

**Travis Air Force Base
Environmental Restoration Program
Restoration Program Manager's
Meeting Minutes
15 August 2018, 0930 Hours**

Mr. Lonnie Duke of the Air Force Civil Engineer Center (AFCEC) Restoration Installation Support Section (ISS) conducted the Restoration Program Manager's (RPM) meeting on 15 August at 0930 hours in Building 248 at Travis AFB, California. Attendees included:

Lonnie Duke	AFCEC/CZOW
Glenn Anderson	AFCEC/CZOW
Angel Santiago Jr.	AFCEC/CZOW
Sarah Miller	USACE/OMAHA
Ben Fries (via telephone)	DTSC
Nadia Hollan Burke	USEPA
Adriana Constantinescu	RWQCB
Mike Wray	CH2M/JACOBS
Jeff Gamlin (via telephone)	CH2M/JACOBS
Tony Chakurian	CH2M/JACOBS
Leslie Royer	CH2M/JACOBS
Jill Dunphy	CH2M/JACOBS

Handouts distributed prior to or at the meeting, discussions, and presentations included:

Attachment 1	Meeting Agenda
Attachment 2	Master Meeting and Document Schedule
Attachment 3	SBBGWTP Monthly Data Sheet (July 2018)
Attachment 4	CGWTP Monthly Data Sheet (July 2018)
Attachment 5	LF007C Monthly Data Sheet (July 2018)
Attachment 6	ST018 Monthly Data Sheet (July 2018)
Attachment 7	Presentation: LF006 Technology Demonstration Work Plan
Attachment 8	Presentation: Program Update

1. ADMINISTRATIVE

A. Previous Meeting Minutes

The July meeting minutes were approved by all agencies as written.

B. Action Item Review

Action items from June 2018 were reviewed.

Action item 1 is ongoing: Ms. O'Sullivan to provide updates on perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). August 2018 update: Mr. Duke conveyed that Ms. O'Sullivan had no updates; however, on behalf of Ms. O'Sullivan, Mr. Duke informed the team that the State of California is considering lowering the advisory limits beyond those in place at the federal level.

Action Item 2 is ongoing: Mr. Duke will continue to provide design and construction information for the new KC-46 Hangar construction project for agency input ahead of the Air Force/Civil Engineering awarding the construction contract. August 2018 update: The Contractor is working on finishing their design package to submit to potential bidders. Soil vapor samples will be collected next week as planned. The deeper samples will be collected at approximately 9 feet below ground surface (bgs) in order to stay above the expected groundwater table, based on site conditions. For indoor air sampling, they will core through the floor first then install the probes. Soil vapor probes will be allowed to equilibrate for 48 hours before sampling. Mr. Chakurian will be present when the soil vapor sampling is conducted to help with the observations and boring logs. Ms. Constantinescu inquired about a potential teleconference with the contractors; Mr. Duke said that the contractors have done this type of work before and are communicating often with Jacobs for additional site-specific expertise.

C. Master Meeting and Document Schedule Review (see Attachment 2)

The Travis AFB Master Meeting and Document Schedule (MMDS) was discussed during this meeting (see Attachment 2).

Travis AFB Annual Meeting and Teleconference Schedule

The next RPM meeting will be a teleconference, held on Wednesday 19 September 2018, at 0930 hours.

Reminder: The annual RAB tour (which historically has been held in October) will not be formally scheduled and will instead be individual tours given when an interested party would like to see field work this summer. As a result, since there will not be a formal RAB meeting, all agencies agreed to move the October RPM meeting from Thursday, 18 October, to Wednesday, 17 October, at 0930.

