



**Final
HTW BCT
Meeting Minutes
September 21, 2022**



BRAC Conference Room and Teleconference
Former Fort Ord, California

Agenda

Reference the handout titled “HTW BCT Meeting Agenda, Wednesday, September 21, 2022, at 1:30 PM, Former Fort Ord, California.”

1. Attendance and Announcements

Last Name	First Name	Organization	By Phone
Anderson	Thor	Burleson Consulting	
Bleichner	Randall	California Department of Toxic Substances Control (DTSC)	x
Cervantes	Christina	Chenega for BRAC	
Clancy	Maeve	U.S. Environmental Protection Agency (USEPA)	
Collins	Bill	U.S. Army BRAC, Fort Ord Office	
Corr	Erin	USACE	x
Dillon	Holly	Ahtna Global, LLC (Ahtna)	x
Facchini	Hudson	Chenega for BRAC	
Floyd	Bridget	U.S. Army Corps of Engineers (USACE)	
Hession	Shaelyn	Ahtna	x
Higgins	Jolie	USACE	x
Kochman	Aaron	Chenega for BRAC	x
Kosowski	Sylvester	Ahtna	x
Lam	Nancy	USACE	x
Leary	Brett	DTSC	x
Meakes	Charity	USACE	x
No	Jason	Chenega for BRAC	
Nozaki	Chieko	Chenega for BRAC	
Sarmiento	Riz	DTSC	x
Schmidt	Eric	Ahtna	x
Sellinger	Amber	California Regional Water Quality Control Board, Central Coast Region (CCRWQCB)	x
Soderberg	Sheila	CCRWQCB	x
Specht	James	USACE	x
Valdez	Val	Chenega for BRAC	x
Walak	Kelsey	USACE	x

Bill Collins with the BRAC Office announced that the Site 33 Explanation of Significant Differences (ESD) was signed and uploaded to the Administrative Record today, September 21. One more step in the process is to remove the residential land use restriction. The newspaper Notice of Availability for the Site 33 ESD will be issued next week.

Bill also noted that the 5th Five-Year Review report was signed by the Army and forwarded to the USEPA. It is anticipated the USEPA will sign a concurrence letter by September 27.

Bridget Floyd with USACE announced that she was promoted to Section Chief; however, she will still be involved with the Fort Ord project. The new Fort Ord Technical Lead for USACE is Erin Corr.

2. BCT Minutes Status

HTW BCT meeting minutes are final through the last meeting in July.

3. Community Outreach Update

The handout titled “U.S. Army Fort Ord Environmental Cleanup Community Outreach Update” was reviewed. Additional discussion included:

- The Fort Ord Annual Report draft is in progress.
- Analysis of the 2021 Community Survey is in progress.
- An announcement for the Community Involvement Workshop (CIW) open house on July 23 was made in early July through mail, email and newspaper ads. An announcement about the cancellation of the CIW due to high COVID community risk level was sent through mail, email and newspaper ads. A few staff were still onsite in case some people came with questions who did not receive the cancellation notification.
- The Technical Review Committee (TRC) meeting was held on July 26 highlighting the munitions cleanup and Environmental Services Cooperative Agreement.
- On August 19, the annual York School munitions safety training was held for approximately 200 students and faculty.
- An informational booth was held on September 1 at the Monterey County Fair and was visited by approximately 100 people. Photos of the event were shared.
- There are tentative newspaper ad publications for:
 - The Finding of Suitability to Transfer (FOST) 11 amendment
 - The Notice of Availability of the ESD to the Basewide ROD for Site 33
 - The Notice of Availability of Completed 5th Five-Year Review
- In October, there are two community events where a munitions safety informational booth will be staffed.
- One response to a community comment received on the Draft Final Sites 2 and 12 (Sites 2/12) Exit Strategy is ready to be sent out.
- Proposed 2023 community outreach event dates were shared.
 - The HTW CIW is proposed for February 11, 2023.
 - The HTW TRC is proposed for February 14, 2023.
 - The Guided Nature Walk is proposed for May 20, 2023.
 - The Munitions Response (MR) CIW is proposed for July 15, 2023.
 - The MR TRC is proposed for July 18, 2023.
- Maeve Clancy with the USEPA announced that she was contacted by the U.S. Department of Housing and Urban Development (HUD) regarding a property on Hayes Circle in Marina. The person requested information about cleanup activities that occurred on the property and the environmental condition. The property is not overlying the current extent of any of the groundwater plumes.

