



**Final  
Hazardous and Toxic Waste (HTW) Base Realignment  
and Closure (BRAC) Cleanup Team (BCT)**



**Meeting Minutes**

**January 31, 2020**

BRAC Conference Room  
Former Fort Ord, California

**Agenda**

Reference the handout titled "HTW IPM Meeting Agenda, Friday, January 31, 2020, at 1:30 PM, Former Fort Ord, California."

**1. Attendance**

| Last Name  | First Name | Organization  | By Phone |
|------------|------------|---|----------|
| Anderson   | Thor       | Burleson Consulting   |          |
| Balch      | Duane      | U.S. Army Corps of Engineers (USACE)  | X        |
| Bayliff    | Kyle       | USACE   |          |
| Bennett    | Steven     | Ahtna Global, LLC (Ahtna)   |          |
| Broadston  | Melissa    | Chenega for BRAC  |          |
| Canham     | Haley      | USACE   |          |
| Caruso     | Erin       | Gilbane   | X        |
| Clancy     | Maeve      | U.S. Environmental Protection Agency (USEPA)                                    |          |
| Collins    | Bill       | U.S. Army BRAC, Fort Ord Office   |          |
| Crane      | Steve      | KEMRON Environmental Services (KEMRON)  | X        |
| Dillon     | Holly      | Ahtna   |          |
| Gentry     | Dana       | USACE   |          |
| Gettmann   | Kimberly   | California Department of Toxic Substances Control (DTSC)                        | X        |
| Ghigliotto | Tom        | Chenega for BRAC  |          |
| Ginorio    | Amber      | USACE   |          |
| Jelenek    | Zachary    | USACE   |          |
| Jones      | Mark       | USACE   | X        |
| Kan        | Alex       | USACE   |          |
| Kochman    | Aaron      | Chenega for BRAC  |          |
| Leary      | Brett      | DTSC  |          |
| Lieberman  | Derek      | Ahtna   |          |
| Mauck      | Andrew     | Ahtna   |          |
| Meakes     | Charity    | USACE   | X        |
| Salamida   | Terra      | USACE   |          |
| Schmidt    | Eric       | Ahtna   |          |
| Sellinger  | Amber      | California Regional Water Quality Control Board, Central Coast Region (CCRWQCB) |          |
| Soderberg  | Sheila     | CCRWQCB   | X        |
| Whipple    | Jonathan   | USACE   | X        |
| Wu         | Min        | DTSC  |          |

## 2. BCT Minutes Status

HTW BCT meeting minutes are final through October.

## 3. Community Outreach Update

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

- Maeve Clancy said Viola Cooper with USEPA is retiring. Maeve and John Chestnut nominated Fort Ord for the USEPA’s 2020 National Federal Facility Excellence in Site Reuse Awards.
- A congressional letter was responded to with the list of contaminants at Fort Ord for local representative Jimmy Panetta of the 20<sup>th</sup> congressional district.
- Alex Kan, with USACE, noted he is being moved to a new position in USACE and will no longer be the Fort Ord project Technical Lead. Zach Jelenek will be taking over for Alex.
- A Fort Ord Cleanup presentation was held at the Carmel Valley Rotary Club on December 3 for 30 participants.
- Bill Collins gave a tour and briefing to the new Monterey County Weekly reporter Asaf Shalev. Bill answered follow-up questions from Asaf, who said the article he is preparing about Fort Ord would be posted in a few weeks.
- Tomorrow, the February 1 Community Involvement Mobile Workshop (CIW) will be conducted.
- The Technical Review Committee (TRC) meeting will be held on February 4.
- Responses are in progress for Mike Weaver’s comments on cleanup documents.

