



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

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Superfund Records Center

SITE: PEASE AFB

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September 30, 2014

Robert E. Moriarty, Director
Installations Directorate
Air Force Civil Engineering Center
2261 Hughes Avenue, STE 155
JBSA Lackland, TX 78236-9853

Re: Final Five Year Review Report (2009 - 2013) for the Former Pease Air Force
Base NPL Site, September 2014

Dear Mr. Moriarty:

EPA Region I (EPA) is in receipt of the above referenced document. EPA requested and received the Final Pease AFB 4th Five Year Review via e-mail on 26 September 2014 from Mr. Peter Forbes of AFCEC's Loring office. EPA provided comments on the draft five year review on 18 August 2014. To facilitate timely revision and finalization of the Pease Five Year Review Report, EPA provided comments to the draft document by electronically revising the draft text using redline and strikeout editing tools.

Consistent with CERCLA Section 120(e)(4)(A), EPA and the Air Force have a joint responsibility to select CERCLA remedies; those remedies must meet the requirements of CERCLA, including but not limited to the requirement in CERCLA Section 121 for ensuring protectiveness of human health and the environment. The five year review process mandated by CERCLA Section 121 is designed to ensure that remedies remain protective over the long-term.

To adequately assess the protectiveness of remedies at the former Pease AFB, three questions needed to be adequately addressed in the five year review per EPA's 2001 Comprehensive Five Year Review Guidance (2001 Guidance):

Question A – Is the remedy functioning as intended by the decision documents?

Question B – Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

Question C – Has any other information come to light that could call into question the protectiveness of the remedy?

Based upon these three threshold questions, a remedy can fall into one of five protectiveness categories: protective, short-term protective, will be-protective, protectiveness deferred, and not protective.



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A "protectiveness deferred" determination must be made when available information for Questions A, B and C do not provide sufficient data or documentation to conclude all human and ecological risks are currently under control and no unacceptable exposures are occurring. A new exposure pathway that is identified but not fully evaluated for an OU, or the presence of an emerging contaminant that is identified but its impacts to human health and the environment have not been fully assessed are two scenarios for deferring site protectiveness.

Because Pease AFB is a construction completion Site, the 2001 Guidance also requires a Site-wide protectiveness determination be made in addition to a protectiveness statement for each operable unit (OU). The Site-wide protectiveness determination is based on the same protectiveness determination as the least protective OU at the Site:

EPA's comments on the draft Five Year Review and the Air Force's final version of the document both agree that the Site-wide protectiveness determination for Pease must be deferred until additional data and analysis is completed for specified OUs. However, EPA does not concur with the Air Force's protectiveness determinations for several OUs evaluated in the final document.

The Air Force has only deferred a protectiveness determination for one area of concern at Pease because of a potentially complete vapor intrusion pathway (Site 39 - Building 227). EPA concurs with the protectiveness deferment for this site. However, the Air Force disregarded EPA's deferred protectiveness determinations for other operable units due to the presence or threatened presence of emerging contaminants. Historical Air Force use of firefighting foams containing perfluorinated compounds (PFCs) have been released to the environment at Pease. The presence of PFCs in groundwater above EPA's provisional health advisories has resulted in the shutdown of the main Pease water production well (Haven Well) and potentially threatens the two remaining Pease supply wells (Smith and Harrison Wells). These wells provide water to the 9,000 people who work at the Pease International Tradeport. PFCs have also migrated off the former base. The full extent of these chemicals' potential impact to base water production wells and off-base residential wells is not fully understood.

For these reasons, it is EPA's finding that the following Pease OUs should also have a deferred protectiveness determination:

- **Zone 2 - Ground Water**
- **Zone 5 - Site 8, Pickering Brook, and Knights Brooks**
- **Base-Wide (Zone 3, Haven Aquifer) - Ground Water**

In our comments on the draft Five Year Review, EPA proposed recommended actions to address protectiveness issues for these OUs as it relates to PFCs along with milestone dates for completing these actions. EPA proposed these milestone dates as points of departure for negotiating mutually agreeable dates between the Air Force and EPA. The Air Force rejected EPA's recommended actions and milestone dates in the final Five Year Review.

Because of the issues identified above EPA will take the following actions related to the 4th Five Year Review for Pease AFB NPL Site:

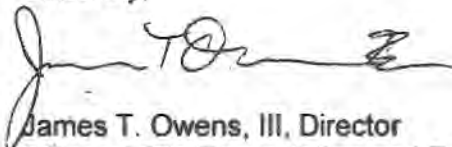
1. EPA will provide the following Pease AFB Site-wide protectiveness statement to Congress:

"Based upon the results of this Five-Year Review for the former Pease Air Force Base completed in September 2014, it is concluded that remedies for most sites are currently protective of human health and the environment. During the reporting period covered by this Five Year Review, perfluorinated compounds (PFCs) above EPA provisional ground water health advisories have been confirmed in site and off-base groundwater monitoring wells associated with the former Fire Department Training Area #2 (Site 8). In mid-2014, PFCs were also confirmed in three operating water production wells at the former base, resulting in the shutdown of one production well located within Zone 3 (Haven Well). The Air Force has begun efforts to complete an inventory of off-base residential drinking water wells and will also conduct additional studies to identify the nature and extent of PFCs on the former base. Until these tasks are completed, a base-wide protectiveness determination has been deferred."

2. Recommended actions needed to be taken to evaluate and modify protectiveness determinations for those operable units where protectiveness has been deferred, as determined by EPA, will be tracked within EPA's Superfund program.
3. Because the Site-wide protectiveness determination for Pease is being deferred, GPRA Superfund Environmental Indicators for: a) Migration of Contaminated Ground Water and b) Human Exposure Under Control will be changed to "insufficient data to make determination". Upon the completion of recommended actions, an addendum to the 4th Five Year Review should be completed to make the necessary protectiveness determinations for the deferred operable units.

Should you have any questions with regard to this letter, please feel free to contact Mike Daly at (617) 918-1386.

Sincerely,



James T. Owens, III, Director
Office of Site Remediation and Restoration

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