4. 5th Five-Year Review

There was no handout for the 5th Five-Year Review. Discussion included:

- The final document was forwarded to the USEPA.
- The USEPA stated it would sign the concurrence letter on September 27.
- The distribution list and fact sheet are in progress.
- Hardcopies will also be provided for the Admin Record, USEPA, and DTSC.
- The public notice of availability will go out after USEPA concurrence is received and the document is posted in the Administrative Record.

5. Operable Unit 2 (OU2)

a. Groundwater Remedy/Monitoring –

The handout titled “Operable Unit 2 Data and Status” was reviewed. Additional discussion included:

- Table 1 shows that the OU2 groundwater treatment plant (GWTP) was online 100 percent (%) of the time in July and almost 100% in August at approximately 1,000 gallons per minute (gpm) flow rate. The OU2 GWTP has treated cumulatively nine billion gallons of water and removed approximately 950 pounds of chemicals of concern (COCs) since treatment began in 1995.
- Table 2 shows the OU2 GWTP injection point of compliance analytical results from August. A few COCs were detected at low estimated concentrations below their discharge limits.
- Key events were discussed for July through August and upcoming events.
 - On August 5 there was a power outage that caused a 3-hour shut down of the GWTP.
 - On August 18, EW-OU2-06-A went offline due to a failed pump.
 - The Third Quarter 2022 annual groundwater monitoring program (GWMP) event was conducted. Available preliminary data will be discussed. One well had a passive diffusion bag (PDB) above the water table, a new PDB was placed below the water table, and it will be sampled this week.
 - Two offline extraction wells (EW-OU2-05-A and EW-OU2-06-A) will be repaired and restarted.
- Available preliminary data from the Third Quarter 2022 GWMP event was shared and discussed.
 - Some results are available for A-Aquifer wells. Results were similar to the previous event.
 - A couple highlighted wells in the tables and figures are green for decreasing concentrations and orange for increasing concentrations between the two compared quarterly events.
 - MW-OU2-02-A had a decrease in tetrachloroethene (PCE) concentrations below the aquifer cleanup level (ACL).
 - A few wells had increasing concentrations in Hydraulic Zone 5 including MW-OU2-05-AR, MW-OU2-07-A, MW-OU2-75-A, and MW-OU2-81-A. An error on the handout shows the trichloroethene (TCE) result for MW-OU2-07-A as bolded, but it is not above the ACL.
 - The A-Aquifer COC plume map from the Second Quarter 2022 report issued in August was shared.
 - Trend charts for MW-OU2-05-AR, MW-OU2-07-A, and MW-OU2-75-A show increasing COC concentrations at these wells in Hydraulic Zone 5.
 - Available results for wells in the Upper 180-Foot Aquifer were consistent with previous results.

- MW-OU2-28-180 had a TCE result above the ACL in the Fourth Quarter 2021, decreased below the ACL in the next two events, and then is above the ACL again in the Third Quarter 2022. The trend chart for this well shows a cyclical trend increasing in the Third and Fourth Quarter events.
- The Upper 180-Foot Aquifer COC plume map from the Second Quarter 2022 report issued in August was shared.
- The trend chart for MW-OU2-62-180 shows continued decreasing TCE concentrations still below the ACL. This well is upgradient of MW-OU2-28-180.

b. Treated Water Reuse – The handout titled “Operable Unit 2 Treated Water Reuse” was reviewed.

