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NAS FORT WORTH
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MEMORANDUM REGARDING U S AIR FORCE COMMENTS ON FOCUSED FEASIBILITY
STUDY AND INTERIM REMEDIAL ACTION PLAN NAS FORT WORTH TX

4/29/1999

U S AIR FORCE



**NAVAL AIR STATION
FORT WORTH JRB
CARSWELL FIELD
TEXAS**

**ADMINISTRATIVE RECORD
COVER SHEET**

AR File Number 465



465
DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AERONAUTICAL SYSTEMS CENTER (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

1
File:
P.W. 17A-53
465

29 APR 99

MEMORANDUM FOR TNRCC
ATTN: MR. RAY RISNER
PO BOX 13087
AUSTIN TX 78711-3087

RECEIVED
MAY 11 1999
REMEDICATION DIVISION
Corrective Action Section

FROM: ASC/ENVR
1801 10 ST STE 2
WRIGHT-PATTERSON AFB OH 45433-7626

SUBJECT: Air Force Plant 4 (AFP 4) Focused Feasibility Study and Interim Remedial Action Plan for Naval Air Station (NAS) Fort Worth/Carswell Field

1. We have received and reviewed your letter dated 19 Mar 99 addressing concerns to the subject document. After consultation with our headquarters on the cleanup programs at AFP 4 and NAS Fort Worth/Carswell Field, we will continue to implement the AFP 4 Record of Decision (ROD) as written.
2. The remediation goals established in the ROD for the Terrace Alluvial flow system (and the Upper Sand Groundwater/Paluxy Aquifer) are based on the Applicable or Relevant and Appropriate Requirements (see section 8.1 and 9.1 of the ROD); preventing further contamination of the Paluxy Aquifer; and prevention of the migration of contamination off Department of Defense property. Therefore, we can only address comments/concerns related to plume migration and monitoring. We have advised the Air Force Base Conversion Agency (AFBCA) of its need to manage the restoration program at the Carswell Golf Course, including groundwater. Any additional clean-up requirements are driven by their desire to divest the Carswell Golf Course property. This is not a requirement of the AFP 4 ROD, but we believe it is an AFBCA requirement prior to their divestiture of the property.
3. Your letter addressed concerns with surface water contamination in Farmers Branch Creek. The Air Force agrees that protecting Farmers Branch Creek is important. In fact, the ROD addressed groundwater discharging into Farmers Branch Creek and set an allowable level of contaminants in the creek. Monitoring wells and Direct Push Technology (DPT) locations have been used extensively to evaluate the concentrations of groundwater near the creek. Additionally, semiannual sampling of the creek at the aqueduct effluent, downstream near a groundwater to surface water discharge point and at the confluence of Farmers Branch Creek and the West Fork of the Trinity River is conducted pursuant to the ROD and as agreed to in the Long Term Monitoring Plan. The latest data shows that Trichloroethylene (TCE) is not detectable at the point of compliance where Farmers Branch Creek converges with the West Fork of the Trinity River. The AFP4 Public Health Assessment (PHA) conducted in 1998 by the Texas Department of Health (TDH) stated that Farmers Branch Creek poses no apparent public health hazard.
4. We note your concern over the proper screening interval and the length of the screen for monitoring wells at the site. The Air Force agrees that screening wells to bedrock is essential in characterizing TCE concentrations in an aquifer. Standard operating procedure for installing monitoring wells at the site has been to screen the wells from the bedrock up. A preliminary review of the distance between the bottom

of the well screen and the top of the bedrock shows that at least 162 of 220 wells on the base are screened within two feet of the top of bedrock. Some additional checking is underway, further verify this data.

