

**Travis Air Force Base  
Environmental Restoration Program  
Restoration Program Manager's  
Meeting Minutes  
16 November 2022, 1000 Hours**

Mr. Chet Storrs of the Air Force Civil Engineer Center (AFCEC) Restoration Installation Support Section (ISS) conducted the Restoration Program Manager's (RPM) meeting on 16 November at 1000 hours. **This meeting was held in-person with a Microsoft Teams option for those who could not attend in person.**

The 60 AMW/CC at Travis Air Force Base (AFB) has directed Health Protection Condition (HPCON) Alpha in response to improving COVID-19 public health conditions in the local area. Mask wearing on base is currently not mandated. Visitors are permitted with an approved base pass. This will be the final HPCON update documented in the RPM Meeting Minutes unless the Base directs a change in the future.

**Attendees included:**

|                          |                      |
|--------------------------|----------------------|
| • Chet Storrs            | AFCEC/CZOW           |
| • Kim Rasmussen          | AFCEC/CZOW           |
| • Tom Potter             | AFCEC/CZOW           |
| • Mobashir Ahmad         | AFCEC/CZOW           |
| • Angel Santiago         | AFCEC/CZOW           |
| • Kurt Grunawalt         | Travis AFB 60 AMW/JA |
| • Chris Morriss          | AFCEC                |
| • Jessica Faragalli      | USACE-Sacramento     |
| • Jolie Higgins          | USACE-Sacramento     |
| • Nadia Burke            | EPA                  |
| • Kimiye Touchi          | DTSC                 |
| • Christopher Scudder    | DTSC                 |
| • Dave Kremer            | DTSC                 |
| • Jimmy Spearow          | DTSC                 |
| • Adriana Constantinescu | RWQCB                |
| • Megan Duley            | SRS                  |
| • Bob Mallisee           | SRS                  |
| • Chris Coonfare         | FPM                  |
| • Lynette Mokry          | FPM                  |
| • Leslie Royer           | Jacobs               |
| • Doug Berwick           | Jacobs               |
| • Mike Perlmutter        | Jacobs               |
| • Jill Dunphy            | Jacobs               |

Handouts distributed prior to the meeting included:

- Attachment 1: Meeting Agenda
- Attachment 2: Action Item Status
- Attachment 3: Master Meeting and Document Schedule
- Attachment 4: Travis AFB PFAS Update (November 2022)
- Attachment 5: Travis AFB LUC Update (November 2022)
- Attachment 6: ORC Program Update (November 2022)
- Attachment 7: Presentation - Groundwater Treatment Systems Update (July 2022 through September 2022)
- Attachment 8: Presentation - Subarea LF007C Groundwater Extraction System Optimization
- Attachment 9: Presentation: Phase 1 Remedial Investigation of AFFF Areas (July 2022)

## **I. TRAVIS AFB UPDATES**

### **A. ADMINISTRATIVE**

#### **1. Agenda and Introductions**

Mr. Storrs started the meeting and reviewed the agenda.

#### **2. Action Item Review (Attachment 2)**

Mr. Storrs reported on the status of action items from the July 2022 RPM Meeting. Please see Attachment 2 for full briefing.

#### **3. Master Meeting and Document Schedule Review (see Attachment 3)**

The Travis AFB Master Meeting and Document Schedule (MMDS) was discussed during this meeting (see Attachment 3).

#### **Travis AFB Annual Meeting and Teleconference Schedule**

The next RPM Meeting is scheduled for 19 January 2023. Mr. Storrs proposed alternating in-person and MS Teams RPM Meetings, with the January meeting to be held in person. The team agreed; Mr. Storrs took the action to update the MMDS accordingly.

Mr. Storrs inquired if the team would prefer to hold the second RPM meeting of 2023 in May, or in March so that it comes before the annual RAB meeting scheduled for 20 April 2023. The regulatory agency representatives collectively voiced their desire to hold some form of RPM meeting in the days before the RAB meeting to ensure all time-sensitive issues are addressed before presenting at the RAB. Ms. Dunphy requested that the meeting be held either Thursday morning to allow time for set-up of the RAB, or Wednesday morning since she will be in travel to the area on Wednesday afternoon. The agency representatives requested that if the meeting is scheduled for the day of the RAB meeting, that it be in-person due to the travel required. Mr. Storrs took the action to provide an updated master meeting schedule for 2023, including virtual vs. in person format, a March RPM meeting rather than a May RPM meeting (but keeping May as a placeholder), and an April pre-RAB RPM meeting (day, time, and format TBD).

The next RAB meeting is scheduled for 20 April 2023. This is currently planned as an in-person meeting.

## Travis AFB Master Document Schedule

- Universal Federal Program Quality Assurance Program Plan (UFP-QAPP): The Response to Comments Due date was changed to 21 November 2022. The rest of the dates were updated accordingly.
- Community Relations Plan (CRP) Update: There was no change to the schedule.
- 2021 Annual Groundwater Remediation Implementation Status Report (GRISR): The Response to Comments due date was changed to 18 November 2022. The rest of the dates were updated accordingly.
- 2021 Annual Site LF007 CAMU Inspection, Monitoring, and Maintenance Report: There was no change to the schedule.
- Subarea LF007C Groundwater Extraction Optimization Work Plan: There was no change to the schedule. This document is new since the July 2022 RPM Meeting, but has been on updated MMDS distributions prior to today's call.
- Sites SS015, SD036, SD037, and DP039 Groundwater Remedy Optimization Work Plan: This is a new document. The Travis AFB lead will be Mobashir Ahmad, and the Jacobs lead will be Tony Chakurian. The Predraft to AF/Service Center was assigned a due date of 14 November 2022; the rest of the dates were assigned accordingly.
- Remedial Action Construction Completion Report Site SS016 (Site SS016 RACCR): This is a new document. The Travis AFB lead will be Mobashir Ahmad, and the Jacobs lead will be Doug Berwick. The Predraft to AF/Service Center was assigned a due date of 30 November 2022; the rest of the dates were assigned accordingly.

This will document the installation of the new extraction well, as well as the replacement of wells that were removed this summer due to the construction at the site.

The agencies raised concerns about, and requested documentation of, all soil removed from the area around former Buildings 16, 18, and 21 during construction of the three bay hangar (also referred to as the KC-46 Hangar). These former buildings and a portion of the new KC-46 hangar are (or were) located at ERP Site SS016. Ms. Royer noted that the CERCLA-contaminated soil was removed and the soil LUCs for Site SS016 were lifted as documented in the Final Site SS016 Soil Remedial Action Completion Report, dated December 2020. This occurred prior to soil removal activities associated with hangar construction. Mr. Storrs added that AFLOA has provided recent guidance that military construction projects (MILCON) fall outside of DERP. Mr. Storrs took the action to request, and provide, if possible, documentation of CERCLA and MILCON soil removal activities at Bldg. 18, and other soil removal activities that may have occurred during construction of the KC-46 hangar.

Installation of the KC-46 hangar's vapor intrusion mitigation system was not part of the Site SS016 Remedial Design/Remedial Action Work Plan Addendum scope, so will not be covered in the Site SS016 RACCR. Mr. Storrs took the action to request post-construction completion documents from the construction contractor.

