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LETTER REGARDING REGULATORY REVIEW AND COMMENTS ON DRAFT WORK PLANS, FOCUSED FEASIBILITY STUDY AND INTERIM REMEDIAL ACTION PLANS NAS FORT WORTH TX
2/1/1999
TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

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P.W.

NAVAL AIR STATION
FORT WORTH JRB
CARSWELL FIELD
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 599

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TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

February 1, 1999

John Doepker
ASC/EMR Building 8
1801 Tenth Street, Suite 2
Wright-Patterson AFB, OH 45433-7626

RE: Draft Work Plans, Focused Feasibility Study and Interim Remedial Action, NAS Fort Worth JRB, Texas

Dear Mr. Doepker:

Enclosed are the TNRCC comments to the aforementioned draft work plan. Should you have any comments or require additional information please contact me at (512) 239-2484.

Sincerely,

Peter A. Waterreus
Senior Project Manager
Superfund Cleanup Section

PAW/ls

Enclosure

Texas Natural Resource C ns rvation Commission

INTEROFFICE MEMORANDUM

To: John Doepker **Date:** February 1, 1999

Thru: Wade Stone

From: Peter Waterreus

Subject: Comments to the Draft Work Plans, Focused Feasibility Study and Interim Remedial Action, NAS Fort Worth JRB, Texas

Comments to the Draft Work Plans prepared by HydroGeologic, Inc., dated 1/14/99, submitted on 1/20/99.

1) **Section 3.2.2, page 3-3, paragraph 2:** Ground water is to be analyzed for VOC's using method EPA method 8260B. The list of compounds under method 8260B is quite extensive. If each compound under 8260B is to be analyzed for please state so. If a subset of the analytical list is to be analyzed for, then provide the list of compounds.

   The work plan states that the TCE concentrations analyzed under the work plan will be compared to previous TCE concentrations. However, we should also look at daughter products as well as petroleum compounds (e.g., BTEX). The daughter products can give clues as to natural attenuation of the TCE. BTEX compounds are known to aid in dechlorination of TCE. Incidently, we have discovered that removal of TCE to acceptable concentrations using carbon may not remove all the DCE (i.e., cis & trans) due to inadequate retention times. Please make sure this is not the case at Air Force Plant 4.

2) **Section 3.2.3, page 3-4, paragraph 2:** This section refers to aquifer testing. Please address the following: 1) Is the aquifer under consideration unconfined or confined? 2) If unconfined, will the storage coefficients (i.e., storativity and specific yield) be determined? 3) Are there a sufficient number of observation wells in the vicinity of the pumping wells and is the distance from the pumping well adequate to determine the storage coefficients? Please provide the basis for the number and spacing. 4) Will the shape of the cone of depression be identified given the observation well locations? 5) Will a step drawdown test be performed in order to determine a suitable pumping rate for the aquifer test? 6) How will the discharge rate be measured so as to ensure a constant pump rate? How will the contractor handle a non-constant pump rate? 7) Will the aquifer testing account for changes in atmospheric pressure should changes arise? How will the changes be accounted for (i.e., corrected drawdown)? 8) Are there suspected hydrogeologic boundaries in the vicinity of the pump test and how will the contractor be able to identify and account for these during and after the test? 9) If the piezometric surface has not stabilized during the 48 hour test, will the test duration be extended? How will the contractor determine if an extension is warranted?

10) How will the water levels in the wells be measured during the test? 11) What method (e.g., Neuman) will you use to calculate the hydraulic parameters? 12) Will a recovery test be performed after the pumping test has been conducted as a check on the transmissivity?

This section also states that a third pump test may be performed if the first two tests indicate the need for additional data. Specify the conditions upon which this decision is to be made.

3) **Figure 1.3 shows the proposed locations for the extraction wells.** What is the basis for these particular locations? If the ground water is contaminated, will the proposed extraction locations prevent contaminated ground water from migrating any further down gradient than what is indicated on figure 1.3? Please provide the information upon which these wells will provide an effective hydraulic barrier to contaminant migration. If there is no sound basis, will the information gathered from the pump tests provide a sound basis for extraction well locations? If the pump test data is to be used for designing an appropriate hydraulic barrier to contaminant migration, please provide the methodology upon which the design is to be based. How does the contractor plan to deal with the increased contamination if the bulk of the contaminant mass migrates at a faster rate due to the operating extraction wells? If one of the extraction wells ceases to operate (e.g., pump failure) will the remaining extraction wells be able to remove the contaminant or will the remaining extraction wells prove ineffective with respect to preventing further contaminant migration?

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