5. The Air Force agrees that screen length is important to accurately characterize an aquifer. Your letter recommends a screen length no longer than 10 feet. However, section VIII.A.2.b.2 Carswell AFB Permit HQ50289 states "The upper 20 feet of the upper flow zone of the uppermost aquifer must be sampled. No monitor well screen shall exceed 20 feet." Section 5.3.4 of the Field Sampling Plan states that, "The length of the well screen will be at least 10 feet and up to 20 feet long. The well screen will extend from the bedrock surface to above the water table." Attempts were made to keep the screened interval as small as possible. But there have been instances where a screened interval of greater than ten feet, yet less than twenty feet, was used in order to intercept the entire saturated section. Every effort will be made to use a ten foot maximum screen length. If the saturated thickness is greater than twenty feet, the bottom ten feet of the saturated thickness will be screened.

6. Your letter raises the concern that the extent of the plume might not have been determined based on well screening. The boundary of the plume was defined using a DPT investigation with a mobile laboratory. All the DPT locations were drilled to top of bedrock. Current well design has the objectives of providing permanent monitoring locations, possible use as containment extraction points, and to provide additional data to be used by AFBCA in the FFS. Based on these objectives, these wells appear to be properly located.

7. ASC/ENVR is awaiting regulatory comments on the subject work plans. Once comments have been received the existing remediation system will be reactivated to address the immediate concern of TCE leaving Air Force property. AFBCA will be able to utilize this action as the first step in conducting the ultimate remediation for the southern lobe of the TCE plume and facilitate AFBCA property transfer.

8. We believe our ROD is truly protective of human health and the environment. We will continue to use the Air Force's scarce resources wisely to implement the requirements driven by the ROD. We've attempted to address your concerns in this letter, further details can be found in the attachment. John Doepker and George Walters are your points of contact and can be reached at 937-255-7716 or e-mail john.doepker@wpafb.af.mil. Also, please note that as a result of recent reorganization, our new office symbol is ASC/ENVR.

David R. Lawrence
Acting Chief, Restoration Branch

DAVID R. LAWRENCE
Chief, Restoration Branch
Acquisition Environmental Safety
& Health Division
Engineering Directorate

cc:
HQ AFMC/CEVR
AFCEE/ERD (Joe Dunkle)
HQ AFBCA (Rafael Vasquez)

RESPONSES TO TNRCC COMMENTS:
DRAFT FOCUSED FEASIBILITY STUDY AND INTERIM
REMEDIAL ACTION WORK PLAN

- Comment** *Page 2 Paragraph 3 Last sentence: Also, collecting samples from spigots at 11 of the extraction wells is not considered an appropriate sampling technique for TCE.*
- Response** The proposed extraction well sampling is not intended to provide characterization data for the delineation effort. This sampling is intended to provide influent concentrations for design conditions to ensure the system is capable of effectively treating the groundwater. The dynamic concentration data from this sampling is generally the most useful data for determining the design parameters for a remediation system.
- Comment** *Page 2 Paragraph 4 First Sentence: When the monitor well at B-15 is properly installed, and the appropriate information is entered into an appropriate model, ASC should be able to tell if the extraction well proposed at B-23 is necessary, as it is very close to the well proposed at B-28.*
- Response** The nature of the Base boundary suggests that two wells may be necessary to determine whether the TCE contamination is leaving the base at the subject location.
- Comment** *Page 2 Paragraph 5 First Sentence: It is unclear whether the proposed extraction wells will be connected to the existing pump and treat system and included in the 3 month operation and maintenance period.*
- Response** Until the wells are drilled and sampled, it cannot be determined whether the wells will contain any TCE. A determination of which, if any, of the proposed wells will be connected to the system will be made after the analytical results of the sampling are received.
- Comment** *Page 2 Paragraph 5 Second Sentence: It also appears that the TCE plume is close enough to the facility boundary that a more aggressive and long term corrective program should be implemented.*
- Response** A long term corrective action will be proposed in the feasibility study scheduled to be submitted this year. It should be noted, however, that the concentrations of TCE detected along the property boundary were only slightly above the 5 ug/L MCL, and probably do not pose any appreciable risk to human health and the environment due to the low concentrations and lack of receptors in the area. However, the proposed short term action will address the immediate concern of TCE leaving Air Force property.

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ADMINISTRATIVE RECORD

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