



Final
Hazardous and Toxic Waste (HTW) Base Realignment
and Closure (BRAC) Cleanup Team (BCT)
Meeting Minutes
December 5, 2024



BRAC Conference Room and Microsoft Teams Teleconference
Former Fort Ord, California

Agenda

Reference the handout titled "HTW BRAC Cleanup Team Meeting Agenda, Thursday, December 5, 2024 at 10:00 AM, Former Fort Ord, California."

1. Attendance and Announcements

Last Name	First Name	Organization	In-Person	Remote
Anderson	Thor	Harris Environmental	x	
Bascomb	Dawn	California Department of Toxic Substances Control (DTSC)		x
Cervantes	Christina	Chenega for BRAC		x
Clancy	Maeve	U.S. Environmental Protection Agency (USEPA)	x	
Corr	Erin	U.S. Army Corps of Engineers (USACE)	x	
Facchini	Hudson	Chenega for BRAC	x	
Faulkner	David	DTSC		x
Gutierrez	Alberto	DTSC	x	
Hession	Shaelyn	Ahtna Global, LLC (Ahtna)		x
Kellett	MC	USACE	x	
Kowalski	Bart	Chenega for BRAC	x	
Lam	Nancy	USACE	x	
Leary	Brett	DTSC	x	
Lieberman	Derek	Ahtna	x	
Lippa	Antonio	Ahtna		x
Lobo	Joelle	U.S. Army BRAC, Fort Ord Office	x	
No	Jason	Chenega for BRAC	x	
Nozaki	Chieko	JBW Federal for BRAC	x	
Rayman	Jamie	Agency for Toxic Substances and Disease Registry (ATSDR)		x
Santiago	Stephanie	U.S. Army DCS, G-9 BRAC		x
Savage	Tom	USACE	x	
Sciullo	Eric	DTSC		x
Sellinger	Amber	California Regional Water Quality Control Board, Central Coast Region (CCRWQCB)		x

Last Name	First Name	Organization	In-Person	Remote
Steckling	Karyn	CCRWQCB		x
Stiebel	Cary	PIE Services	x	
Valdez	Val	Chenega for BRAC		x
Walak	Kelsey	USACE		x
Weisenfeld	Greg	Chenega for BRAC	x	

Jamie Raymen with ATSDR discussed the recent site visit. Maeve Clancy with the USEPA noted that the USEPA attendees appreciated being able to attend the site visit.

2. ATSDR Reevaluation of Drinking Water Exposures, 1985-1994

The ATSDR was invited to give an update on the progress of its report. Jamie Rayman of ATSDR reminded the BCT that the purpose of the report is to re-evaluate drinking water risks during the 1985-1994 timeframe with available data using new methods and tools to better understand drinking water exposure and said the report would be released in the first half of 2025. The Army and regulators will be able to review a copy of the report prior to public distribution. ATSDR has a centralized point of contact for media inquiries that they will share with the BCT members.

3. BCT Minutes Status

The HTW BCT meeting minutes for the September meeting were distributed to the regulatory agencies for review in November. The CCRWQB's revisions were received and are currently under review with the Army.

4. Community Outreach Update

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

- PBS documentary timeline. The release date is expected to be the end of next year. The documentary covers the "Cost of War" and discusses the different parts of DoD and budgets. The Fort Ord component includes the cost of closing a military installation.
- Karyn Steckling with CCRWQCB had a question about the community inquiry from November 6. She asked which area of Marina the community member inquired about. The community member did not specifically state, but based on the conversation it was likely the Sea Haven Trumark area near the Operable Unit 2 (OU2) Landfills. The community member said it was the information in the contract they had looked at. USEPA had also received an inquiry from someone interested in purchasing a home and looking for more information.
- Karyn Steckling asked how community inquiries were tracked. Was there a system where calls were logged and details recorded? Jason No responded that the list presented in the handout was where the call details were recorded.
- Jason No referenced the Draft 2025 Community Outreach Events factsheet that included dates. He requested that attendees notify him of potential conflicts. A draft of this document was redistributed to the meeting attendees.
- Upcoming activities were highlighted, including the Fort Ord Community Involvement Mobile Workshop and Open house on July 26, 2025. It was noted that the bus tour portion of the open house would likely include the OU2 Landfills and OU2 areas. Maeve Clancy with the USEPA inquired if Jamie Raymen with ATSDR would be interested in participating at the Open House. Jamie Raymen noted the date and Jason No will keep her informed.