- Site SD031 Data Gaps Investigation Technical Memorandum: This is a new document. The Travis AFB lead will be Mobashir Ahmad, and the Jacobs lead will be Leslie Royer. The Predraft to AF/Service Center was assigned a due date of 21 December 2022; the rest of the dates were assigned accordingly.

- UFP-QAPP Addendum No. 2: All dates remain TBD at this time.
- Potrero Hills Annex (FS, PP, and ROD): There was no change to the schedule. Ms. Constantinescu reported that the contractor has requested No Further Action for one area, and the Water Board in turn requested additional sampling for PFAS to assist with a possible NFA determination. She added that if PFAS is detected above the detection limit, she will let the ERP team know since that has implication for areas downgradient of the site.

**Moved to history:**

- Site SD031 Data Gaps Investigation Work Plan

**B. CURRENT PROJECTS**

**1. PFAS Update (Attachment 4)**

Mr. Storrs reported on the PFAS updates for Travis AFB. Please refer to Attachment 4 for the full briefing.

**2. LUC Updates (Attachment 5)**

Mr. Storrs reported on the status of the LUC sites at Travis AFB. Please refer to Attachment 5 for the full briefing.

**C. PROGRAM ISSUES/UPDATE**

None

**D. ACTION ITEMS**

| Item # | Responsible | Action Item Description   | Due Date        | Status |
|--------|-------------|---|-----------------|--------|
| 1      | Chet Storrs | Mr. Storrs to provide an updated 2023 Master Meeting Schedule.  | 18 January 2023 | Open   |
| 2      | Chet Storrs | Mr. Storrs to request as-builts or a post-construction report for the vapor intrusion mitigation system installation in the new KC-46 Hangar. | 18 January 2023 | Open   |

|   |   |  |                 |        |
|---|---|--|-----------------|--------|
| 3 | Chet Storrs   | Mr. Storrs to request (and provide, if available) documentation of soil removal and disposal from the area associated with Buildings 16, 18, and 21 and any other soil removal that occurred in preparation for construction or during construction of the KC-46 Hangar; both under CERCLA and as part of MILCON activities. | 18 January 2023 | Open   |
| 4 | Chet Storrs   | Mr. Storrs to review the DSMOA process, and work with Leslie Royer/Jacobs regarding list of documents forthcoming for Water Board review that have not yet been entered into the Joint Execution Plan (JEP), and add them to the JEP.  | 18 January 2023 | Open   |
| 5 | Chet Storrs, Chris Coonfare, Leslie Royer, Adriana Constantinescu | Coordinate details for a meeting to be held on 13 December to discuss upcoming POCO work at Site ST028, Union Creek, and Site SD031, including a POCO 101 segment.   | 18 January 2023 | Closed |

## II. OPTIMIZED REMEDIATION CONTRACT UPDATES

### A. Administrative

All administrative topics were discussed earlier in the RPM meeting.

### B. CURRENT PROJECTS

#### 1. Program Update (Attachment 6)

Ms. Royer reported on the status of the Optimized Remediation Contract at Travis AFB. Please see Attachment 6 for the full briefing.

Ms. Constantinescu noted that a new JEP for Site ST028 should be created in the DSMOA database to facilitate funding for the Water Board's review time. Mr. Storrs took the action to review the DSMOA process and to create the new JEP.

#### 2. Groundwater Treatment Systems Update (Attachment 7)

Mr. Berwick reported on the status of the groundwater treatment systems at Travis AFB at Travis AFB. Please see Attachment 7 for the full briefing. Highlights of the discussion are as follows:

- The tertiary carbon vessel with the pinhole leak at the Subarea LF007C GWTS was in secondary containment, so the fluid remained in a containment system until the treatment system was back online and was directed to the influent to be treated. There was no release to the environment. No photos were taken, but Mr. Berwick offered to point out the pinhole during today's RAB tour. The Air Force intends to modify the ORC contract to include management of the spent carbon in accordance with Air Force guidance for managing AFFF-related waste, as the spent carbon is suspected to contain PFAS.
- Regarding the discharge limit exceedances at the South Base Boundary Groundwater Treatment System, Mr. Berwick clarified that once the September sample lab report indicating an exceedance was received on 10 October 2022, the sampling team requested that the lab analyze the October samples that had just been collected on 3 October 2022 as quickly as possible so they could serve as confirmation samples. The plant was shut down on 18 October, the same day the confirmation sampling results were received. This was summarized in the Monthly Groundwater Data Sheet that was provided to the regulators on 27 October 2022. Mr. Berwick took the action to verify confirmation sampling and notification timeframes specified in the NPDES permit. The carbon that was changed out on 30 October 2022 was disposed of in accordance with Air Force guidance for managing AFFF-related waste.
- Mr. Berwick updated the team on the new horizontal well at Site SS016. A pump test was conducted in April 2022. The results will be documented in the forthcoming RACCR. The 48-hour sustainable flow rate was 0.8gpm. It has not been online since the pump test was done. The flow rate for the old horizontal well was lower than this and would often run dry.

### 3. Subarea LF007C Groundwater Extraction System Optimization (Attachment 8)

Ms. Royer presented information intended to facilitate review of the Subarea LF007C Groundwater Extraction System Optimization Work Plan, scheduled for submittal in December 2022. Please see Attachment 8 for the full briefing.

## C. PROGRAM ISSUES/UPDATE

None

## D. ACTION ITEMS

| Item # | Responsible  | Action Item Description  | Due Date        | Status |
|--------|--------------|--|-----------------|--------|
| 6      | Doug Berwick | Mr. Berwick to verify confirmation sampling and notification timeframes specified in the NPDES permit. | 18 January 2023 | Open   |

### III. SRS PFAS CONTRACT

#### A. ADMINISTRATIVE

All administrative topics were discussed earlier in the RPM meeting prior to the Oneida Team presentation.

#### B. PRESENTATIONS

##### 1. Travis AFB Phase I RI of AFFF Sites – Program/Issues/Update (Attachment 8)

###### **Phase 1 Remedial Investigation Data-Driven Process**

Ms. Duley presented a diagram illustrating the current progress and upcoming activities as part of the data-driven process for this Phase I RI. The Oneida Team is wrapping up the majority of Field Event #2 activities. The crew are completing on-Base activities this week for survey of the newly installed monitoring wells. Laboratory analysis is ongoing. The next steps are data validation, bring the data into database and GIS, and begin interpretation and further development of the conceptual site model. Once complete, recommendations for Field Event #3 will be developed. Field Event #3 could include lysimeter installation and sampling, as well as additional potential optional soil borings and monitoring well installations. The Oneida Team anticipates holding a meeting with stakeholders to discuss recommendations then issue UFP-QAPP Addendum No. 2 for Field Event #3 (targeted May 2023).

###### **Field Event No. 2 – June to November 2022**

###### **Sediment/Surface Water Sample Collection**

The Oneida Team completed sediment/surface water sample collection at 19 locations in June 2022. A second surface water sample event will be conducted after a rain event when likely to have saturate ground and possible influx of water to the creek and increased gradient.

###### **Groundwater Sample Collection**

The team collected 121 groundwater samples from existing monitoring wells in June 2022. The newly installed 59 monitoring wells have also been sampled as part of Field Event #2.

###### **Monitoring Well Installation**

The Oneida Team completed on-Base drilling activities for Field Event #2. For the monitoring wells, Ms. Duley explained that there were 65 wells on-Base wells planned. Six locations were not installed due to shallow bedrock refusal. The Oneida Team is waiting for access resolution to install the remaining 25 monitoring off-Base monitoring well locations that were originally planned for Field Event #2.