## 4. Operable Unit 2 (OU2)

### a. Groundwater Remedy/Monitoring–

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

- The OU2 groundwater treatment plant (GWTP) was online approximately 100 percent of the time in December. There were a couple of communications losses in December. On January 8, there was a shutdown at the OU2 GWTP due to an overcurrent fault that only affected the Upper 180-Foot Aquifer extraction wells. The A-Aquifer wells were not affected, but the GWTP shut down due to low-flow conditions. The Upper 180-Foot Aquifer extraction wells have larger pumps and higher voltage demand, which may have been affected by a power surge.
- There were estimated detections of a few chemicals of concern (COCs) at the OU2 injection point of compliance below the discharge limits in December.
- Development in the Sea Haven area will reduce the casing height of five monitoring wells by approximately 30 feet. The five wells are not recommended for decommissioning, and the Sea Haven contractor will prepare a Work Plan for completing the work around the monitoring wells. The five wells are MW-OU2-05-A (quarterly well), MW-OU2-05-180 (depth to water only), MW-OU2-07-A (quarterly well), MW-OU2-07-180R (quarterly well), and MW-OU2-07-400 (depth to water only). These wells are located on the boundary between the former Fort Ord and the City of Marina in future residential development. They will be challenging to access in the existing locations after construction is complete. At the December 10 field meeting, Sea Haven requested the Army do another review to confirm all the wells are still needed. Jon Fenske confirmed all the wells are still needed, and the Army will notify Sea Haven.
- The flow meters at EW-OU2-02-180R and EW-OU2-12-180 are not transmitting data to the supervisory control and data acquisition (SCADA) system, repairs will be completed by the RORE/Gilbane Joint Venture (JV).
- EW-OU2-05-A and EW-OU2-06-A were redeveloped, video logged, and the pumps were replaced January 14 through 16. Approximately 600 gallons of water were pumped with the new

extraction well pumps to confirm they were operable. The JV previously put new pumps in these wells that burned out due to uptake of sediment in the wells. The work performed by Ahtna showed these wells are in good condition, considering they were installed in 1995. The wells will be operated once the JV completes the western network leak detection system.

- The Fourth Quarter 2019 groundwater monitoring event was completed last month, December 2 through 6. A majority of the preliminary data for the Fourth Quarter event was received and presented. Most of the results were similar to the Third Quarter event with a few exceptions.
  - In Hydraulic Zone 1, extraction well EW-OU2-19-A has been operable for one year now and had a decrease in COC concentrations. EW-OU2-19-A is located adjacent to other extraction wells in the Abrams/Imjin Parkway network.
  - Also in Hydraulic Zone 1, monitoring well MW-OU2-44-A has historically had high COC concentrations, but in the Third Quarter 2019 event COC concentrations were lower, possibly due to operation of the new adjacent extraction wells. However, COC concentrations at MW-OU2-44-A increased again in the Fourth Quarter 2019 event. The Third Quarter 2019 event was likely an anomaly, and there is still COC mass upgradient being captured.
  - Monitoring well MW-OU2-73-A had high vinyl chloride concentrations historically. This is indicative of a local, reducing condition near the OU2 Landfills area, which is abnormal in the A-Aquifer. Vinyl chloride concentrations decreased 50 percent in the Fourth Quarter 2019 event at MW-OU2-73-A.
  - MW-OU2-04-A is located downgradient of the eastern extraction well network. The well was resampled because the passive diffusion bag (PDB) was initially placed at a depth that was above the water level. The results were received after the handout was made but were similar to the Third Quarter 2019 results.
  - The COC concentrations for MW-OU2-08-A decreased likely due to the PDB being placed at a shallower depth than usual, though this PDB station was still saturated. The groundwater COC concentrations are stratified in the well. The PDB will be placed at a deeper station for the First Quarter 2020 event.
  - The Upper 180-Foot Aquifer results shown in the handout include the past four sampling events (First Quarter through Fourth Quarter 2019) for select wells. Concentrations for the COC trichloroethene (TCE) were generally consistent.
  - New extraction well EW-OU2-11-180 was inoperable and is a low flowrate well, which is why it took longer than other extraction wells to begin to draw in the TCE plume.
  - MW-OU2-62-180 near Landfills Area F had TCE increase above the aquifer cleanup level (ACL), located upgradient of the discontinuity in the Intermediate 180-Foot Aquitard, which separates the Upper 180-Foot Aquifer and Lower 180-Foot Aquifer. There are also elevated TCE concentrations at downgradient Lower 180-Foot Aquifer monitoring well MW-BW-59-180, which is believed to be connected to TCE concentrations at Upper 180-Foot Aquifer monitoring well MW-OU2-62-180.
  - The Draft Third Quarter 2019 Upper 180-Foot Aquifer TCE plume map was provided.
- The First Quarter 2020 groundwater monitoring event will occur March 2 through 6.
- A supplemental handout for OU2 shows a leak that occurred at the OU2 Landfills Area D on January 25. The agencies were notified by e-mail of the leak on January 29. The leak was noticed on January 25 coming from an isolation valve vault on the north side of Area D. The isolation valve was connected to extraction well EW-OU2-03-180, which was turned off when the leak was found. It was estimated that less than 72,000 gallons of untreated water from EW-OU2-03-180 was released onto the ground surface. Most of the water infiltrated the surface, and the rest accumulated in a nearby v-ditch. The leak remained on the Landfills site, above the A-