5. Habitat Restoration

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

- Seeding of barren areas was conducted. Overall, the sites are doing well.
- Photos of the seed broadcasting, raking the seeds in, and installation of straw waddles were shown.
- The 2024 Habitat Restoration Annual Report is currently in progress and will be out early next year. Karyn Steckling inquired if CCRWQCB will receive a copy of the annual report. The annual report is typically only submitted to the United States Fish and Wildlife Service and California Department of Fish and Wildlife.

6. 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 18 percent (%) of the time in September and 96% of the time in August. Downtime in September is the result of pipeline realignment due to the City of Marina Imjin Parkway widening construction project. Cumulatively since 1995 the OU2 GWTP has treated over 10 billion gallons of water and removed almost 1,000 pounds of chemical of concern (COC) mass. The treated water injection sample from October was below the discharge limits.
- Table 2 shows that there were 1,500 gallons of treated water used in September at the OU2 Landfills.
- Key events were discussed for September through November and upcoming events as listed in the handout.
- During the Fourth Quarter Groundwater Monitoring event, additional samples and field measurements were collected on behalf of Marina Coast Water District (MCWD) to assess seawater intrusion for SGMA compliance.
- The new extraction well EW-OU2-13-180 is performing better than the well it is replacing. The next phase of testing for the new well will be operating the well with the entire OU2 groundwater treatment system online.
- For decommissioning monitoring wells MW-OU2-37-A and MW-OU2-37-180, a work plan will be prepared to describe procedures for decommissioning because these wells have obstructions that prevented decommissioning by pressure grouting.
- Amber Sellinger from the CCRWQCB inquired if the transformer leak identified on November 21 leaked onto the soil. Derek Lieberman responded that there had been some leaking onto the soil, but PG&E cleaned up the area when they replaced the transformer.

b. Landfills Operations and Maintenance (O&M) – The handout titled “Former Fort Ord Operable Unit 2 Landfills Data and Status, HTW BCT, December 5, 2024” was reviewed. Additional discussion included:

- Key events were discussed for the Fourth Quarter 2024 as listed in the handout.
- The photo on the handout shows a section of Area F where a small area with erosion damage from the previous wet season received erosion repair work in November and was reseeded with native seed.
- The quarterly Monterey County Health Department inspection was conducted with no issues.
- Owl nest box cleaning was completed earlier in the week and 12 nest boxes were occupied by owls. A meeting participant inquired about the species of owl using the boxes. Barn owls were the species found to be occupying the boxes.
- The First Quarter 2025 scheduled events were discussed as shown in the handout.

- A summary of the thermal treatment unit (TTU) operations was presented. In 2024 so far the TTU has operated for over 1,100 hours and removed approximately 96,000 pounds of methane.
- The methane concentration at the TTU influent varies over time due to various factors; however, there has been an overall decline in concentrations over time. No new decomposable waste is being added to the Landfills that would generate methane.
- Karyn Steckling inquired about a column header on page 3 of the handout. A typo is present in the column header and should read “2023 Methane Removed (lbs)”
- Karyn Steckling inquired why some vents at the landfill were passive venting and some were actively sent to the TTU.
 - Derek Lieberman responded that it depends on concentration. If there is historical methane concentrations that exceed the 5% criteria, then it is captured and treated.
 - Karyn asked if the system was dynamic and if the probe was above 5% it would be treated. Derek clarified that all the existing probes show decreasing concentrations. The TTU can operate down to a 25% methane influent concentrations without supplemental fuel and operational cycles are designed to limit the need for supplemental fuel.
 - Karyn inquired why not all of the vents are connected to the TTU so there is no passive discharge.¹ Derek stated that O&M of the Landfills and landfill gas (LFG) extraction and treatment system are in compliance with applicable regulatory requirements.
 - Karyn mentioned that she had reached out to air quality agencies including the Monterey Bay Air Resources District and California Air Resources Board. She expressed that there is a concern as an environmental regulator that there should be testing for other compounds to make sure that there are no other constituents being emitted, especially near residential areas. Derek noted that he will look into the methane regulations.² Derek also mentioned that a previous ambient air study conducted in the vicinity of the landfill showed no elevated concentrations of volatile organic compounds (VOCs) in the air. Karyn inquired about the study and why it was initiated. Derek said that similar concerns had been raised in the past as there were known VOCs in the Landfills. The study assessed locations upwind and downwind from the Landfills and no significant difference was identified. Karyn asked about the timeline of the previous study and if it was before or after treatment. Derek mentioned that he thought it was documented in an ambient air monitoring report from the early 2000s. At the time of the study the Landfills had an interim LFG extraction and treatment system, which included granular activated carbon and potassium permanganate for treatment of VOCs. The system was upgraded to the TTU in 2006.
- Karyn inquired about an update on the comments provided on the 2023 annual report and asked when she could expect the responses. Derek noted that the reports and submittal dates are included in the document deliverable schedule.
- Maeve Clancy with the USEPA asked about the change in the time before added fuel would be required if the passive vents were connected to the LFG extraction and treatment system. Derek Lieberman with Ahtna noted that he would need to look at the data and that some areas are not producing significant methane, which is why they were not connected to the LFG extraction and

