	BJETA919-B	E418.1	
CR-A157203	BJETA920-A	E418.1	
CR-A157204	BJETA920-B	E418.1	
CR-A157206	BJETA921-B	E418.1	
CR-A157207	BJETA919-AFD	E418.1	Field Duplicate
CR-A157301	BJETA922-A	E418.1	
CR-A157302	BJETA922-B	E418.1	
CR-A157304	BJETA923-B	E418.1	
CR-A157305	BJETA924-A	E418.1	
CR-A157306	BJETA924-B	E418.1	
CR-A157401	BJETA901-A	SW9315 and SW9320	
CR-A157403	BJETA902-A	SW9315 and SW9320	
CR-A157404	BJETA902-B	SW9315 and SW9320	
CR-A157405	BJETA903-A	SW9315 and SW9320	
CR-A157406	BJETA903-B	SW9315 and SW9320	
CR-A157501	BJETA904-A	SW9315 and SW9320	
CR-A157503	BJETA905-A	SW9315 and SW9320	
CR-A157504	BJETA905-B	SW9315 and SW9320	
CR-A157505	BJETA906-A	SW9315 and SW9320	

APPENDIX E

Laboratory Control Number to Sample Location Cross-Reference
Weapons Storage Area Background Study

CONTROL NUMBER	SAMPLE ID	METHOD	QC SAMPLE TYPE
CR-A157506	BJETA906-B	SW9315 and SW9320	
CR-A157507	EB961106	SW9315 and SW9320	Equipment Blank
CR-A157508	EB961107	SW9315 and SW9320	Equipment Blank
CR-A157601	BJETA907-A	SW9315 and SW9320	
CR-A157602	BJETA907-B	SW9315 and SW9320	
CR-A157603	BJETA908-A	SW9315 and SW9320	
CR-A157604	BJETA908-B	SW9315 and SW9320	
CR-A157605	BJETA909-A	SW9315 and SW9320	
CR-A157606	BJETA909-B	SW9315 and SW9320	
CR-A157701	BJETA910-A	SW9315 and SW9320	
CR-A157702	BJETA910-B	SW9315 and SW9320	
CR-A157704	BJETA911-B	SW9315 and SW9320	
CR-A157705	BJETA912-A	SW9315 and SW9320	
CR-A157706	BJETA912-B	SW9315 and SW9320	
CR-A157707	EB961109	SW9315 and SW9320	Equipment Blank
CR-A157801	BJETA913-A	SW9315 and SW9320	
CR-A157802	BJETA913-B	SW9315 and SW9320	
CR-A157803	BJETA914-A	SW9315 and SW9320	
CR-A157804	BJETA914-B	SW9315 and SW9320	
CR-A157805	BJETA915-A	SW9315 and SW9320	
CR-A157806	BJETA915-B	SW9315 and SW9320	
CR-A157807	BJETA914-BFD	SW9315 and SW9320	Field Duplicate
CR-A157901	BJETA916-A	SW9315 and SW9320	
CR-A157903	BJETA917-A	SW9315 and SW9320	
CR-A157904	BJETA917-B	SW9315 and SW9320	
CR-A157905	BJETA918-A	SW9315 and SW9320	
CR-A157906	BJETA918-B	SW9315 and SW9320	
CR-A157907	EB961112	SW9315 and SW9320	Equipment Blank
CR-A158001	BJETA919-A	SW9315 and SW9320	
CR-A158002	BJETA919-B	SW9315 and SW9320	
CR-A158003	BJETA920-A	SW9315 and SW9320	
CR-A158004	BJETA920-B	SW9315 and SW9320	
CR-A158006	BJETA921-B	SW9315 and SW9320	
CR-A158007	BJETA919-AFD	SW9315 and SW9320	Field Duplicate
CR-A158101	BJETA922-A	SW9315 and SW9320	
CR-A158102	BJETA922-B	SW9315 and SW9320	
CR-A158104	BJETA923-B	SW9315 and SW9320	
CR-A158105	BJETA924-A	SW9315 and SW9320	
CR-A158106	BJETA924-B	SW9315 and SW9320	
CR-A158301	WJEPX925-01	E418.1	
CR-A158302	WJEPX926-01	E418.1	
CR-A158303	EB030597	E418.1	Equipment Blank
CR-A158304	XU3212901-01	E418.1	
CR-A158401	RUDYSWELL-01	E418.1	
CR-A158402	EB030497	E418.1	Equipment Blank
CR-A158403	XU3212902-01	E418.1	
CR-A158601	WJEPX925-01	SW9315 and SW9320	
CR-A158602	WJEPX926-01	SW9315 and SW9320	
CR-A158603	EB030597	SW9315 and SW9320	Equipment Blank
CR-A158701	RUDYSWELL-01	SW9315 and SW9320	
CR-A158702	EB030497	SW9315 and SW9320	Equipment Blank
CR-A158703	XU3212902-01	SW9315 and SW9320	
CR-A158704	XU3212901-01	SW9315 and SW9320	
CR-A159001	BJETA922-AFD	SW9315 and SW9320	Field Duplicate