Aquifer 1,2-dichloroethane plume, which is in the current extraction well network capture area. It was estimated that approximately two grams of COCs from EW-OU2-03-180 were released. However, most of the mass likely volatilized at the before the water infiltrated the surface. The leak at the isolation valve was caused by a failed gasket, which was repaired. However, EW-OU2-03-180 was not restarted because the leak detection system had not turned off the well as designed. The system will be re-activated and tested before restarting EW-OU2-03-180.

**b. Treated Water Reuse** – No treated water was used recently. The access point for treated water is not hooked up yet, but it will be once the JV turns the GWTP over to the Government.

**c. Groundwater Treatment Plant Relocation** – Construction of the new OU2 GWTP is in progress. The following items were discussed:

- The JV contract modification for the western network leak detection work is still with USACE. Duane Balch of USACE said he would investigate and try to encourage a quicker turnaround time.
- USACE issued a substantially complete letter with exceptions in December 2019.
- The JV issued a Warranty Management Plan in December 2019.
- There is currently no JV staff onsite.

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

- Winterization activities were completed, including reseeded the eroded areas of the north side of Area F.
- More raptor perches will be installed in the next couple of months to reach the minimum recommended density.
- The landfill gas extraction and treatment system, including the thermal treatment unit (TTU), has been operated regularly, with a recent decline in TTU influent methane concentrations to 36 percent. Extra fuel to operate the TTU would be needed at 25 percent methane, which is projected to be around the year 2045. Over time the landfill gas extraction and treatment system has operated less frequently to stabilize TTU influent methane concentrations and is currently operated approximately 60 hours every two weeks.
- The landfill gas extraction and treatment system with the TTU has been operated since 2006 and has removed almost 4 million pounds of methane from the Landfill Areas D, E, and F. Landfill Areas B and C are older and do not generate enough methane to be extracted by the TTU.

## **5. Sites 2 and 12 (Sites 2/12)**

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

- The Sites 2/12 GWTP was online 98.5 percent of the time in December. There were a few shutdowns related to communications loss at OU2 because the GWTPs are interconnected, and Sites 2/12 uses the OU2 Excess treated water to balance the GWTP flow rates. In January, the OU2 GWTP shut down due to an overcurrent fault.
- The injection point of compliance at Sites 2/12 GWTP was sampled in December with a few low-level COC detections below discharge limits. The injection sample location is blended Sites 2/12 GWTP and OU2 GWTP treated effluent water.
- In February, the Site 2 infiltration gallery control valves and flow meters will be replaced. This will allow better control of the flow to the galleries due to the increased flowrate from OU2.
- In March, the First Quarter 2020 groundwater monitoring event will be conducted.