¹ Clarification: All LFG passive vents at the OU2 Landfills that are not connected to the LFG extraction and treatment system are capped, so there is no passive discharge of methane or VOCs to the atmosphere occurring.

² Per Title 17 of the California Code of Regulations § 95462, requirements regarding methane emissions from landfills do not apply to landfills currently regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), such as the OU2 Landfills.

treatment system. Erin Corr with USACE said that the TTU was already operating cyclically due to low methane concentrations.

- Erin Corr with USACE stated that she would be looking into the updated regulations, but if Karyn wanted to share that would be helpful. Karyn noted that CCRWQCB would share. Maeve Clancy with the USEPA noted that compliance with new measures can be addressed in the next Five-Year Review and that, even as regulatory requirements change, if it is not listed in the Record of Decision (ROD) there is a process to go through, although the site can voluntarily comply with new regulations.

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

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

- The GWTP operated 76% of the time in September and 67% in October.
- The soil vapor treatment unit (SVTU) remained offline in September and October.
- Key events were discussed for September through November and upcoming events as listed in the handout.
- The Third Quarter 2024 and some preliminary Fourth Quarter GWMP tetrachloroethene (PCE) results were discussed.
- The Third Quarter 2024 and preliminary Fourth Quarter 2024 Soil Gas Monitoring Program (SGMP) data were presented.
 - Soil gas probe cluster SG-12-01 is located between SG-12-04 and SG-12-02. Only one probe was sampled on this cluster and the concentrations remain below the Soil Gas Screening Level (SG-SL).
 - Soil gas probe cluster SG-12-02 is isolated from the influence of nearby soil vapor extraction wells by a stormwater infiltration basin. While some seasonal variation in PCE concentrations exist with this probe cluster, PCE concentrations have an overall declining trend.
 - Soil gas probe cluster SG-12-02 had a recent increase in PCE concentrations, but concentrations remain well below the soil gas cleanup level (SGCL).
 - Concentrations of PCE at soil gas probe SG-12-07-65 remain below the soil gas screening level.
- Comments were received on the Sites 2/12 Annual Report and soil gas quality assurance project plan (QAPP). The responses to comments are in progress and will be completed soon.
 - Erin Corr with USACE said that some additional work near the movie theater and mixed-use development area is proposed. Joelle Lobo with BRAC stated that a workplan will be developed.
 - Maeve Clancy with USEPA inquired if the future work would include sampling. Erin Corr noted that the work will likely start with sampling the existing probes but the Army is still determining what the scope of this work will be.
 - Maeve Clancy noted that the timing of additional work would be better if it occurred before people moved into the mixed-use development area. Maeve mentioned soil gas action levels from a different site and noted that the Department of Defense does not always agree with the regulatory agencies on action levels. Maeve noted that the USEPA Regional Screening Levels are due to be updated and that she could send them over to the group. Maeve also mentioned that the USEPA has a vapor intrusion expert that she can bring in to look at this issue. Eric Corr reiterated that the Army is still in the process of figuring out the scope of work.