Additional discussion included:

- In July, no treated water was reused.
- In August, 3,000 gallons of treated water were used at the OU2 Landfills.
- The total treated water used since October 2016 is 4,348,750 gallons.

c. Landfills Operations and Maintenance (O&M) – The handout titled “Former Fort Ord Operable Unit 2 Landfills Data and Status” was reviewed. Additional discussion included:

- Third Quarter 2022 key events were discussed, including:
 - Monterey County Department of Health (MCDH) inspection was completed on August 22 with no issues.
 - Quarterly perimeter probe monitoring was completed on August 22. Nothing unusual to report.
- Upcoming planned events include:
 - Annual mowing will be conducted in late September or early October.
 - Rodent trapping will continue.
 - Annual owl box cleaning will be conducted in November after the end of daylight savings time.
 - The MCDH inspection will be conducted in 4Q.
 - Quarterly probe monitoring will be conducted in 4Q.
- The thermal treatment unit (TTU) influent methane concentration was declining to 34%, and recently increased to 36%. The lower methane concentration previously may have been due to changes in barometric pressure.

6. Sites 2 and 12 (Sites 2/12)

The handout titled “Sites 2 and 12 Data and Status” was reviewed. Additional discussion included:

- Table 1 of the handout shows Sites 2/12 GWTP data for July and August. The GWTP was online 72.6% in July with a flow rate of 160 gpm and 41.9% in August with a flow rate of 62 gpm.
- The soil vapor treatment unit (SVTU) remains offline.
 - A vapor-phase granular activated carbon (GAC) change-out event was attempted on September 20 to restart the SVTU. However, the GAC vessel was compromised by saturated GAC fines and a broken pipeline.
 - A repair or replacement GAC vessel will be procured in order to start the SVTU.
- Table 2 shows the Site 2 injection point of compliance was sampled in July and August, with COCs detected at concentrations below their discharge limits.
- Key events for July through August and upcoming events were discussed.
 - July 22 through August 3 the GWTP was online only during business hours due to a programmable logic controller (PLC) issue, which was repaired on August 4.

- On August 8, a pulse pumping strategy was implemented for the GWTP by alternating weeks operationally. The GWTP was offline for one week starting August 8 and online for one week starting August 15.
 - Samples are being collected bi-weekly at EW-12-08-180U when the GWTP is restarted after being offline for a week to see the peak COC concentrations.
 - Samples are being collected monthly at EW-12-05-180M because no COCs are above ACLs at that well.
- The Third Quarter 2022 annual soil gas monitoring program (SGMP) event was completed August 15-19.
 - The three soil gas probes that are no longer part of the SGMP (SG-12-07-65, SG-12-17-60, and SG-12-20-70) were included that the regulatory agencies were interested in.
 - Supplemental sampling will be completed at a few soil gas probes (SG-12-01-65, SG-12-02-10, and SG-12-04-10) the week of September 26 due to unusual detections of PCE during the Third Quarter 2022 event.
- The Third Quarter 2022 annual GWMP event was completed August 29-September 2.
- The preliminary Third Quarter 2022 annual groundwater results were discussed.
 - TCE groundwater concentrations for the Third Quarter 2022 for available results were still below the ACL.
 - PCE groundwater concentrations for the Third Quarter 2022 were collected four times at EW-12-08-180U, with the last two results from after the pulse pumping strategy was implemented. Results are above the PCE ACL.
 - The Second Quarter 2022 groundwater monitoring results map was shared. The PCE plume is very small because EW-12-08-180U is the only well with PCE above the ACL.
 - The recent trend chart for EW-12-08-180U shows PCE has been increasing since the pulse pumping strategy was implemented. This shows that PCE mass is being removed and remediated, but has not started to decrease yet in concentrations.
- The preliminary Third Quarter 2022 soil gas data was presented.
 - There were nine soil gas probes with PCE concentrations above the soil gas screening level (SG-SL) and two soil gas probes with PCE concentrations above the soil gas cleanup level (SGCL).
 - There is a discrepancy in the PCE concentration for SG-12-04-10 between the primary and duplicate sample results and the cause is unknown at this time.
 - SG-12-01-65 PCE concentration was significantly higher than historical results.
 - SG-12-02-10 PCE concentration had a slight increase as well.
 - SG-12-01-65, SG-12-04-10, and SG-12-02-10 will be resampled the week of September 26.
 - TCE concentrations were above the SGCL at all sampled soil gas probes in the SG-12-04 cluster in the Third Quarter 2022.
 - The preliminary Third Quarter 2022 soil gas COC concentration map was shared.
 - Once the SVTU is restarted, four soil vapor extraction (SVE) wells will be turned online: VE-12-02, VE-12-06, VE-12-08, and VE-12-09. These SVE wells are highlighted on the map.
 - The trend charts for SG-12-01-65, SG-12-02-10, and SG-12-04-10 PCE shows that the Third Quarter 2022 results were much higher than anticipated. These probes will be resampled the week of September 26.