- The Soil Vapor Treatment Unit (SVTU) has been offline since February 2019 and will continue to remain offline based on a review of the Fourth Quarter 2019 soil gas monitoring data.
  - Soil gas results for the past four sampling events show a modest increase in TCE and tetrachloroethene (PCE) concentrations. Concentrations remain below their soil gas cleanup levels (SGCLs).
  - TCE concentrations increased at soil gas probe SG-12-04-10 located outside of Bed Bath & Beyond to 910 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), just below the SGCL of 1,000  $\mu\text{g}/\text{m}^3$ . This soil gas probe cluster will be sampled at all six probe depths in the First Quarter 2020 event scheduled for February. During the 2013-2014 Remedial Investigation/Feasibility Study, there were elevated TCE concentrations in the SG-12-04 probe cluster above the SGCL.
  - Maeve Clancy of USEPA asked if the soil gas and groundwater TCE concentrations were interconnected. This seems unlikely because TCE has been below the ACL for a while at Sites 2/12 and there is no evidence of increasing TCE concentrations in the groundwater. The First Quarter results at SG-12-04 may indicate whether shallow probe TCE concentrations are related to higher concentrations in the deeper probes. Maeve will talk with USACE more about soil gas at Sites 2/12 in relation to the National Priorities List (NPL) partial deletion.
  - Amber Sellinger of CCRWQCB asked if the increased concentrations of PCE at SG-12-02 could be connected to groundwater concentrations. This is unlikely because there is no evidence of increasing concentrations in the deeper soil gas probes and no evidence of partitioning of PCE between soil gas and groundwater at this location.
- The Fourth Quarter 2019 groundwater monitoring event was completed, and preliminary data were presented.
  - PCE is consistently above the ACL at operational extraction well EW-12-08-180U, and the concentration was similar to the Third Quarter event.
  - PCE fluctuates above and below the ACL at monitoring well MW-12-20-180U, which increased in the Fourth Quarter event. This well exhibits historically seasonal trends that are on an overall decreasing trend. There may be a PCE mass north of MW-12-20-180U being captured by EW-12-08-180U.

## 6. Operable Unit Carbon Tetrachloride Plume (OUCTP)

### a. Groundwater Remedy/Monitoring–

The handout titled “Former Fort Ord OUCTP Data and Status” was reviewed. Additional discussion included a review of data from the Fourth Quarter 2019 groundwater monitoring event. Carbon tetrachloride (CT) concentrations were similar to the previous event with a few exceptions.

- A-Aquifer:
  - Monitoring well EW-BW-124-A is in Hydraulic Zone 4 and Enhanced In Situ Bioremediation (EISB) Deployment Area 2A. CT concentrations in this well decreased in the past two sampling events to non-detect levels.
  - Monitoring well EISB-EW-01 is in Hydraulic Zone 5 and the EISB Pilot Study area. CT concentrations decreased below the ACL in the past two sampling events.
  - MW-BW-74-A is in Hydraulic Zone 5 in the area of the City of Marina, downgradient of EISB Pilot Study area. CT concentrations decreased below the ACL in the past two sampling events.
  - Overall, CT concentrations decreased in the downgradient portion of the plume.
  - A Draft Third Quarter 2019 A-Aquifer CT plume map was provided. There is a separation in the CT mid-plume area.

