



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

**Meeting Minutes**

**April 11, 2018**

BRAC Conference Room  
Former Fort Ord, California



**Agenda**

- 1. Attendance**
- 2. BCT Minutes Status**
- 3. Community Outreach Update**
- 4. Operable Unit 2**
  - a. Groundwater Remedy/Monitoring
  - b. Treated Water Reuse
  - c. Groundwater Treatment Plant Relocation
  - d. Landfills O&M
- 5. Sites 2 and 12**
  - a. Groundwater Remedy/Monitoring
  - b. Soil Gas Monitoring
- 6. Operable Unit Carbon Tetrachloride Plume**
  - a. Groundwater Remedy/Monitoring
- 7. Basewide Range Assessment and Lead Evaluation Status**
  - a. Basewide Range Assessment
  - b. Lead Evaluation at HA 18D and HA 23D
  - c. Erosion Control
  - d. Habitat Restoration
- 8. FFA Schedule**
  - a. Status Update
  - b. Document Schedule
- 9. Action Items**
- 10. Calendar Update**

**1. Attendance**

| Last Name           | First Name | Company Name  | By Phone |
|---------------------|------------|---|----------|
| <b>Arsov</b>        | Vlado      | California Department of Toxic Substances Control (DTSC)                        |          |
| <b>Broadston</b>    | Melissa    | Chenega supporting BRAC   |          |
| <b>Caruso</b>       | Erin       | Gilbane   |          |
| <b>Christianson</b> | Kayti      | Burleson Consulting   |          |
| <b>Collins</b>      | Bill       | U.S. Army Base Realignment and Closure (BRAC), Fort Ord Office                  |          |
| <b>Dillon</b>       | Holly      | Ahtna Environmental, Inc. (Ahtna)   |          |
| <b>Evans</b>        | Roy        | HydroGeoLogic (HGL)   | X        |
| <b>Fenton</b>       | Jeff       | Amec Foster Wheeler   | X        |
| <b>Gettmann</b>     | Kimberly   | DTSC  | X        |
| <b>Ghigliotto</b>   | Tom        | Chenega supporting BRAC   |          |
| <b>Kan</b>          | Alex       | U.S. Army Corps of Engineers (USACE)  |          |
| <b>Kowalski</b>     | Bart       | Chenega supporting BRAC   |          |
| <b>Lieberman</b>    | Derek      | Ahtna   |          |
| <b>McNeill</b>      | Bonnie     | USACE   | X        |
| <b>Savage</b>       | Tom        | USACE   | X        |
| <b>Soderberg</b>    | Sheila     | California Regional Water Quality Control Board, Central Coast Region (CCRWQCB) | X        |
| <b>Sterling</b>     | Steve      | DTSC  | X        |
| <b>Sumner</b>       | Donald     | USACE   |          |
| <b>Wu</b>           | Min        | DTSC  |          |

**2. BCT Minutes Status**

Hazardous and Toxic Waste (HTW) Base Realignment and Closure (BRAC) Cleanup Team (BCT) minutes are final through January 2018.

**3. Community Outreach Update**

A review of recent community outreach events and upcoming activities was provided.

Long term actions underway include:

- Continue outreach related to munitions cleanup work in the northern portion of the Fort Ord National Monument.
- Evaluate results of 2017 community survey and publish draft analysis report.

Recent activities include:

- On April 4, 2018 provided cleanup information booth at Presidio of Monterey Earth Day for 200 participants.

Upcoming activities include:

- On April 19, 2018 provide cleanup information booth at California State University Monterey Bay Earth Day event.
- On April 22 to 29, 2018 is the Cleanup information booth at the Sea Otter Classic.
- On May 5, 2018 is the Community Involvement Mobile Workshop (CIW) Nature Walk inside the Impact Area. Topics include munitions cleanup, prescribed burns and habitat management.