- SG-12-04 probe cluster TCE trend chart shows an increase in concentrations during the Third Quarter 2022 with all probes above the SGCL. PCE concentrations at this cluster remain below the SG-SL.
- SG-12-07-65 probe PCE trend chart shows concentrations increasing since the rebound study and above the SG-SL in the Third Quarter 2022. TCE concentrations at this probe increased slightly, but are within the historical range and below the SG-SL.
- SG-12-17-60 probe TCE trend chart concentrations are below the SG-SL.
- SG-12-20 probe cluster PCE trend chart had concentrations above the SG-SL but below the SGCL in the Third Quarter 2022.

7. Operable Unit Carbon Tetrachloride Plume (OUCTP)

a. Groundwater Remedy/Monitoring – The handout titled “Operable Unit Carbon Tetrachloride Plume Data and Status” was reviewed. Additional discussion included:

- The Third Quarter 2022 GWMP event was conducted. The PDBs were missing at a couple wells, which were replaced and will be sampled this week so the analytical results will be included with the other Third Quarter 2022 GWMP results.
- Available preliminary Third Quarter 2022 groundwater data was discussed:
 - A few results were received for the A-Aquifer and the carbon tetrachloride (CT) concentrations were similar to previous events.
 - MW-BW-93-A increased above the CT ACL in the Second Quarter 2022 event and then decreased below the ACL in the Third Quarter 2022 event.
 - MW-BW-32-A in the mid-plume area continues to have persistent CT above the ACL.
 - MW-BW-89-A has had increasing CT concentrations over the past few events.
 - The trend chart for MW-BW-91-A showed a continued decline in CT concentrations since 2018 and is just below the ACL.
 - MW-BW-52-180 in the Upper 180-Foot Aquifer had an increasing CT trend with concentrations above the ACL in the past two sampling events.
 - The trend chart for MP-BW-46-170 shows an increasing CT trend overall consistently above the ACL.
 - The trend chart for MW-OU2-64-180 shows a seasonal trend with a decrease in CT concentrations in the past year.
 - Only a few results are available for the Lower 180-Foot Aquifer.
 - TCE concentrations increased at EW-OU2-07-180 and MW-BW-59-180. The trend chart for EW-OU2-07-180 has had a consistently increasing trend since 2016. The trend chart for MW-BW-59-180 shows a seasonal CT concentration trend consistently above the ACL.
 - Maps of the Second Quarter 2022 COC plume data were presented from the report issued in August.

b. TCE in the Lower 180-Foot Aquifer – TCE is not a COC for the Lower 180-Foot Aquifer, but it is being monitored to assess any potential impact on the downgradient drinking water supply wells. Additional discussion included:

- A chart with available Third Quarter 2022 TCE data for the Lower 180-Foot Aquifer was provided in the OUCTP handout in agenda item 7a.
- TCE in the Lower 180-Foot Aquifer is addressed in the Five-Year Review report, which recommends that the Lower 180-Foot Aquifer be added to OU2.