- The CT plume may be migrating into the Salinas Valley Aquitard (SVA) channel low in the former Operable Unit 1 (OU1) area. The CT plume around MW-BW-95-A to the north is dashed to show the possibility of CT migration into the SVA channel-low. A map of the former OU1 area showing the SVA channel low was provided. Responses to Amber Sellinger's comments on the EISB Deployment 3A Summary Report will show proposed additional monitoring well locations in the channel low to monitor for potential CT migration in the area.
- Upper 180-Foot Aquifer:
  - CT concentrations were consistent with previous results.
  - MW-OU2-64-180 has the highest CT concentration in the southern plume area and is near the discontinuity in the aquitard between the Upper and Lower 180-Foot Aquifers where vertical migration may be occurring.
  - MW-OU2-67-180 is located downgradient of MW-OU2-64-180 and the CT concentration at this well is below the ACL. Results for MW-OU2-64-180 and MW-OU2-67-180 were switched in the table for the First and Second Quarter 2019 sampling events.
  - The Draft Third Quarter 2019 CT plume map was provided.
- Lower 180-Foot Aquifer:
  - TCE and CT concentrations were similar to previous events.
  - CT concentrations are above the ACL in Hydraulic Zone 7 wells in the southern area of the site.
  - TCE is not a COC in the Lower 180-Foot Aquifer but possibly migrated through the discontinuity in the aquitard.
  - MW-BW-59-180 is the only well with elevated TCE concentrations in the Lower 180-Foot Aquifer and is downgradient of OU2 wells screened in the Upper 180-Foot Aquifer.
  - MW-OU2-82-180 has TCE concentrations just below the ACL but was historically above the ACL.
  - The Draft Third Quarter 2019 CT plume map was provided.

## 7. Basewide Range Assessment (BRA) and Lead Evaluation Status

The handout titled "BRA and Lead Evaluation Status" was reviewed. Additional discussion included:

### a. BRA –

- The Army had a meeting on November 22 with DTSC to discuss this week on the Unit 33 plan, and responses to comments are in progress.
- The Comprehensive BRA Report Revision 3 was submitted to the Army for their completion.
- The revised final Bureau of Land Management (BLM) Area B report was issued.

### b. Lead Evaluation at HA 18D and HA 23D –

The cleanup value is still being discussed between the DTSC and the Office of Environmental Health Hazard Assessment. The lead evaluation is on hold until DTSC meets. Kim Gettmann of DTSC does not have an update on progress but does not expect the cleanup level to move far from 80 milligrams per kilogram (mg/kg).

### c. Erosion Control –

Fieldwork is completed. Best management practices were checked after the rains. Burleson will conduct erosion control actions once the weather is dry.

### d. Landfills Soil Management –

Landfills soil management is completed.

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

- Seed broadcasting and planting were completed concurrently so the seeds or plants do not get trampled. There was good rain in November when seeding and planting began; however, there has been no recent significant precipitation.
- The native plant nursery is continuing to grow plants for next season planting, with a goal of approximately 5,500 plants. The hard-to-grow plant species were started first from cuttings, including the manzanita, which takes 12-14 months of growth in the nursery before it can be planted.
- Minor erosion control activities at HA 34, including repairs to 30 wattles, will be completed.

## **8. 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. There are no primary documents currently.

b. Document Schedule – The handout titled “31 January 2020 HTW BCT Deliverable Schedule” was reviewed, and near-term documents were identified.

- The comment period was extended to February 3 for a few documents, including the OUCTP Deployment Area 3A Summary Report and the Landfills Quality Assurance Project Plan.
- The Perfluorooctanoic Acid/Perfluorooctane Sulfonate (PFOA/PFOS) Technical Memorandum responses to comments from the Fort Ord Community Advisory Group (FOCAG) are in progress and will be sent to the regulatory agencies for review.
- The NPL Deletion Remedial Action Summary Report comment period was extended to February 13.
- The Army will provide a few updates to the Comprehensive BRA Report, which will be issued once as Final because it is a data dump of previously completed work.
- KEMRON work will be completed on March 31.

## **9. Action Items**

The handout titled “HTW BCT 2020 Action Items” was reviewed.

- Add an item to the action item list for Phase II Environmental Investigation per Kim Gettmann’s comments. More information will be given at the next HTW BCT meeting.
- The additional sampling fieldwork for PFOA/PFOS is approximately one year away.

## **10. Calendar Update**

The calendar was reviewed for upcoming HTW BCT meeting dates. The CIW is on February 1, starting at 9:00 am. The TRC is on February 4 at 10:00 am. In February, there will only be an MR BCT, not an HTW BCT. The next HTW BCT is on March 18 at 1:30 pm. There will be no HTW BCT in April. The May HTW BCT is on May 1 at 1:30 pm. The Guided Nature Walk is scheduled for May 2.