## **Soil Sample Collection**

During drilling activities, PFAS soil samples were collected at 55 monitoring wells and included collection of samples for geochemical parameters (pH, total organic carbon, and anion and cation exchange capacity). Soil source sampling is also complete for Field Event #2 at planned soil borings.

## **Stream Gauge Installation**

Stream gauges were installed in August 2022. Monthly water level measurements will be collected from stream gauges.

## **Field Event #2 – Drilling Delay**

Field activities were delayed in September/October 2022 while waiting for approval of the Technical Airfield Construction Waiver (TACW). The crews were still able to complete all on-Base drilling by 28 October 2022.

## **Off-Base Well Locations**

Ms. Duley presented a slide showing the off-Base monitoring well locations where the Team is waiting for access and Section 106 requirement approvals. Once approved, the schedule will be reassessed for their installation.

Ms. Touchi asked for clarification that none of the off-Base monitoring wells have yet been installed. Mr. Storrs confirmed that none of the off-Base monitoring well have been installed. Mr. Storrs spoke of the off-Base Section 106 process and getting the signatures from the 60<sup>th</sup> CE for the packet submittal to the SHPO. There are 25 monitoring wells in 13 locations off-Base along road easements. Access agreements are still being worked out with either the City of Fairfield, County of Solano, or CalTrans. The team discussed the locations of the furthest south and east off-Base monitoring well cluster (MW2019xSS030P and MW2020xSS030P) and their proximity to a mapped wetlands area. Ms. Duley noted that the Team had agreed in previous planning discussion that the well cluster could be moved slightly east or west to avoid areas where water may accumulate and target close to the road shoulder.

## **Next Steps**

The laboratories are behind on reporting data from Field Event #2. The Oneida team is working with the laboratories to receive data, begin validation and data analysis, and begin interpretation. Field Event #3 is targeted to begin in May 2023 after a stakeholder meeting and submittal of UFP-QAPP Addendum No. 2. All project data will be reported in the Phase I Remedial Investigation Report in 2024-2025.

## **Questions/Discussion**

Ms. Touchi asked if Oneida planned to complete the off-Base well locations as approvals are given or wait to complete the wells all together in the spring. Ms. Duley said once the approvals are received, the Oneida Team would need to consult with the biologists (since we are in the wet season until May 2023), internal resources, and the drilling subcontractor to determine the schedule.

Dave Kremer asked if there was surface water present at all 19 locations when they were sampled in June 2022. Ms. Duley confirmed there was water present and that the surface water samples were collected at all 19 locations.



Mr. Kremer asked if the second surface water sampling event would be collected at the same locations. Ms. Duley confirmed that the Oneida Team planned to sample at the same locations.

Mr. Kremer asked if the second round of surface water samples would be considered part of Field Event #2. Ms. Duley confirmed the second round of surface water samples would be part of Field Event # 2.

**C. ACTION ITEMS**

| <b>Item #</b> | <b>Responsible</b>             | <b>Action Item Description</b> | <b>Due Date</b>     | <b>Status</b> |
|---------------|--------------------------------|--------------------------------|---------------------|---------------|
| 7             | Megan Duley/<br>Diane Escobedo | Send meeting minutes to Jacobs | 23 November<br>2022 | Closed        |

**AGENDA**  
**TRAVIS AIR FORCE BASE**  
**ENVIRONMENTAL RESTORATION PROGRAM**  
**RESTORATION PROGRAM MANAGER'S MEETING**  
**16 November 2022**

The RPM Teleconference is scheduled for 10:00 am PST. This will be an in-person meeting with a call-in option (via MS Teams) be provided in the MS Teams meeting invite and also in the same email that the meeting materials are provided. If you are able to participate via MS Teams meeting, you will see the shared documents that will be viewable by all participants.

**A. TRAVIS INSTALLATION SUPPORT SECTION**

---

**1. ADMINISTRATIVE**

- a. Introductions
- b. Action Item Review (New format)
- c. Master Meeting and Document Schedule Review

**2. UPDATES**

- a. PFAS
- b. Land Use Controls

**B. JACOBS OPTIMIZED REMEDIAL CONTRACT (ORC)**

---

**1. ADMINISTRATIVE**

**2. PROGRAM UPDATE**

- a. Documents & Activities Completed, In Progress & Planned

**3. PRESENTATIONS**

- a. Groundwater Treatment Systems Updates July, August, and September 2022
- b. Subarea LF007C Groundwater Extraction System Optimization

**C. ONIEDA AFFF REMEDIAL INVESTIGATION**

---

**1. ADMINISTRATIVE**

**2. PROGRAM UPDATE**



# Action Item Review



| Item # | Responsible   | Action Item Description   | Due Date    | Action Taken   | Status |
|--------|---|---|-------------|--|--------|
| 1      | Mr. Storrs  | Mr. Storrs will get guidance from AFCEC regarding appropriate timeframes for providing data to the regulatory agencies.                                 | 18 May 2022 | Data can be released to regulators once the data validation process is complete. | Closed |
| 2      | Mr. Storrs, Ms. Burke, Ms. Constantinescu, Ms. Touchi | Mr. Storrs will review the FFA and coordinate a meeting with the agencies to discuss documents, document review schedules, and data delivery schedules. | 18 May 2022 | This action item has been reworded as Action Item 5 for clarity.                 | Closed |
| 3      | Ms. Dunphy  | Provide Mr. Spearow with the Final April 2022 Travis AFB RPM Meeting Minutes, and add him to the invitation/distribution list for future meetings.      | 22 Jul 2022 | Ms. Dunphy sent the appropriate information to Mr. Spearow on 20 July 2022.      | Closed |



# Action Item Review (cont'd)



| Item # | Responsible  | Action Item Description   | Due Date    | Action Taken  | Status |
|--------|--|---|-------------|---|--------|
| 4      | Mr. Storrs, Ms. Dunphy   | Include a list of action items from previous RPM meeting in meeting handouts/slides. Complete by next RPM Meeting scheduled for 16 November 2022.   | 16 Nov 2022 | Ms. Dunphy and Mr. Storrs collaborated on new slides itemizing the previous action items, actions taken to close the action items (if available), and status (if available).  | Closed |
| 5      | Mr. Storrs, Ms. Faragalli, Ms. Burke, Ms. Constantinescu, Ms. Touchi | Coordinate a meeting on the placeholder RPM date of 17 August 2022 to discuss all document- and data-related matters relating to the FFA (including data and document deliverable timeframes, which documents are primary vs secondary vs. informational, which documents should be on the MMDS, and document review timeframe). This meeting should include all agency subject matter experts and legal counsel. | 29 Jul 2022 | Mr. Storrs received guidance regarding the FFA from AFLOA; the FFA is not open for renegotiation; regulators can continue requesting additional review time on a document by document basis. Issue resolved, no further action necessary. | Closed |