- Maeve Clancy with the USEPA said an ESD has been used to add a remedy to an existing OU at Fort Ord, like at Sites 2/12. Bill Collins with the BRAC Office noted that a ROD Amendment was done for Site 39 before, but no ROD Amendments for groundwater remediation at the site. Maeve said a Memo to File would not be appropriate. Maeve said she would potentially be ok with either an ESD or a ROD Amendment as long as community involvement occurs, but needs to confirm with Suzanne Pyatt, the EPA R9 attorney for the site.
- The DTSC and RWQCB deferred to the USEPA about which decision document is necessary.
- Bill Collins noted that the remedy for Lower 180-Foot Aquifer in OUCTP is monitored natural attenuation (MNA) with a contingency for supply wellhead treatment. An ESD would reference that justification.
- Maeve noted that USEPA is not fond of the MNA remedy, but she will inquire with others at the USEPA.

8. Per- and Polyfluoroalkyl Substances (PFAS)

The handout titled “Per- and Polyfluoroalkyl Substances (PFAS) Preliminary Assessment/Site Inspection” was reviewed. Additional discussion included:

- The PFAS PA Narrative Report was issued as Final on September 16. Key revisions to the Final report included:
 - Revisions to be consistent with the Site Inspection (SI) Work Plan/Quality Assurance Project Plan (QAPP).
 - USEPA screening levels published in May and Department of Defense (DoD) screening levels were added.
 - The sewage treatment plants were all added to the tertiary assessment per comments from the regulatory agencies, adding further detail to the analyses of the sites.
- The PFAS SI Work Plan/QAPP was issued on September 20. Key revisions to the Final QAPP included:
 - The discussion about investigation derived waste (IDW) was expanded because the originally referenced Arcadis white paper could not be used.
 - The project schedule was updated.
 - Shallow soil sampling was added at one foot depth due to results at other military installations where Aqueous Film-Forming Foam (AFFF) discharges occurred and higher PFAS concentrations were detected near the surface.
 - One soil boring at Site 40A was adjusted approximately 50 feet to the north to avoid a sand gilia population.
- SI Fieldwork is scheduled and includes:
 - Geophysical utility clearance conducted on September 19.
 - Shallow soil sampling for PFAS is occurring now, from September 20 through 23. Two sampling locations at the Fritzsche Army Air Field (FAAF) and Site 40A were completed.
 - Deep soil boring and groundwater monitoring well installation will begin October 17. The drilling will be occurring in 10-day work cycles with 4-day gap between them. Three drilling cycles were included in the schedule up to November 23, but it is not expected to take that long.
 - Groundwater monitoring well development will be conducted November 7-10.
 - PFAS groundwater sampling will be conducted November 14-18. As discussed with the regulatory agencies, the HydraSleeve samplers will not be left in the well any longer than 4 days.
- Results of the SI Fieldwork will be reported in the SI Narrative Report scheduled to be issued draft in April 2023.

- Bridget Floyd with USACE noted the field work was going smooth with extra precautions being taken to reduce the risk of PFAS cross-contamination.
- Maeve Clancy with the USEPA identified an interest to observe some of the deep soil bore sampling. The other regulatory agencies are also welcomed to observe. Observation may be from afar and downwind to prevent potential cross-contamination of PFAS. Guests should reference the SI Work Plan/QAPP for what is allowed and what isn't during PFAS sampling.