Travis AFB Master Document Schedule

- Community Relations Plan Update (CRP): There was no change to the schedule.
- Amendment to the WABOU Soil ROD for Travis AFB ERP Sites DP039, SD043, and SS046: The Draft Final will be submitted on 17 August 2018. Mr. Anderson noted that the purpose of the Draft Final version is for the regulators to ensure that their comments on the Draft were adequately incorporated, and that a redline version will be submitted to assist with that task. The team will determine if each agency will have a separate signature page, or if there will be one page for all signatures. Ms. Constantinescu advised the Air Force that her agency will not likely sign until the Air Force signs, as lead agency, according to the Federal Facility Agreement. Mr. Anderson and Mr. Duke replied that in the past the Air Force wouldn't sign until the agencies signed. This issue affects all forthcoming RODs and Mr. Duke indicated that he will elevate this to his management for direction, as well as discuss it during the Air Force quarterly meeting to be held in two weeks. **This is a super critical document.**
- Amendment to the NEWIOU Soil ROD for the Travis AFB ERP Sites SS016 and SD033: The agency comment due date was shifted to 22 August. The EPA has provided one set of comments, and Ms. Burke indicated that the second set is currently with legal review, but they may not be ready by the due date. The Water Board will provide comments by 22 August. Mr. Duke said he would contact DTSC to see if they will be providing comments since Mr. Fries is out of the office. Mr. Anderson emphasized the importance to submit comments by the due date. **This is a super critical document** due to site work supporting planned KC-46 hangar construction. The field work at Site SS016 must be completed by December 2018.
- Site TS060 No Further Action Record of Decision for Old Skeet Range: There was no change to the schedule. **This is an important but not critical document.**
- Site SD043 Remedial Design/Remedial Action Work Plan: No change was made to the schedule.
- Site SS046 Remedial Design/Remedial Action Work Plan: The Response to Comments date has been changed to 21 August 2018. The rest of the schedule was changed accordingly.
- Site SS016 Remedial Design/Remedial Action Work Plan: The Draft to Agencies date was changed to 31 July, the rest of the dates were changed accordingly. The Response to Comments Due, Draft Final Due and Final Due dates were changed to TBD to ensure the work plan supports any changes in the NEWIOU ROD amendment. This excavation project is located within the footprint of the future new KC-46 hangar, so **this document is critical.**
- Site SD031 Soil Remedial Investigation/Feasibility Study: The Predraft to Air Force/Service Center has been changed to 28 August 2018. The due dates for items related to the Predraft and Draft versions changed accordingly. No change was

made to the schedule for the Final version, because any follow-on work will come under the next contract. **This document is important but not critical.**

- Fourth Five-Year Review Report for Multiple Groundwater, Soil, and Sediment Sites: No change was made to the schedule. Comments are being received and sent to Air Force Legal as appropriate. Mr. Duke indicated that the Air Force may not have responses ready by 23 September. Ms. Burke indicated that the EPA needs to issue a protectiveness statement by that date, and Mr. Duke agreed to work with the EPA on timing of responses. Ms. Constantinescu noted that the state agencies are expected to issue new guidance regarding vapor intrusion numbers that may affect the EPA's determination of protectiveness. Ms. Constantinescu said that if there is a concern regarding vapor intrusion, the Water Board will consider multiple lines of evidence, but may request indoor air sampling. Ms. Royer replied that we have collected data and developed site specific attenuation factors without use of the J&E model for vapor intrusion, so although new generic numbers will be included in the forthcoming guidance, hopefully this will be considered in the protectiveness evaluation. She noted that TCE is the most widespread contaminant, and the current data are what were used to develop the LUC boundaries. Ms. Burke added that the primary change will be for perchloroethylene, which likely won't affect LUC boundaries based on TCE concentrations. **This document is very important but not critical.**
- Potrero Hills Annex (FS, PP, and ROD): No change was made to the schedule. The Water Board sent comments on the risk assessment work plan; responses are being prepared by the Potrero Hills contractor.
- Site LF006 Technology Demonstration Work Plan: The Draft to Agencies date has been changed to 20 August 2018. The remainder of the schedule has been changed accordingly. Ms. Royer noted that the Draft version may be submitted earlier than that date. Mr. Wray requested the agencies review at their earliest convenience so that the field work can occur on 4 September as scheduled, noting that this is the only date that the drillers are available. A presentation is scheduled for later in the meeting in order to facilitate discussion and expedite approval. The agencies concurred that drilling can commence as scheduled.
- Quarterly Newsletters (July 2018): No change was made to the schedule; however, Mr. Anderson noted that the newsletter has been delayed indefinitely, until the KC-46 mission has been officially approved and announced for Travis AFB.
- 2017 Annual GRISR: There was no change to the schedule. This document is not as critical as some others, and comments are not expected until November 2018. Mr. Anderson requested that, if the agencies have comments on the 4Q2018 sampling plan, to please let Ms. Royer know so that changes to the monitoring event could be incorporated if possible. If not, proposed changes will be incorporated into the 2Q2019 sampling event.
- Monitoring Well Installation Technical Memorandum for Site DP039, Addendum to the Site DP039 Remedial Action Construction Completion Report: The

Response to Comment and Final dates were changed to 26 July 2018 to reflect actual submittal date.