# Action Item Review (cont'd)



| Item # | Responsible  | Action Item Description   | Due Date    | Action Taken  | Status |
|--------|--|---|-------------|---|--------|
| 6      | Mr. Storrs, Ms. Faragalli, Ms. Burke, Ms. Constantinescu, Ms. Touchi | Coordinate a second meeting on a placeholder RPM Meeting date (17 August 2022 or 21 September 2022) to discuss the new EPA PFAS Health Advisories and impacts for the Travis AFB ERP. This meeting should include all agency subject matter experts and legal counsel.    | 29 Jul 2022 | Office of Secretary of Defense published guidance on 6 Jul 2022 regarding the May 2022 EPA screening levels for PFOS, PFOA, PFNA, PFHxS and HFPO-DA (PFBS remains unchanged). The Air Force is using the May 2022 EPA RSLs. | Closed |
| 7      | All parties  | Locate the communication from USFWS instructing not to operate the LF007C Groundwater Treatment Plant when nearby vernal pools are full; send to Dylan Hickey to attempt resolution with USFWS, send to Adriana Constantinescu to forward to her Watershed Division Lead. | 30 Aug 2022 | Travis AFB has consulted with their biologists and will continue to shut down the LF007C GWTS when nearby vernal pools are full. No further action is necessary.  | Closed |



# Action Item Review (cont'd)



| Item # | Responsible            | Action Item Description  | Due Date    | Action Taken  | Status |
|--------|------------------------|--|-------------|---|--------|
| 8      | Ms. Duley/Ms. Escobedo | Send meeting minutes to Ms. Dunphy/Jacobs                                    | 27 Jul 2022 | This action item was completed as specified.        | Closed |
| 9      | Mr. Mayry/Oneida Team  | Provide an updated schedule for Field Event #2 activities to Regulatory Team | ASAP        | Updated field schedules were provided as necessary. | Closed |

## Travis Environmental Restoration Program

### RPM & RAB Meeting Schedule 2022 Revision 6

| Virtual Meeting              | In-Person Meeting            | Monthly Placeholder<br>(Optional as needed) | Restoration<br>Advisory Board<br>Meeting |
|------------------------------|------------------------------|---|--|
| 19 Jan (Wed) 0930 PST        | —                            | —   | —  |
| —                            | —                            | 16 Feb (Wed) 0930 PST                       | —  |
| —                            | —                            | 16 Mar (Wed) 0930 PST                       | —  |
| 20 Apr (Wed) 0930 PST        | —                            | —   | 21 Apr (Thu) 1900 PST                    |
| —                            | —                            | 18 May (Wed) 0930 PST                       | —  |
| —                            | —                            | 15 Jun (Wed) 0930 PST                       | —  |
| 20 Jul (Wed) 1000 PST        | —                            | —   | —  |
| —                            | —                            | 17 Aug (Wed) 1000 PST                       | —  |
| —                            | —                            | 21 Sep (Wed) 1000 PST                       | —  |
| —                            | —                            | 20 Oct (Thu) 1400 PST                       | 20 Oct (Thu) 1900 PST                    |
| —                            | 16 Nov (Wed) 1000 PST        | —   | 16 Nov (Wed) 1330 PST<br>RAB Tour        |
| Dec<br>No meetings scheduled | Dec<br>No meetings scheduled | Dec<br>No meetings scheduled                | Dec<br>No meetings scheduled             |

**Travis Environmental Restoration Program**  
**2023 RPM & RAB Meeting Schedule**  
(DRAFT\_V.2)

| Month        | Virtual Meeting      | In-Person Meeting | Monthly Placeholder<br>(Optional as needed) | Restoration Advisory Board Meeting |
|--------------|----------------------|-------------------|---|------------------------------------|
| JAN          | 18 (Wed) 10:00 PST   | —                 | —   | —                                  |
| FEB          | —                    | —                 | 15 (Wed) 10:00 PST                          | —                                  |
| <b>**MAR</b> | —                    | —                 | 15 (Wed) 10:00 PST                          | —                                  |
| APR          | —                    | —                 | —   | 20 (Thu) 7pm PST                   |
| <b>MAY</b>   | **17 (Wed) 10:00 PST | —                 | —   | —                                  |
| JUN          | —                    | —                 | 21 (Wed) 10:00 PST                          | —                                  |
| JUL          | —                    | —                 | 19 (Wed) 10:00 PST                          | —                                  |
| AUG          | 16 (Wed) 10:00 PST   | —                 | —   | —                                  |
| SEP          | —                    | —                 | 21 (Wed) 10:00 PST                          | —                                  |
| OCT          | —                    | —                 | 18 (Wed) 10:00 PST                          | —                                  |
| NOV          | 15 (Wed) 10:00 PST   | —                 | —   | —                                  |
| *DEC         |                      |                   |   |                                    |

\*\* May RPM meeting can be moved to March based upon DTSC request.

\* No meetings scheduled for Dec



**Travis Environmental Restoration Program**  
**2023 RPM & RAB Meeting Schedule**  
**(DRAFT\_V.3)**

| Month        | Virtual Meeting      | In-Person Meeting | Monthly Placeholder<br>(Optional as needed) | Restoration Advisory Board Meeting |
|--------------|----------------------|-------------------|---|------------------------------------|
| JAN          | 18 (Wed) 10:00 PST   | —                 | —   | —                                  |
| FEB          | —                    | —                 | 15 (Wed) 10:00 PST                          | —                                  |
| <b>**MAR</b> | **15 (Wed) 10:00 PST | —                 | —   | —                                  |
| APR          | —                    | —                 | —   | 20 (Thu) 7pm PST                   |
| <b>MAY</b>   | —                    | —                 | —   | —                                  |
| JUN          | —                    | —                 | 21 (Wed) 10:00 PST                          | —                                  |
| JUL          | —                    | —                 | 19 (Wed) 10:00 PST                          | —                                  |
| AUG          | 16 (Wed) 10:00 PST   | —                 | —   | —                                  |
| SEP          | —                    | —                 | 21 (Wed) 10:00 PST                          | —                                  |
| OCT          | —                    | —                 | 18 (Wed) 10:00 PST                          | —                                  |
| NOV          | 15 (Wed) 10:00 PST   | —                 | —   | —                                  |
| *DEC         |                      |                   |   |                                    |

## Travis AFB Master Meeting and Document Schedule

| PRIMARY DOCUMENTS                   |  |  |
|-------------------------------------|--|--|
| Life Cycle                          | UFP-QAPP<br>Travis AFB, Mobashir N. Ahmad<br>FPM, Chris Coonfare | Community Relations Plan Update<br>Travis AFB,TBD<br>Jacobs, Jill Dunphy |
| <b>Scoping Meeting</b>              | NA   | NA   |
| Predraft to AF/Service Center       | 01-06-22   | 08-23-16   |
| AF/Service Center Comments Due      | 02-07-22   | 09-07-16   |
| Draft to Agencies / RAB             | 05-31-22   | 09-28-16 (03-22-18)  |
| <b>Agency Comments Due</b>          | 09-09-22   | 10-28-16 (04-27-18)  |
| <b>Response to Comments Meeting</b> | <b>TBD</b>   | <b>TBD</b>   |
| Agency Concurrence with Remedy      | NA   | NA   |
| Public Comment Period               | NA   | NA   |
| <b>Public Meeting</b>               | NA   | NA   |
| Response to Comments Due            | 11-21-22   | TBD  |
| Draft Final Due                     | 11-21-22   | TBD  |
| Final Due                           | 12-21-22   | TBD  |