- In May 2018 (date to be determined [TBD]) is the Cleanup information booth at the Presidio of Monterey (POM) Language Day.
- The cleanup presentation for the local chapter of the California Native Plant Society meeting has been postponed. Presentation will emphasize munitions cleanup, prescribed burns and habitat management.
- On July 14, 2018 is the CIW open house/bus tour. Topics include munitions cleanup, prescribed burns, and habitat management.
- On July 17, 2018 is the TRC with the same topics as the July 14 CIW.
- On August 31, 2018 is the Cleanup information booth at the Monterey County Fair.
- In October 2018 (date TBD) is the Fort Ord National Monument National Public Lands Day celebration.

Community comments on munitions and cleanup related documents have been received and responses to comments (RTCs) are in progress. Community members Mike Weaver and LeVonne Stone were sent a letter asking if they want to continue receiving documents for review. Mike Weaver responded that he wants to continue receiving documents. Judy Huang with the U.S. Environmental Protection Agency (USEPA) sent an e-mail to LeVonne Stone and Bill Collins met with Ms. Stone in person where she stated she would like to continue to receive documents for review.

#### **4. Operable Unit 2**

##### **a. Groundwater Remedy/Monitoring –**

- The Operable Unit 2 (OU2) groundwater treatment plant (GWTP) had 86.7 percent (%) operability through March 31, 2018, which is below the 95% operational goal.
- One injection point-of-compliance sample was collected in March 2018 and there were a few low level chemical of concern (COC) detections below the discharge limit.
- On March 1, 2018 the OU2 GWTP was shut down for 16 hours due to a power outage. EW-OU2-03-180 was offline until March 5 due to a variable frequency drive (VFD) issue. EW-OU2-06-180 and EW-OU2-16-A were offline until March 6 due to programmable logic controller (PLC) and VFD issues.
- March 5 to 8, 2018 the First Quarter 2018 groundwater monitoring program was conducted. The preliminary data was presented for select wells. Results for the First Quarter 2018 were comparable to the Fourth Quarter 2017 results though there was an overall decline in COC concentrations with some exceptions (e.g., MW-OU2-81-A had an increase in TCE from 8.5 to 10.1 micrograms per liter).
- On March 13, 2018 the OU2 GWTP shut down for 5 hours due to a power outage. There was also a brownout condition that caused a pump failure at EW-OU2-02-A, communication issue at EW-OU2-04-A, which was repaired March 20, and a starter motor failure at EW-OU2-05-A, which was replaced on March 29.
- From March 29 to 29, 2018 the OU2 GWTP was shut down for 78 hours due to JV construction.
- In April 2018 Ahtna will coordinate with the JV and Burleson as needed for any treated water use.
- Ahtna will continue to prepare for the existing OU2 GWTP decommissioning.
- Ahtna will coordinate with Sea Haven developer for extraction well elevation adjustments to EW-OU2-09-A and EW-OU2-10-A and decommissioning of EW-OU2-08-A.
- In summer 2018 four existing A-Aquifer monitoring wells will be decommissioned (MW-OU2-33-A, MW-OU2-36-A, MW-OU2-59-A, MW-OU2-60-A) according to a Work Plan that is in progress. Two wells are on the western edge of OU2 (MW-OU2-33-A and MW-OU2-36-A) and two wells are on the eastern edge of OU2 (MW-OU2-59-A and MW-OU2-60-A), all of which are far away

from the current COC plume extents, removed from the GWMP due to low COC concentrations, and redundant for groundwater elevations.

- In summer 2018 one new A-Aquifer monitoring well will be installed (MW-OU2-83-A) located between MW-OU2-08-A and MW-OU2-75-A to fill the data gap in the area and delineate COC plumes above their ACLs in the northern extent of OU2.

b. Treated Water Reuse – 6,000 gallons of treated water was used in March by Burleson for an irrigation project at HA 26. A total of 12,000 gallons of treated water was used in 2018 so far. Burleson will continue to use treated water through August and will be dependent on weather conditions. Treated water will be used in the future by the JV for hydrostatic pressure testing and KEMRON for the prescribed burn program.