- Site FT005 Extraction System Optimization Report: The Response to Comments Due and Final Due dates were changed to 23 August 2018.
- Site LF044 Sediment Sampling Report: The Response to Comments Due and Final Due dates were changed to 28 August 2018.
- 2017 Annual CAMU Monitoring Report: The Response to Comments Due and Final Due dates were changed to 7 September 2018.
- Emulsified Vegetable Oil Sites FT004, SS015, SD031, and SD036 Optimization Injections Report: The Draft to Agencies date was changed to 31 August 2018. The remainder of the dates were changed accordingly. This is a lower priority document.
- Site SS015 Soil Sampling Plan: Moved to History.

2. CURRENT PROJECTS

Treatment Plant Operation and Maintenance Update

South Base Boundary Groundwater Treatment Plant, July 2018 (see Attachment 3)

The South Base Boundary Groundwater Treatment Plant (SBBGWTP) performed at 96.1% uptime, and 7.3 million gallons of groundwater were extracted and treated in July 2018. All treated water was discharged to Union Creek. The average flow rate for the SBBGWTP was 154.3 gallons per minute (gpm). Electrical power usage was 19,404 kWh, and approximately 15,159 pounds of CO₂ were created (based on DOE calculation). Approximately 1.2 pounds of volatile organic compounds (VOCs) were removed in July. The total mass of VOCs removed since startup of the system is 502.9 pounds.

No optimization activities are reported for the month of July 2018.

In July 2018, troubleshooting was performed on several extraction wells, and several maintenance activities were performed on the treatment system. Details can be found in Attachment 3.

Central Groundwater Treatment Plant, July 2018 (see Attachment 4)

The Central Groundwater Treatment Plant (CGWTP) performed at 97.1% uptime with approximately 1,325,442 gallons of groundwater extracted and treated in July 2018. All treated water was discharged to the storm sewer system which discharges to Union Creek. The average flow rate for the CGWTP was 27.9 gpm. Electrical power usage

was 3.089 kWh for all equipment connected to the Central Plant, and approximately 3,174 pounds of CO₂ were generated. Approximately 2.8 pounds of VOCs were removed from groundwater by the treatment plant in July. The total mass of VOCs removed since the startup of the system is 11,498 pounds.

Optimization Activities for CGWTP: The DP039 bioreactor continues to operate in a four-week “pulsed mode.” No other optimization activities are reported for the month of July 2018.

A carbon changeout of the lead GAC vessel was performed on 17 July.

LF007C Groundwater Treatment Plant, July 2018 (See Attachment 5)

The Subarea LF007C Groundwater Treatment Plant (LF007C GWTP) performed at 93% uptime with approximately 188,262 gallons of groundwater extracted and treated in July 2018. All treated water was discharged to the Duck Pond for beneficial reuse. The average flow rate was 4.2 gpm. Approximately 1.2×10^{-3} pound of VOCs was removed from groundwater by the treatment plant in June. The total mass of VOCs removed since the startup of the system is 174.4 pounds. There was no electrical power usage statistics, because this plant operates on solar power only.

No optimization activities are reported for the month of July 2018.