## Travis AFB Master Meeting and Document Schedule

| INFORMATIONAL DOCUMENTS             |   |  |  |
|-------------------------------------|---|--|--|
| Life Cycle                          | 2021 Annual Groundwater Remediation Implementation Status Report<br>Travis AFB, Mobashir N. Ahmad<br>Jacobs, Leslie Royer | 2021 Annual Site LF007 CAMU Inspection, Monitoring, and Maintenance Report<br>Travis AFB, Mobashir N. Ahmad<br>Jacobs, Dan Chern | Subarea LF007C Groundwater Extraction System Optimization Work Plan<br>Travis AFB, Mobashir N. Ahmad<br>Jacobs, Doug Berwick |
| <b>Scoping Meeting</b>              | NA  | NA   | NA   |
| Predraft to AF/Service Center       | 05-06-22  | 06-07-22   | 09-30-22   |
| AF/Service Center Comments Due      | 06-06-22  | 07-06-22   | 10-31-22   |
| Draft to Agencies / RAB             | 07-19-22  | 09-20-22   | 12-01-22   |
| Agency Comments Due                 | 09-30-22  | 10-20-22   | 12-30-22   |
| <b>Response to Comments Meeting</b> | <b>TBD</b>  | <b>TBD</b>   | <b>01-18-23</b>  |
| Response to Comments Due            | 11-18-22  | 11-21-22   | 01-31-23   |
| Draft Final Due                     | NA  | NA   | NA   |
| Final Due                           | 11-18-22  | 11-21-22   | 01-31-23   |
| Public Comment Period               | NA  | NA   | NA   |
| <b>Public Meeting</b>               | NA  | NA   | NA   |

## Travis AFB Master Meeting and Document Schedule

| INFORMATIONAL DOCUMENTS             |   |  |  |
|-------------------------------------|---|--|--|
| Life Cycle                          | Sites SS015, SD036, SD037, and DP039 Groundwater Remedy Optimization Work Plan<br>Travis AFB, Mobashir N. Ahmad<br>Jacobs, Tony Chakurian | Remedial Action Construction Completion Report Site SS016<br>Travis AFB, Mobashir N. Ahmad<br>Jacobs, Doug Berwick | Site SD031 Data Gaps Investigation Technical Memorandum<br>Travis AFB, Mobashir N. Ahmad<br>Jacobs, Leslie Royer |
| <b>Scoping Meeting</b>              | NA  | NA   | NA   |
| Predraft to AF/Service Center       | 11-14-22  | 11-30-22   | 12-23-22   |
| AF/Service Center Comments Due      | 12-15-22  | 12-29-22   | 01-23-23   |
| Draft to Agencies / RAB             | 01-17-23  | 02-09-23   | 03-13-23   |
| Agency Comments Due                 | 02-17-23  | 03-09-23   | 04-13-23   |
| <b>Response to Comments Meeting</b> | TBD   | TBD  | TBD  |
| Response to Comments Due            | 03-21-23  | 04-06-23   | 04-24-23   |
| Draft Final Due                     | NA  | NA   | NA   |
| Final Due                           | 03-21-23  | 04-06-23   | 04-24-23   |
| Public Comment Period               | NA  | NA   | NA   |
| <b>Public Meeting</b>               | NA  | NA   | NA   |

## Travis AFB Master Meeting and Document Schedule

| PRIMARY DOCUMENTS                   |   |
|-------------------------------------|---|
| Life Cycle                          | UFP-QAPP Addendum No. 2<br>Travis AFB, Chet Storrs<br>Oneida, Megan Duley |
| <b>Scoping Meeting</b>              | <b>TBD</b>  |
| Predraft to AF/Service Center       | TBD   |
| AF/Service Center Comments Due      | TBD   |
| Draft to Agencies / RAB             | TBD   |
| <b>Agency Comments Due</b>          | TBD   |
| <b>Response to Comments Meeting</b> | TBD   |
| Agency Concurrence with Remedy      | TBD   |
| Public Comment Period               | TBD   |
| <b>Public Meeting</b>               | TBD   |
| Response to Comments Due            | TBD   |
| Draft Final Due – as RLSO w/ RTC    | TBD   |
| Agency Concurrence                  | TBD   |
| Final Due                           | TBD   |

## Travis AFB Master Meeting and Document Schedule

| PRIMARY DOCUMENTS                   |   |                  |                    |
|-------------------------------------|---|------------------|--------------------|
| Life Cycle                          | Potrero Hills Annex<br>Travis, Chet Storrs            |                  |                    |
|                                     | FS  | Proposed Plan    | ROD                |
| <b>Scoping Meeting</b>              | <b>180 days after Water Board<br/>Order Rescinded</b> | <b>+470 days</b> | <b>+735 days</b>   |
| Predraft to AF/Service Center       | + 270 days  | +530 days        | + 915 days         |
| AF/Service Center Comments Due      | + 300 days  | +560 days        | + 975 days         |
| Draft to Agencies                   | +330 days   | +590 days        | + 1035 days        |
| Draft to RAB                        | + 330 days  | +590 days        | + 1035 days        |
| Agency Comments Due                 | +390 days   | +650 days        | + 1095 days        |
| <b>Response to Comments Meeting</b> | <b>+ 405 days</b>                                     | <b>+665 days</b> | <b>+ 1110 days</b> |
| Agency Concurrence with Remedy      | NA  | NA               | + 1130 days        |
| Public Comment Period               | NA  | +735 to 765 days | NA                 |
| <b>Public Meeting</b>               | <b>NA</b>   | <b>+745 days</b> | <b>NA</b>          |
| Response to Comments Due            | +430 days   | +695days         | + 1190 days        |
| Draft Final Due                     | +430 days   | +695 days        | + 1190 days        |
| Final Due                           | +460 days   | +725 days        | + 1250 days        |

[https://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=SL20299915](https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL20299915)

## Travis AFB Master Meeting and Document Schedule

| HISTORY-PRIMARY DOCUMENTS           |  |
|-------------------------------------|--|
| Life Cycle                          | Site SD031 Data Gaps Investigation<br>Work Plan<br>Travis AFB, Mobashir N. Ahmad<br>Jacobs, Levi Pratt |
| <b>Scoping Meeting</b>              | NA   |
| Predraft to AF/Service Center       | 01-20-21   |
| AF/Service Center Comments Due      | 02-22-22   |
| Draft to Agencies / RAB             | 04-14-22   |
| <b>Agency Comments Due</b>          | 06-13-22   |
| <b>Response to Comments Meeting</b> | <b>07-20-22</b>  |
| Agency Concurrence with Remedy      | NA   |
| Public Comment Period               | NA   |
| <b>Public Meeting</b>               | <b>NA</b>  |
| Response to Comments Due            | 06-29-22   |
| Draft Final Due                     | 06-29-22   |
| Final Due                           | 08-18-22   |

## Other Travis AFB Restoration Documents Provided to the Agencies

| Other Travis Restoration Documents                    |  |
|---|--|
| Document  | Status   |
| Final 2021 Annual Land Use Controls Inspection Report | Courtesy copy delivered to agencies on 11/3/2022 |





# PFAS Updates

---



## DoD / DAF

- DoD continues using the 2016 HAs as the trigger for drinking water actions until the EPA MCLs are promulgated; expected by the end of 2022.
- Published MCLs will increase the spatial extent of private drinking water wells that need testing and possible treatment.
- Office of Secretary of Defense published guidance on 6 Jul 2022 regarding the May 2022 EPA screening levels for PFOS, PFOA, PFNA, PFHxS and HFPO-DA (PFBS remains unchanged). The Air Force is using the May 2022 EPA RSLs per the OSD guidance memo.