- Maeve Clancy inquired if the Army had asked the developer what was done during site development, if they had placed a soil vapor barrier or taken some other voluntary measure. Erin Corr replied that the Army had not inquired about this, but noted that there were no constraints on construction required.
 - Karyn Steckling with CCRWQCB wanted to reiterate that the CCRWQCB was interested in quickly committing to a plan and will prioritize reviewing the document. She noted that it would be easier to conduct work before occupancy. Karyn Steckling mentioned that the regulatory agencies keep hearing “soon” and asked for a more exact timeline. There is no specific date at this time.
- Karyn Steckling with CCRWQCB inquired about the probes at soil gas probe cluster SG-12-01. She said that she would like to see samples collected from the shallow, mid, and deep probes at this cluster since currently only the 65-foot probe is being sampled. Since the site is capped, shallower depths may contain higher concentrations than deeper depths as observed in SG-12-02. The Army acknowledged the request but noted that soil gas probes are added or removed from the soil gas monitoring program per the decision criteria in the soil gas QAPP.
- Karyn Steckling with the CCRWQCB said that the CCRWQCB is interested in a re-evaluation of soil gas vapor intrusion in the buildings previously investigated. It was noted that vapor intrusion is not part of the decision documents for Sites 2/12.
 - Dawn Bascomb with DTSC voiced support for the re-evaluation.
 - Karyn Steckling expressed concern about immediate exposure risk based on PCE concentrations in soil gas observed at SG-12-02-10. It was noted that the soil gas probe cluster SG-12-02 is outside the radius of influence of vapor extraction wells due to the presence of a stormwater infiltration basin. Karyn requested an action item be added to address this.
 - Maeve Clancy with the USEPA inquired about the concern and noted that the probe was located outside the footprint of the building.
 - Derek Lieberman with Ahtna said that there has been no need to install soil gas probes east of the SG-12-02 probe cluster as that probe is on the eastern extent of the plume and PCE concentrations remain below the SGCL. Derek Lieberman also noted that sub-slab and indoor air samples had been collected at every store in the shopping center and that the vapor intrusion risk was minimal based on those data. Sub-slab probes were temporary and none had been retained.
 - Dawn Bascomb with DTSC asked about the time since the previous vapor intrusion study was conducted. It was stated that the samples had been collected in 2013-2014 and the report was produced in 2015. Dawn expressed concern about the time since the pervious vapor intrusion study. Erin Corr with USACE stated that an action item for this topic would be added.
- Amber Sellinger with the CCRWQCB mentioned that the wells proposed for decommissioning by Shea Homes (EW-12-04-180U and EW-12-04-180M) should consider PFAS based on proximity to sites. She requested the regulatory agencies be notified before any wells are decommissioned. Derek Lieberman with Ahtna said that the wells were in a proposed building footprint based on older plans and the developer is pretty good about providing notice before construction. He mentioned that the PFAS working group will discuss this site and consider which wells to monitor.

8. Operable Unit Carbon Tetrachloride Plume (OUCTP)

The handout titled “Former Fort Ord Operable Unit Carbon Tetrachloride Plume Data and Status” was reviewed. Additional discussion included:

- A remedial summary was presented, and key events were discussed for September through November and upcoming events as listed in the handout.
- The new extraction well EW-OU2-13-180 construction was completed. Photos of the construction were shared. A construction completion report will be issued.
- Erin Corr with USACE said that, at the last BCT meeting, the group had discussed the new Explanation of Significant Differences for the remedy for TCE in the Lower 180-Foot Aquifer as an OUCTP decision document and everyone seemed in agreement.

9. Groundwater Monitoring Program Recommendations

The handout titled “Former Fort Ord Groundwater Monitoring Program Recommendations” was reviewed. Additional discussion include:

- The proposed changes will be described in the annual reports. A general overview of the process was presented along with the proposed changes by site.
- Well MW-BW-43-180 met the QAPP decision criteria to be removed from the groundwater monitoring program and was brought back when detections of CT in a downgradient well had increased. The purpose of adding the well back into the program was to determine if there was an upgradient source. No upgradient source was identified. CT appears to be back-defusing out of the Salinas Valley Aquitard clay into the Upper 180-Foot Aquifer, as described in the update to the conceptual site model in last year’s annual report for OUCTP. The sampling frequency for this well is proposed to be reduced from quarter to annually.
- The wells that had been brought up in the Sites 2/12 discussion, EW-12-04-180U and EW-12-04-180M, are proposed for decommissioning. It was clarified that this decision is based on the existing groundwater QAPP. PFAS will be discussed separately, and these wells may be considered for PFAS sampling.
- The information presented in the handout was a preview of the wells proposed for decommissioning.
- Maeve Clancy with the USEPA inquired if the Army has evaluated biannual sampling. Erin Corr with USACE stated that we can look at it. Derek Lieberman with Ahtna noted that there must be four consecutive quarters of data with COC concentrations at less than 10% of the ACL or less than the laboratory limit of quantitation before a well is proposed for annual monitoring.
- Karyn Steckling with the CCRWQCB expressed appreciation for putting this presentation together. She inquired about the work plan addendum for the three proposed OUCTP A-Aquifer monitoring wells in the City of Marina. She asked about the proposed changes to the locations and if the reasoning was due to access issues or changes in the plume. Derek Lieberman with Ahtna stated that the original work plan had been based on older data and that property owners had been approached. While in the process of discussions with property owners, the time was taken to reevaluate the proposed locations. Erin Corr with USACE noted that the changes in location were minor.
- Erin Corr with USACE noted that recommendations for any actions, such as installing new wells, will appear in the annual reports and feedback is welcomed. She clarified that the recommendations presented in the annual reports will not necessarily be happening in the near future.