ST018 Groundwater (MTBE) Treatment Plant, July 2018 (see Attachment 6)

Site ST018 (MTBE) Treatment Plant (ST018 GWTP) performed at 99.9% uptime with approximately 223,640 gallons of groundwater extracted and treated in July 2018. All treated water was discharged to the Fairfield – Suisun Sewer District. The average flow rate for the ST018 GWTP was 4.6 gpm. Electrical power usage for the month was 126 kWh for all equipment connected to the ST018 GWTP. The total CO₂ equivalent, including an estimate for the carbon change-out, equates to approximately 93 pounds. Approximately 0.16 pound of MTBE, BTEX, VOCs, and TPH was removed in July by the treatment plant, and approximately 0.02 pound of MTBE was removed from groundwater. The total BTEX, MTBE and TPH mass removed since the startup of the system is 45.7 pounds, and the total MTBE mass removed since startup of the system is 11.1 pounds.

Note: Electrical power use at the ST018 GWTP is only for the alarm system and a pump that pushes water through the GAC vessels for treatment. The four groundwater extraction pumps in the system are all solar powered.

Optimization activities for July 2018: Because influent concentrations are significantly less than Fairfield-Suisun Sewer District (FSSD) effluent limitations, and because the system began experiencing increased high-pressure shutdowns, the GAC vessels and bag filters will be bypassed on 1 August (as approved by the FSSD). Extracted

groundwater from Site ST018 is discharged directly to the sanitary sewer. FSSD currently does not have a local limit for MTBE, but a limit of 6,4000 µg/L is advised based on worker health and safety. On 3 July, the ST018 GWTP was shut down for approximately 1 hour to break up the top foot of GAC in the lead vessel to help decrease system pressure. After the system was restarted, the pressure only decreased slightly; therefore, the screens at the bottom of the tank may be clogged.

3. Presentations:

A) Site LF006 Technology Demonstration Work Plan (see Attachment 7)

Mr. Chakurian presented the technology demonstration planned for Site LF006. Please refer to Attachment 7 for the full briefing. Highlights from the discussion following the presentation are as follows:

- Mr. Gamlin noted that an aquifer test was performed at this site; concentrations of 1,1-DCE declined during the test but then increased later due to slight back-diffusion out of clays.
- Mr. Gamlin has been coordinating with several in the academic world to provide soil cores from drilling activities for future research purposes.
- Lactoil is lactate plus emulsified vegetable oil (EVO), and may be more efficient than EVO-only and help a solvent site reach site closure faster.
- Ms. Burke asked if all planned injections will utilize Lactoil with the sulfidated iron; Mr. Chakurian replied that only the three upgradient wells will. The amendment will be pulled downgradient, and better groundwater flow was observed in the deeper wells during the aquifer test.
- The agencies unanimously agreed for the team to install the injection wells as scheduled on 4 September 2018.

B) Program Update: Activities Completed, In Progress, and Upcoming (see Attachment 8)

Mr. Wray reported on the status of fieldwork and documents which are completed, in progress, and upcoming. Please refer to Attachment 8 for the full briefing.

- Mr. Duke noted that the offbase property owners near Site FT005 have changed, but the new owners signed a cattle grazing lease with the same people as the previous owners; therefore, there is no change to the plan for this site.

4. New Action Item Review

No new action items were identified during this meeting.

5. PROGRAM/ISSUES/UPDATE

1) Ms. Constantinescu, Ms. Burke, Mr. Duke, and Mr. Anderson discussed the signature process for Records of Decision and other decision documents. Per the FFA, the agencies cannot sign until the lead agency signs; but since the centralization of AFCEC, the Air Force as lead agency cannot sign until they know the regulating agencies agree with the document as written. Mr. Duke said that he would elevate this issue to his management, and potentially discuss during the Air Force quarterly meeting with the regulators, to be held at the end of the month.

2) Ms. Burke noted that the funding for EPA's contract with TechLaw, Inc. is running out as the end of the fiscal year approaches. As a result, EPA may not review and provide comments on lower priority secondary documents. She noted a risk that the reviewer contract may not be renewed in the next fiscal year.

6. Action Items

Item #	Responsible	Action Item Description	Due Date	Status
1.	Monika O'Sullivan	Ms. O'Sullivan to provide updates on PFOS and PFOA as she becomes aware of them.	Ongoing	Open
2.	Lonnie Duke	Mr. Duke will continue to provide design and construction information for the KC-46 Hangar for agency input ahead of the Air Force/Civil Engineering awarding the construction contract.	Ongoing	Open