## Point-Of-Entry-Treatment-Systems

- 24 Oct 2022 Quarterly sampling and O&M event completed at all three systems.
- Data sample points included influent, mid-point, and effluent.
- Expecting preliminary data late November.



# Land Use Control Updates

---

## **2021 Annual land Use Controls Inspection Report**

- Submitted to regulators on 3 Nov 2022

### **SS016-KC-46 Hangar Project**

- Concrete pouring is currently underway. Bioreactor is marked and protected during the pours.

### **SD037-Bldg. 977, Aerial Port**

- \*NSTR

### **LF044, Concrete batch plant construction**

- NSTR

### **SS016/SS029/ST032 Runway Repairs**

- Runway repair project on hold due to contract dispute issues.

\*Nothing Significant To Report

# Air Force Civil Engineer Center

---



ORC Program Update  
RPM Meeting  
November 16, 2022



# Finalized Documents

---

## CERCLA

- Site SD031 Data Gaps Investigation WP

## POCO

none



# Draft Documents

---

## CERCLA

- UFP-QAPP
- 2021 Annual GRISR
- 2021 Annual Site LF007 CAMU IMM Report

## POCO

none



# Upcoming Documents

---

## CERCLA

- Subarea LF007C Groundwater Extraction System Optimization WP Dec
- Sites SS015, SD036, SD037, and DP039 Groundwater Remedy Optimization WP Jan
- Site SD031 DGI TM March

## POCO

none



# Completed Fieldwork

---

- 4Q21 GRIP Event
- 2Q22 GRIP Event
- Site SD031 Data Gaps Investigation
- 4Q22 GRIP Event



# Upcoming Fieldwork

---

## CERCLA

- 2Q23 GRIP April

## POCO

none



# Air Force Civil Engineer Center

---



Groundwater Treatment  
Systems Updates July, August,  
and September 2022



# LF007C GWTP

---



- The system had 100% uptime in July and September 2022, and 48% in August 2022.
- System downtime in August 2022 was due to a pinhole leak that developed in the tertiary carbon vessel (55-gallon drum). The drum was replaced, and the system brought back online without issue.
- The system plumbing was reconfigured, and a new air-relief valve was installed in September 2022 to minimize the possibility of increased air pressure within the system.



# ST018 GWTP



- The system experienced 100% uptime in July, August, and September 2022.
- MTBE influent concentrations remained relatively consistent, though decreasing, in July (20  $\mu\text{g/L}$ ), August (22  $\mu\text{g/L}$ ), and September (16  $\mu\text{g/L}$ ) 2022. These concentrations are all less than half of the 47  $\mu\text{g/L}$  concentration observed in June 2022.
- The system continues to run with only two extraction wells (EW2016x18, EW2333x18) online. Two extraction wells (EW2014x18, EW2019x18) were previously taken offline due to low MTBE concentrations.



# Central GWTP

---

- System experienced 100% uptime in July and August, and 67% uptime in September 2022.
- Downtime in September 2022 was due to a section of system piping within the treatment plant compound that had cracked. The pipe section was replaced, and the system restarted without issue.
- The CGWTP SCADA system is in the process of being upgraded, with completion scheduled for January 2023.
- Extraction wells EW605x16 and EW610x16 were mostly offline from July through September 2022. Both of these wells are expected to be brought back online by December 2022.



# SBBGWTP



- The SBBGWTP had at 100% uptime in July, 99% in August, and 97% in September 2022.
- Routine, minor maintenance activities were performed in each month at individual wells (replace flow meters, replace pressure transducers, clean fouled pumps, etc.).
- The minor amounts of downtime in August and September 2022 were due to general system maintenance activities:
  - August 2022 - The water level sensor within the system influent tank was replaced. The system was taken offline to replace the sensor.
  - The particulate filter automatic purge valve was replaced and required the system to be offline to facilitate its replacement in September 2022.



# SBBGWTP



- September monthly O&M sample results indicated discharge limit exceedances of cis-1,2-DCE (1.7  $\mu\text{g/L}$ ), and TCE (1.4  $\mu\text{g/L}$ ).
- Confirmation samples collected in October also indicated an exceedance. The SBBGWTP was shut down for a carbon changeout; which occurred on October 31.
- Confirmation samples to verify effective treatment were collected on November 9 for expedited analysis.

# Air Force Civil Engineer Center

---



Subarea LF007C Groundwater  
Extraction System Optimization  
RPM Meeting  
November 16, 2022

---

***Battle Ready...Built Right!***



# Overview

---

- Purpose is to facilitate review of the *Subarea LF007C Groundwater Extraction System Optimization Work Plan*
  - Draft scheduled for submittal in December 2022
- No changes to the selected groundwater remedy (remedy remains groundwater extraction and treatment)
- The planned optimization is similar in scope to groundwater extractions system optimizations that have already been performed at Sites FT005 and SS030







# Background

---

- The Subarea LF007C groundwater trichloroethene (TCE) groundwater plume is co-located with a large vernal pool
- Due to the presence of the vernal pool:
  - Groundwater extraction is restricted to dry season only
  - Building new infrastructure is restricted
- Despite these limitations, significant progress has been made over the last few years on reducing the plume extent
  - Recent CA drought conditions resulted in longer groundwater extraction seasons