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Laboratory Control Number to Sample Location Cross-Reference
Weapons Storage Area Background Study

CONTROL NUMBER	SAMPLE ID	METHOD	QC SAMPLE TYPE
CR-A159002	BJETA922-BFD	SW9315 and SW9320	Field Duplicate
CR-A159101	BJETA922-AFD	E418.1	Field Duplicate
CR-A159102	BJETA922-BFD	E418.1	Field Duplicate
CR-A159103	EB961112	E418.1	Equipment Blank
CR-A161301	DF970214-926	SW9315 and SW9320	
CR-A161302	DF970214-W	SW9315 and SW9320	
CR-A161303	DF970216-925	SW9315 and SW9320	
CR-A161401	WJEPX925-A	D2434, D422, and Effective Porosity	
CR-A161402	WJEPX925-B	D2434, D422, and Effective Porosity	
CR-A161403	WJEPX925-C	D2434, D422, and Effective Porosity	
CR-A161501	WJEPX925-02	E418.1	
CR-A161502	WJEPX926-02	E418.1	
CR-A161503	RUDYSWELL-02	E418.1	
CR-A161504	RUDYSPOND	E418.1	
CR-A161505	RUDYSWELL-02FD	E418.1	
CR-A161506	EB970319	E418.1	Equipment Blank
CR-A161601	WJEPX925-02	SW9315 and SW9320	
CR-A161602	WJEPX926-02	SW9315 and SW9320	
CR-A161603	RUDYSWELL-02	SW9315 and SW9320	
CR-A161604	RUDYSPOND	SW9315 and SW9320	
CR-A161605	RUDYSWELL-02FD	SW9315 and SW9320	Field Duplicate
CR-A161606	EB970319	SW9315 and SW9320	Equipment Blank
CR-A161701	WJEPX925-03	E418.1	
CR-A161702	WJEPX926-03	E418.1	
CR-A161703	RUDYSWELL-03	E418.1	
CR-A161704	XU3212901-03	E418.1	
CR-A161705	XU3212902-03	E418.1	
CR-A161706	WJEPX926-03FD	E418.1	Field Duplicate
CR-A161707	EB970403	E418.1	Equipment Blank
CR-A161801	WJEPX925-03	SW9315 and SW9320	
CR-A161802	WJEPX926-03	SW9315 and SW9320	
CR-A161803	RUDYSWELL-03	SW9315 and SW9320	
CR-A161804	XU3212901-03	SW9315 and SW9320	
CR-A161805	XU3212902-03	SW9315 and SW9320	
CR-A161806	WJEPX926-03FD	SW9315 and SW9320	Field Duplicate
CR-A161807	EB970403	SW9315 and SW9320	Equipment Blank
CR-A161901	WJEPX925-04	E418.1	
CR-A161902	WJEPX926-04	E418.1	
CR-A161903	RUDYSWELL-04	E418.1	
CR-A161904	WJEPX926-04FD	E418.1	Field Duplicate
CR-A162001	WJEPX925-04	SW9315 and SW9320	
CR-A162002	WJEPX926-04	SW9315 and SW9320	
CR-A162003	RUDYSWELL-04	SW9315 and SW9320	
CR-A162004	WJEPX926-04FD	SW9315 and SW9320	Field Duplicate
CR-A163101	WJEPX925-05	E418.1	
CR-A163102	WJEPX926-05	E418.1	
CR-A163201	WJEPX925-05	SW9315 and SW9320	
CR-A163202	WJEPX926-05	SW9315 and SW9320	
CR-A163203	RUDYSWELL-05	SW9315 and SW9320	
CR-A163301	RUDYSWELL-05	E418.1	

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