10. Per- and Polyfluoroalkyl Substances (PFAS)

The handout titled “Summary of Former Fort Ord Per- and Polyfluoroalkyl Substances (PFAS) Working Group (FOPWG) Activities” was reviewed. Additional discussion included preparation for the site visit on January 15.

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

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

- a. BRA – The Comprehensive BRA Report is under review.
- b. Lead Evaluation at HA 18D and HA 23D – This item was not discussed.
- c. Explanations of Significant Differences – This item can be deleted.

12. 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 “Former Fort Ord Document Schedule” was reviewed, near-term documents were identified.

- The Army requested that the regulatory agencies prioritize review of the draft final versions of the “OU2 Remedy Monitoring and O&M, Fourth Quarter 2022 through Third Quarter 2023” and the “QAPP, Volume 1, Appendix D, Revision 9, Landfill Gas Monitoring at OU2.” These documents are part of a period of performance extension and the deadlines cannot be extended. The Army noted that, as these are the draft final versions, it is not the first time the regulatory agencies have seen them.
- Karyn Steckling with the CCRWQCB inquired if the “Sites 2/12 Fourth Quarter 2022 through Third Quarter 2023 Groundwater and Soil Gas Monitoring and Treatment System Report” would be issued today, as indicated in the schedule. Erin Corr with USACE noted that the dates provided are estimates. Karyn Steckling noted that the revised schedule was months behind the previous schedule. Erin Corr said that the Sites 2/12 report required a more detailed review based on the comments received and would be issued soon.

c. Proposed Changes to HTW Documents – This topic was not discussed.

13. Action Items

The handout titled “HTW BCT 2024 Action Items” was reviewed.

- Action Item #3 update regarding import soil. The Army is still evaluating the benefits of implementing.
- Action Item #4 will be removed and replaced with Sites 2/12 vapor intrusion. A concern about how building modifications or HVAC updates can alter vapor intrusion was raised. Ways to regulate changes to structures or land use that may result in changes to vapor intrusion were discussed.
- There are currently no plans for additional enhanced in-situ bioremediation deployments for the A-Aquifer at OUCTP.

14. Calendar Update

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

- January 15 will be the next FOPWG meeting.
- The next HTW BCT meeting is scheduled for February 13 at 9:00 am.

HTW Governing Document References

The latest QAPPs in use and decision documents, including Records of Decision (RODs) and Explanations of Significant Differences (ESDs) are listed below. These are typically final documents not currently being

reviewed. These documents can be used as references for site COCs, ACLs, monitoring, remedies, and project decision criteria. Fort Ord document numbers are given below.

- **Current QAPPs:**

- Landfill Gas Revision 8: Final [OU2-702V](#) (May 2024).
- Soil Gas Revision 8: Final [BW-2792V](#) (August 2023).
- Groundwater Revision 12: Final [BW-2785Z](#) (August 2024).
- Groundwater Revision 11, Addendum No. 2, OUCTP Upper 180-Foot Aquifer Extraction Well Installation: Final [BW-2928B](#) (May 2024).

- **Decision Documents:**

- OU2:
 - ROD: [OU2-480](#) (1994).
 - ESD No. 1: [OU2-406](#) (1995).
 - ESD No. 2: [OU2-458](#) (1996).
 - ESD No. 3: [OU2-523](#) (1997).
 - ESD No. 4: [OU2-656](#) (2006).
- Sites 2/12:
 - ROD: [RI-025](#) (1997).
 - ESD: [BW-2794](#) (2016).
- OUCTP:
 - ROD: [OUCTP-0021D](#) (2007).
- Site 39:
 - ROD: [RI-025](#) (1997).
 - ROD Amendment: [RI-041E](#) (2009).