# Background, Cont.

---

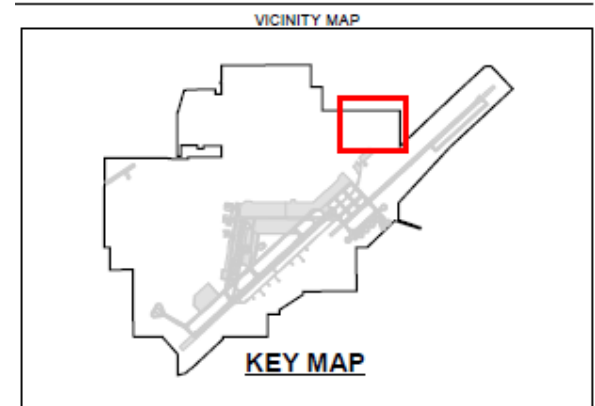
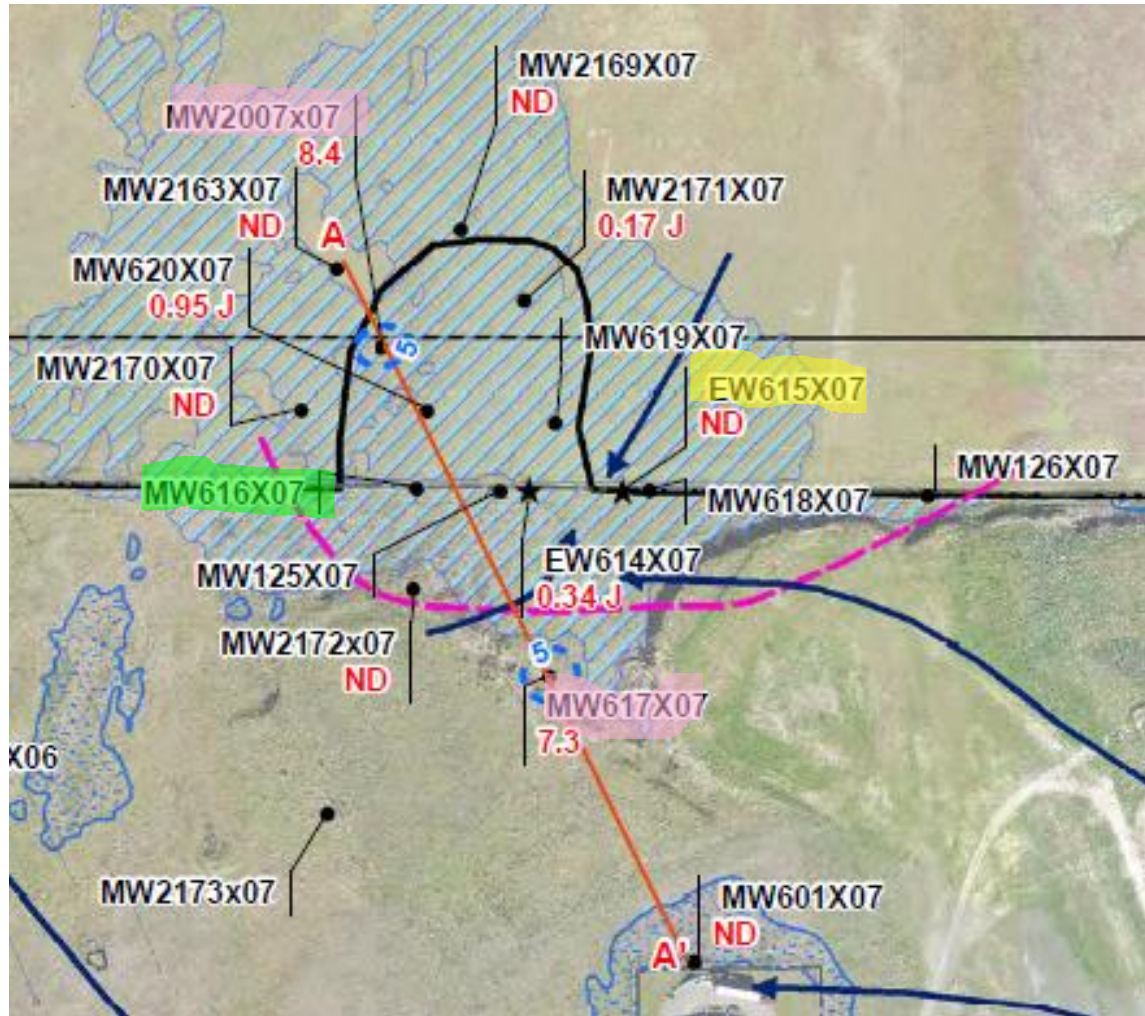


- As of May 2022, two relatively small areas of groundwater contamination remain at Subarea LF007C
- The optimization goal is to improve plume capture without impacting the overlying vernal pool





# May 2022 LF007C TCE Plume



## Legend

- GROUNDWATER MONITORING WELL
- ⊗ INJECTION WELL
- ★ EXTRACTION WELL
- MANHOLE
- 5- APPROXIMATE ISOCONCENTRATION CONTOURS (µg/L)
- GROUNDWATER FLOW DIRECTION
- - - APPROXIMATE EXTENT OF 2Q21 CAPTURE
- SURFACE WATER
- A—A' CROSS SECTION LINE
- FENCE
- ▭ ERP SITE BOUNDARY
- WETLAND FEATURES
- SEASONAL WETLAND
- VERNAL POOL



# Planned Extraction Optimization



- Convert MW616x07 to an extraction well
  - Located immediately downgradient of the remaining offbase plume
  - Located adjacent to the fence, which supports the aboveground groundwater conveyance line
  - Can be tied into the existing groundwater conveyance line without impacting the vernal pool
- Take EW615x07 offline
  - COC concentrations below the cleanup level in this area
  - Has minimal impact on capture of the current plume
  - Will evaluate repurposing extraction infrastructure for MW616x07



# Schedule

---

- Fieldwork planned for summer 2023 (dry season)
- Optimization will be documented in the Subarea LF007C Groundwater Extraction System Optimization Technical Memorandum