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

- The Ord Market conduit construction work is in progress and the Pacific Gas and Electric (PG&E) transformer was not shut down for the work. The existing concrete transformer pad is too small but PG&E had mistakenly approved the pad and PG&E will be responsible for replacing it.
- March 26 to 29, 2018 the OU2 GWTP was shut down for conduit work at the existing OU2 GWTP.
- April 16, 2018 the OU2 GWTP will be shut down for one day to replace the PG&E transformer.
- The transition period is scheduled to begin in June. However, the transition period is more likely to begin in July or August.
- The JV is working on the Operations and Maintenance Plan preliminary draft response to comments.

d. Landfills Operations and Maintenance (O&M) – Recent landfill gas extraction and thermal treatment unit (TTU) operations and landfill cover system O&M activities were reviewed:

- Methane at the TTU influent has had a declining trend overall but has recently increased, between 38% and 39%. The last operational time was increased to 100 hours from the normal 60-70 hours and methane concentration dropped to 37%, with the largest decline in Area E. The rapid decrease in methane concentration indicates the operational time was increased too much. The operational time will be adjusted modestly (around 80 hours) from the normal operational time to determine a steady state methane concentration.
- Erosion control repairs are complete and have held up well, including repair of vegetative cover and cleaning out the v-ditches, the erosion controls will be monitored for effectiveness. Photos of the erosion repairs were presented. One of the owl nest boxes has scratches visible on the outside indicating it is being occupied.

## **5. Sites 2 and 12**

a. Groundwater Remedy/Monitoring –

- The Sites 2 and 12 (Sites 2/12) GWTP had 85.8% operability through March 31, 2018, which is below the 95% operational goal.
- No injection point-of-compliance sample was collected in March 2018.
- On March 1, 2018 the Sites 2/12 GWTP shut down for 16 hours due to a power outage.
- March 5 to 8, 2018 the First Quarter 2018 GWMP was conducted, including total petroleum hydrocarbon (TPH) sampling at seven monitoring wells.
  - EW-12-06-180M had a pump failure and was not sampled.

- The preliminary results were presented and the PCE groundwater plume is the same size between the Fourth Quarter 2017 and First Quarter 2018. However, concentrations have decreased between the two events. MW-12-20-180U had an order of magnitude decrease in PCE concentrations.
- The preliminary TPH results were presented and the well that had a diesel odor in the Third Quarter 2017 event (MW-12-20-180U) had a similar TPH diesel result between the Fourth Quarter 2017 and First Quarter 2018, which is approximately twice the screening level. The TPH diesel concentration decreased to an estimated concentration well below the screening level after silica gel cleanup, and the chromatogram does not match the diesel standard. A few other wells had estimated TPH diesel concentrations below the screening level and all wells were not detected for TPH motor oil. The results indicate that the TPH is likely from a biogenic source and not a spill or leak. It was proposed to the regulatory agencies that no further action is required. Sheila Soderberg with the CCRWQCB and Min Wu with the DTSC would like more time to think about it. Derek Lieberman with Ahtna will send an e-mail summary of the results and recommendation to the agencies and it will be discussed again at the May 2018 HTW BCT meeting.
- On March 13, 2018 the Sites 2/12 GWTP shut down for 12 hours due to a power outage.
- From March 29 to 29, 2018 the Sites 2/12 GWTP was shut down for 78 hours due to JV construction at the OU2 GWTP.
- On March 29, 2018 GAC was removed from INF-02-03-180, which improved the capacity of injecting treated water at Site 2.
- Presidio of Monterey Directorate of Public Works will pick up sulfuric acid on April 23, 2018. The acid is currently being moved from the tank to the portable containers. The residual acid leftover in the tank will be left in place until the Sites 2/12 GWTP is decommissioned. The volume of remaining acid will be under the permit limit.
- A Work Plan is being prepared for the 2018 decommissioning of Sites 2/12 monitoring well MW-02-12-180, which is located at Site 2 and away from the tetrachloroethene (PCE) groundwater plume. A baseline biological survey will be completed for this well. This well was removed from the GWMP due to low COC concentrations and is redundant for groundwater elevations.