9. Basewide Range Assessment (BRA) and Lead Evaluation Status

There was no handout for the BRA and Lead Evaluation Status. Discussion included:

a. BRA – Surface clearance of munitions started at Unit 5 and the BRA process will start with reconnaissance in October. The Comprehensive BRA Report summarizes soil cleanup actions and is in the final stages of review prior to publication.

b. Lead Evaluation at HA 18D and HA 23D – The Army is preparing an ESD for Site 39 with the recommended 200 milligrams per kilogram (mg/kg) lead cleanup value for soil for a residential use scenario. The ESD is expected to be submitted for regulatory agency review by the end of the calendar year.

c. Habitat Restoration – The handout titled “Site 39 Inland Ranges Habitat Restoration Status Update” was reviewed. Additional discussion included:

- Approximately 1,600 plants are being grown at a nursery for planting later this year at six sites, including 1,300 at Historic Area (HA) 34, which is the last site-specific restoration plan prescription (the last of the 19 sites). The rest of the sites are for adaptive management purposes. All plant species targets were met, and are currently in maintenance mode.
- Seed collection is still in progress. Only six pounds is the total target for nine species. Seven species are completed, and two are to be collected in October.
- All Spring monitoring is complete including photo points, annual surveys, species richness surveys, and vegetative cover surveys (three new transects installed). Data entry and management is in progress. The results will be presented in the Annual Report.
- Preparation is underway for plant survivorship monitoring at HA 26, 34, and 37 to be completed in October.
- Purple needlegrass production plot seeds were productive and are being processed. They implied it was a good production this year. Next year will likely be the final year for the production plot.
- Minor repairs were made to the erosion control fabric previously installed at HA 37. The fabric wasn't making good contact with the soil surface. The fabric was cut into smaller strip pieces and staked down for better contact.

10. Federal Facility Agreement (FFA) Schedule

a. Status Update – The FFA schedule is provided to the agencies with the upcoming primary documents with the month the Draft and Draft Final versions will be issued. Draft versions have a 60-day review period, and Draft Final versions have a 30-day review period.

b. Document Schedule – The handout titled “September 21, 2022, BCT Deliverable Schedule” was reviewed, and near-term documents were identified.

- A few reports have gone final since the last HTW BCT meeting, including:
 - Sites 2/12 Soil Gas Rebound Technical Memorandum.
 - Sites 2/12 Exit Strategy.
 - OU2, Sites 2/12, and OUCTP Second Quarter 2022 Groundwater Monitoring Reports.

- The Soil Gas QAPP Revision 7.
- The PFAS PA Narrative Report.
- The PFAS SI Work Plan/QAPP.
- The final 5th 5-Year Review report (signed).
- The Site 33 ESD (signed).
- Upcoming documents include:
 - The draft OU2 Landfills QAPP Revision 7.
 - The draft OUCTP Remedial Design/Remedial Action Work Plan Addendum for the Upper 180-Foot Aquifer extraction well installation.
 - The draft Soil Gas QAPP Revision 8.
 - The draft Groundwater QAPP Revision 11.
 - The draft OUCTP Well Installation Work Plan.
 - The draft OU2, Sites 2/12, and OUCTP Fourth Quarter 2021 through Third Quarter 2022 Annual Groundwater Monitoring Reports. The typical time frame for these annual reports was adjusted this year to avoid them all coming out at the same time and during the holidays.
 - The Comprehensive BRA Revision 3 report.
 - The Unit 5 BRA Reconnaissance report and Technical Memorandum.
 - The Site 39 ESD.

11. Action Items

The handout titled “HTW BCT 2022 Action Items” was reviewed.

- Action Item #1: The lead cleanup level status was discussed in agenda item #9. The ESD is in progress and expected to be issued by the end of the calendar year.
- Action Item #2: The Five-Year Review discusses TCE in the Lower 180-Foot Aquifer. The recommendation is to add the Lower 180-Foot Aquifer to OU2 via a decision document. The type of decision document required was discussed in agenda item #7b. Maeve Clancy with the USEPA will be discussing it internally with her team to determine the appropriate documentation.

12. Calendar Update

The calendar was reviewed for upcoming community outreach and HTW BCT meeting dates:

- The last 2022 HTW BCT meeting is scheduled for December 8, 2022 and was changed to 10:00 am.
- The following 2023 dates were discussed:
 - HTW BCTs: February 10 and May 19, 2023
 - CIW: February 11, 2023
 - TRC: February 14, 2023
 - Nature Walk: May 20, 2023