# Questions?

---



# Air Force Civil Engineer Center

---



## Travis Air Force Base Phase I Remedial Investigation of AFFF Areas

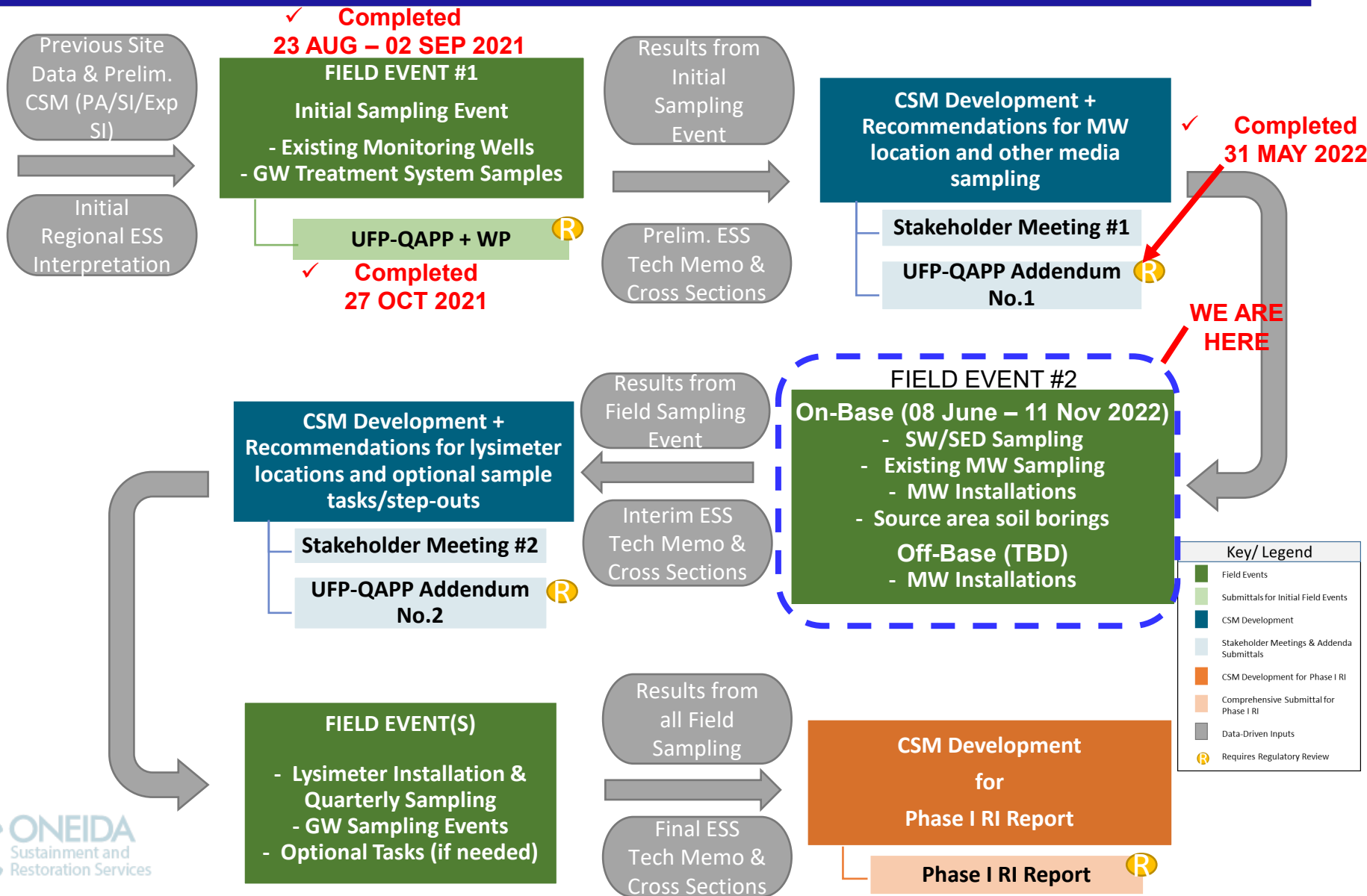
Presented by  
Megan Duley, PM

16 November 2022





# Phase I Remedial Investigation Data-Driven Process





# Field Event #2

## June to November 2022



- **Sediment/Surface water sample collection**
  - 19 locations sampled in June 2022
  - A second surface water sampling event to occur after a rain event when the ground may be saturated, and increased stormwater runoff may be present
- **Groundwater sample collection – new and existing monitoring wells**
  - 121 existing wells sampled in June 2022
  - 59 newly installed wells sampled July-November 2022



Oneida Team surface water sampling



# Field Event #2

## June to November 2022



- **Soil sample collection**
  - Soil sampled from 55 monitoring well locations July-November 2022
  - 30 soil samples analyzed for geochemical parameters
  - Soil sampled from 67 source area soil borings July-November 2022



Oneida Team drilling and sampling soil







# Field Event #2

## June to November 2022

- **Groundwater monitoring well installation**

- Support the delineation of the vertical and lateral extent of PFAS constituents in groundwater (deep/shallow)
- 65 locations drilled on-Base July-November 2022
- 25 locations remain off-Base

- **Stream gauge installation**

- Support evaluation of groundwater-surface water interactions in different parts of Union Creek.
- 5 locations installed in August 2022
- Began monthly water level measurements in September 2022



Oneida Team installing a groundwater monitoring well



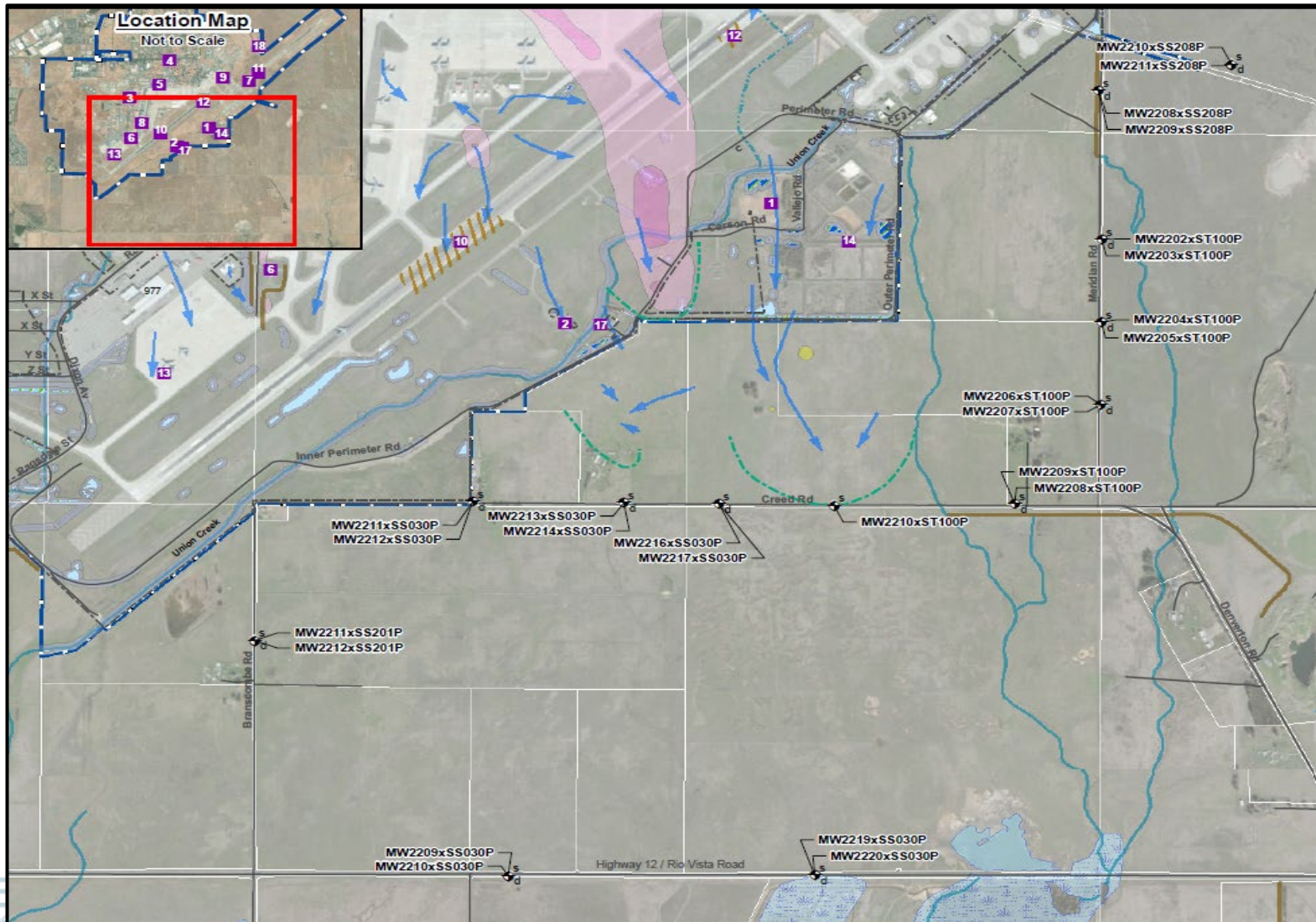
# Field Event #2 – Drilling Delay

---



- From 12 August 2022 to 19 September 2022, no drilling occurred for FE#2 due to waiting for final approval of the Technical Airfield Construction Waiver (TACW). On 19 September 2022, the Oneida Team received a copy of the final TACW for drilling locations within the flightline areas. Crews remobilized and began monitoring well installations on 20 September 2022.
- On-Base drilling completed on 28 October 2022.
- As of November 2022, 25 planned monitoring wells at 13 locations remain to be installed off-Base that were planned as part of Field Event #2. Off-Base access agreements and resolution of off-Base Section 106 requirements are required to proceed with installation of the off-Base monitoring wells.

# Off-base Well Locations





# Next Steps

---

- **Receipt and validation of laboratory analytical data packages**
- **Further CSM development with results from Field Event #2**
- **Develop Recommendations for Field Event #3**
- **UFP-QAPP Addendum No. 2**
- **Field Event #3 – May 2023**
  - Lysimeter installation & quarterly sampling
  - Optional MW installations as necessary
  - Optional soil borings as necessary
  - Sampling event of all proposed existing and newly installed MWs
- **Phase I RI Report – Begin 2024**





Questions?