#### b. Soil Gas Monitoring –

The Sites 2/12 soil vapor extraction and treatment system (SVETS) had 99.5% operability through March 31, 2018. The First Quarter 2018 Soil Gas Monitoring Program was conducted February 20 to 23, 2018, which included the second round of sampling for the rebound study in the southern area. One SVE well (VE-12-09) had an estimated concentration of PCE, and PCE and TCE were not detected at all other SVE wells. The soil vapor treatment unit effluent has increasing TCE concentrations, indicating TCE is now desorbing from the GAC. However, PCE is still being treated by the GAC and the TCE discharge is still well within Monterey Bay Air Resources District permit requirements. Soil gas probe results show another modest increase in TCE in the southern rebound study area at SG-12-16 and SG-12-17. Based on predicted TCE concentrations it is recommended to not sample the southern probes in the Second Quarter 2018 event, and sample a couple of the southern probes in the Third Quarter 2018 annual event. Northern soil gas probe SG-12-02 had a decline in PCE concentrations.

## **6. Operable Unit Carbon Tetrachloride Plume**

### a. Groundwater Remedy/Monitoring –

- March 5 to 8, 2018 the First Quarter 2018 GWMP was conducted. The OUCTP EISB Deployment Area 3A monitoring was conducted on March 14, 2018. EW-BW-165-A required surface pipe

repairs and EISB-EW-01 had the passive diffusion bag fall off the rope. EW-BW-165-A and EISB-EW-01 were sampled March 27, 2018.

- Preliminary First Quarter 2018 results were presented. All EISB Deployment Area 3A monitored wells had a decrease in carbon tetrachloride (CT) concentrations except for EW-BW-160-A and EW-BW-166-A. EW-BW-160-A had a minor increase in CT and EW-BW-166-A had a result that was consistent with previous results except for the abnormally low CT concentration during the Fourth Quarter 2017 event.
- First Quarter 2018 results were consistent with the Fourth Quarter 2017 event with an overall slight decline in CT concentrations. There was a slight increase in CT concentrations at Upper 180-Foot Aquifer well MP-BW-46-170 and Lower 180-Foot Aquifer well MP-BW-49-316.
- March 26 to 29, 2018 the JV construction at the OU2 GWTP caused EW-OU2-09-180 to be offline.
- A Work Plan is in progress for 2018 installation of three OUCTP A-Aquifer monitoring wells (MW-BW-93-A, MW-BW-94-A, and MW-BW-95-A), two OUCTP Upper 180-Foot Aquifer monitoring wells (MW-BW-57-180 and MW-BW-58-180), and one OUCTP Lower 180-Foot Aquifer monitoring well (MW-BW-59-180). Wells in the A-Aquifer will fill data gaps for the CT plume in the northern and eastern areas near the groundwater divide. Wells in the Upper 180-Foot Aquifer will fill data gaps north of the southern CT plume. The new Lower 180-Foot Aquifer will provide more data for trichloroethene concentrations in this area.
- A Work Plan is in progress for 2018 decommissioning of five OUCTP A-Aquifer monitoring wells (MW-BW-62-A, MW-BW-64-A, MW-BW-68-A, MW-BW-69-A, and MW-BW-70-A) and three OUCTP Upper 180-Foot Aquifer monitoring wells (MW-BW-20-180, MW-BW-22-180, and MW-BW-29-180). These wells are redundant for groundwater elevations and were removed from the GWMP due to low COC concentrations or are screened in the vadose zone as part of the old SVE system in the Lexington Court area (MW-BW-68-A, MW-BW-69-A, and MW-BW-70-A).
- The biological reference site is being monitored to determine the 2018 survey time frame for Habitat Management Plan (HMP) annual species. The 2018 Fort Ord Natural Reserve (FONR) survey will include Year 3 (final) follow-up for 2015 well installations, Year 2 follow-up for 2016 EISB Deployment Area 3A construction, and the baseline survey for 2018 well installation and decommissioning locations in the FONR. Wells in the FONR will be installed or decommissioned in the timeline of June 1 to October 31. The reference site has sand gilia flowering and a survey is scheduled for the week of April 16.

