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Subject: [EXTERNAL] Response to EPA Issues
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Attachments: [1 File Filtering Drop.txt](#)

Good Afternoon,

Attached are responses to the concerns identified by EPA during their review of the permit renewal application, excluding item numbers 6 and 7 (6 – groundwater sampling and analysis plan and 7 – SWMU question 30). Please let me know if you have additional questions or concerns. Thanks.

Respectfully,
Mary

//SIGNED//
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Listed below are the items and additional information requested to complete the Altus AFB Corrective Action Permit Review;

1. Part A Form and photographs

- ✓ Part A form previously provided.
- ✓ Photographs of SS017 and SWMU 7/LF004 Bioreactors (note: SWMU 7 bioreactor originally referred to as LF-03)



Bioreactor Photos
for SS017 and SWMU

2. Inspection Plan (264.15)

- ✓ Attached is the inspection checklist for the SS017 and SWMU 7/LF004 (formerly LF-03) bioreactors.



Checklists for
Bioreactor Inspectio

- ✓ Above ground equipment for the remedial systems is minimal because the selected remedy for Altus Air Force Base is enhanced reductive dechlorination using bioreactors and bio-mulch walls. The bioreactors for sites SS017 and SWMU 7 function as a source zone treatment. Both bioreactors are comprised of a well injection circulation system installed in an excavation where source material was previously removed. The excavation was backfilled with a mixture of organic material, sand and gravel. A distribution piping network layer was installed within the backfilled materials. Extraction wells for both the SS017 and SWMU 7 bioreactors pump groundwater from a downgradient collection point to the bioreactor. The only above ground components for the SWMU 7 bioreactor system are the solar panels which power the submersible solar pump. Above ground components of the SS017 bioreactor are the controllers and the flowmeters. Quarterly inspections of the SS017 bioreactor are conducted to ensure the bioreactor is working properly. The recirculation system inspection includes inspecting the pump controllers, checking/cleaning the Y-strainer filters, and recording the flow rate and line pressures.

3. Personnel Training (264.16)

- ✓ Under the terms of the Optimized Restoration Contract:

- The contractor is responsible for training maintenance personnel in system operations.
- The contractor is required to handle all hazardous materials and wastes in accordance with applicable federal, state, local, installation and U.S. Army Corp of Engineers requirements. The contractor would be responsible for ensuring their personnel receive the appropriate training.

4. Procedures to address equipment and power failure (270. 14 (b)(8)(iv))

- ✓ Altus Air Force Base relies on two main systems to handle power failures. The main system is a 9 mega-watt generator on base that automatically switches on when there is a power outage. The system is large enough to power the entire base. The second back-up system consists of back-up generators located at critical buildings/areas, including apron lights for Taxiway A. Power to operate the 2 extraction wells for the SS017 bioreactor is on the same circuit as the apron lights for Taxiway A. The bioreactor for SWMU 7 uses solar power to run the pump. In the event of equipment failure, it is the responsibility of the contractor to make the repairs.
- ✓ Under the term of the Optimized Restoration Contract, the contractor's responsibility includes properly accounting for and managing all new and existing government furnished property procured and utilized at the installation as-is in accordance with the Federal Acquisition Regulation. The contractor will maintain the Air Force-owned property in accordance with applicable maintenance requirements and usability for the intended purpose. This includes all materials required to replace any exhaustible process materials necessary to operate and maintain the individual processes specified in the O&M manuals and equipment manufacturer specifications.

5. Post closure plan (264.118) – N/A

A Post-Closure Plan is not required for the following reasons:

- ✓ Section V of the 3008(h) Administrative Order issued to Altus AFB on November 6, 1996, lists the Conclusions of Law and Determinations. This section does not state Altus AFB has/had a regulated unit(s). Section V states that Altus AFB released hazardous waste or hazardous constituents and under the authorities of the Federal Facility Compliance Act and RCRA, Altus must clean it up.
- ✓ Section II.J., General Closure Requirements, of RCRA Permit No. 9571824045-CA states that Altus AFB has no operating RCRA waste management units which require closure. . . . All clean-up remediation, post-closure activities are subject to the corrective action measures specified in Section III of this Permit.
- ✓ Refer to email from Tracie Donaldson dated 2 January 2018.



EPA -- Altus RCRA
Permit replaces 3008

(Note: Attachment 1 of the Permit Renewal Application contains the revised Corrective Measures Implementation Work Plan. Section 3 of the work plan consists of the Performance Monitoring Plan and methodology for evaluating groundwater plume stability, Section 4 covers the components of the Performance Review Plan (every 3 years), Section 5 is a revised Contingency Plan, and Section 6 is the land Use Control Plan.)

6. Groundwater sampling and analysis plan

Plan to be submitted separately.

In addition, in the checklist at the beginning of the application, there are sections marked "N/A". Could additional information be provided as to why the following are not applicable?

7. SWMU 30: Potential adverse effects on groundwater quality, considering: etc.

Response to be provided separately

- 8. SWMU 31: Potential adverse effects on hydraulically-connected surface water quality, considering:, etc.
- 9. SWMU 32: To make determination under paragraph (b) of this section about the use of groundwater, the Agency will consider any identification of underground sources of drinking water and exempted aquifers (144.8)



p 10 -- SWMU
Checklist - Altus AFE

10. SWMU 128: The facility must report semi-annually the effectiveness of the corrective action plan.



p 28 -- SWMU
Checklist -- Altus AF