## **7. Basewide Range Assessment and Lead Evaluation Status**

### **a. Basewide Range Assessment (BRA) –**

- Revised response to comments were submitted to California Department of Toxic Substances Control (DTSC) on the Draft Technical Memorandum documenting the results of sampling in Units 1, 2, 3, 7, 10, 33, and Watkins Gate Burn Area (WGBA). Unit 33 step-out samples were collected in February, preliminary analytical results were received and additional analysis is pending.
- The Final Technical Memorandum for sampling results in Units 5A and 9 was submitted.
- The Final Sampling Plan for Unit 31 was submitted.
- The Final Technical Memorandum for sampling results in Unit 23 was submitted.
- The Draft Final Sampling Plan for Units 25 and 28 was submitted and comments were received from the Fort Ord Community Advisory Group and responses to comments were submitted to the Army for back check.

- Army back check comments on the Comprehensive BRA Report are being resolved.

b. Lead Evaluation at HA 18D and HA 23D – Cory Koger with USACE outlined the excavation units for Units 18D and 23D and will wait to see where the USEPA and DTSC are at with the blood lead level before taking action. The new regulation is expected to be published around September 2018.

c. Erosion Control – KEMRON is monitoring Site 39 areas throughout the Impact Area MRA for erosion issues. KEMRON is addressing maintenance issues at erosion control sites.

d. Habitat Restoration –

- Plant propagation for the 2018-2019 plant inventory has started for a target of 5,962 plants to restore 3.3 acres. Nursery spring cleaning is being conducted including maintenance of best management practices.
- HAs will continue to be monitored for erosion issues, and minor repairs were completed at HA 28 and 34.
- The HA 26 irrigation system was installed. The system was tested at full capacity of 6,000 gallons and the system passed the pressure test. The system is ready for the first irrigation event, which is dependent on weather. Treated water has been used from leftover prescribed burn tanks (4,000 gallons) and the OU2 treatment plant (12,000 gallons).
- Preparing for the spring monitoring season.
- The final Habitat Restoration 2017 Annual Report was issued April 3, 2018 which describes all 2017 activities.

## 8. FFA Schedule

a. Status Update – The Federal Facility Agreement (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 – A copy of the latest document schedule was distributed. The Annual Reports are all finalized. The Well Installation and Well Decommissioning Work Plans will be issued shortly.

## 9. Action Items

Four action items were identified in the last HTW BCT meeting:

1. Finalize HTW BCT general minutes from March 6, 2018: **in progress**.
2. Finalize HTW BCT OU-1 minutes from March 6, 2018: **completed**.
3. Determine if partial deletion of Fort Ord from the NPL is possible once OU-1 site closure process is completed: **ongoing**. Maeve Clancy with USEPA stated that USEPA is supportive of partial deletion from the NPL, but not for OU-1 due to the presence of PFOA and PFOS. USEPA will consider deletion of other Fort Ord sites, but would prefer deletions of areas that are as large as possible. The Army will look into other sites where remedial actions are complete and prepare a list.
4. Document review and comment: **ongoing**, housekeeping action item to verbally review the document deliverable schedule.

## 10. Calendar Update

- The guided nature walk in the impact area is scheduled for **May 5, 2018**.

- The May 2018 HTW BCT meeting is scheduled for **May 9, 2018 at 1:30 PM** in the BRAC Conference Room.
- The June 2018 HTW BCT meeting is scheduled for **June 13, 2018 at 1:30 PM** in the BRAC Conference Room.
- The July 2018 HTW BCT meeting is scheduled for **July 13, 2018 at 1:30 PM** in the BRAC Conference Room.
- The CIW is scheduled for **July 14, 2018**.