



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

Meeting Minutes

May 9, 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
Arsov	Vlado	California Department of Toxic Substances Control (DTSC)	
Broadston	Melissa	Chenega supporting BRAC	
Caruso	Erin	Gilbane	X
Christianson	Kayti	Burleson Consulting	
Collins	Bill	U.S. Army Base Realignment and Closure (BRAC), Fort Ord Office	
Crane	Steve	KEMRON Environmental Services (KEMRON)	
Dillon	Holly	Ahtna Environmental, Inc. (Ahtna)	X
Eisen	David	USACE	
Fenton	Jeff	Amec Foster Wheeler	X
Gettmann	Kimberly	DTSC	X
Ghigliotto	Tom	Chenega supporting BRAC	
Kan	Alex	U.S. Army Corps of Engineers (USACE)	
Lieberman	Derek	Ahtna	
Meakes	Charity	USACE	
Savage	Tom	USACE	
Soderberg	Sheila	California Regional Water Quality Control Board, Central Coast Region (CCRWQCB)	X
Sterling	Steve	DTSC	X
Stiebel	Cary	Chenega supporting BRAC	
Whipple	Jonathan	USACE	X
Wu	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.
- Initiate 2018 burn season announcements and outreach activities on June 15, 2018.

Recent activities include:

- On April 4, 2018 provided cleanup information booth at Presidio of Monterey Earth Day for 200 participants.
- On April 19, 2018 provided cleanup information booth at California State University Monterey Bay Earth Day event for 50 participants.

- On April 19 to 21, 2018 provided cleanup information booth at the Sea Otter Classic for 100 participants.
- On May 5, 2018 the Community Involvement Mobile Workshop (CIW) Nature Walk was held inside the Impact Area for 100 participants. Topics included munitions cleanup, prescribed burns and habitat management.

Upcoming activities include:

- On May 11, 2018 is the Cleanup information booth at the Presidio of Monterey (POM) Language Day.
- On June 15, 2018 begin burn season announcements.
- 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 Technical Review Committee (TRC) with the same topics as the July 14 CIW.
- On August 7, 2018 a bus tour will be held for a local senior center.
- 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.
- The cleanup presentation for the local chapter of the California Native Plant Society meeting has been postponed (date TBD). Presentation will emphasize munitions cleanup, prescribed burns and habitat management.

Community comments on munitions and cleanup related documents have been received and responses to comments (RTCs) are in progress.

4. Operable Unit 2

a. Groundwater Remedy/Monitoring –

- The Operable Unit 2 (OU2) groundwater treatment plant (GWTP) had 100 percent (%) operability through April 30, 2018.
- Two injection point-of-compliance samples were collected in April 2018 and there were a few low level chemical of concern (COC) detections below the discharge limit. Trichloroethene (TCE) broke through the granular activated carbon (GAC) treatment vessels and is now detected at the injection point-of-compliance, which means a GAC change out event would typically occur soon to prevent a discharge limit exceedance. The concentrations will be closely monitored to prevent a discharge exceedance.
- On April 3, 2018 EW-OU2-05-A was put back online after the failed starter motor was replaced.
- On April 6, 2018 EW-OU2-12-A went offline due to an electrical relay failure, which was repaired and the well restarted April 18, 2018.
- On April 10, 2018 the vault lid from EW-OU2-15-A was repurposed and installed at Vault #31, which had a temporary plywood lid.
- On May 2, 2018 the baseline biological survey was completed at the MW-OU2-59-A decommissioning location with access through the southern Fort Ord Natural Reserve (FONR) area.
- The PG&E transformer replacement at the OU2 GWTP was postponed to May 9, 2018 and the OU2 GWTP was shut down at 9AM today. The JV will conduct a tie-in at the same time.
- In May 2018 Ahtna will coordinate with KEMRON 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. Vault equipment was removed from 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).
- 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.
- The draft First Quarter 2018 COC plume contour maps were provided. The 1,2-dichloroethane plume is pinching out east of the eastern extraction well network.

b. Treated Water Reuse – No treated water was used in April. Treated water might be used in May by Burleson for the irrigation project at HA 26 if there is no significant rain. Treated water will be used in June by KEMRON for the prescribed burn program with the Klein tank just like last year. Burleson will use treated water from Klein tank as well.

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

- Concrete pads were poured at the Ord Market, Sea Haven, and the existing OU2 GWTP and fencing installed.
- The pump test plans are being reviewed.
- The transition date is getting closer but it is also being delayed to end of July now.
- During the 6-week transition period shutdown Sea Haven tie-ins will be conducted.
- The Operations and Maintenance Plan is in progress.

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:

- The TTU could not be operated due to a failed purge blower and a replacement is being ordered. Because an operational period was missed the TTU will be operated extra hours in the next period, which is expected to be next week.
- In April 2017 an iridescent brownish-orange stormwater runoff was observed in Area F with no odor. The runoff was likely biogenic from the vegetative cover; however, it was agreed that the runoff would be sampled if observed again. In April 2018 a similar runoff was observed in Area F and a sample was collected on April 13, 2018. The preliminary results are not detected for pesticides and total petroleum hydrocarbons (TPH) motor oil. TPH diesel had a detection of 110 µg/L which reduced to 21 µg/L after silica gel cleanup. Based on these results no further action is recommended. There was no objection from the BCT.
- A photograph was shared of an owl nest box at the Landfills with visible scratches that may be evidence of owls inhabiting the box.
- Excavated soil will be brought to the Landfills from a large pipeline installation construction project starting next week. Thirty thousand cubic yards would be needed for the Landfills closure and this soil will help. One sample will be collected for every 2,500 cubic yards of imported soil and analyzed for TPH, OU2 COCs, and polycyclic aromatic hydrocarbons (PAHs). The regulatory agencies are ok with this approach, and an e-mail will be sent detailing the plan with a map of where the soil will go at the Landfills.

5. Sites 2 and 12

a. Groundwater Remedy/Monitoring –

- The Sites 2/12 GWTP had 99.4% operability through April 30, 2018.
- Three injection point-of-compliance samples were collected in April 2018 and all results were below discharge limits.
- On April 11, 2018 the Sites 2/12 GWTP was shut down for four hours to clean the air stripper.
- On April 19, 2018 extraction well EW-12-05-180M flow meter malfunctioned showing a lower than actual flow rate. The meter was repaired on April 25, 2018.
- On April 25, 2018 the Presidio of Monterey Department of Public Works removed the sulfuric acid from the Sites 2/12 GWTP.
- On May 9, 2018 the baseline biological survey was completed at decommissioning location MW-02-12-180 in the Site 2 beach area.
- In March 2018 the First Quarter 2018 Groundwater Monitoring Program was conducted and draft COC plume contour map was presented. Seven Sites 2/12 monitoring wells were sampled for TPH analysis after the Fourth Quarter 2017 results had the one TPH diesel result at MW-12-20-180U above the screening level of 100 µg/L. The preliminary TPH results were presented at the April 2018 HTW BCT meeting and the well that had a diesel odor in the Third Quarter 2017 event (MW-12-20-180U) had similar TPH diesel results in the Fourth Quarter 2017 and First Quarter 2018 at 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 requested more time to think about it. Derek Lieberman with Ahtna sent an e-mail summary of the results and recommendation to the agencies on April 20, 2018.
- Min Wu with DTSC requested collection of a confirmation sample from MW-12-20-180U, which will be done next month for the Second Quarter 2018 Groundwater Monitoring Event.

b. Soil Gas Monitoring –

The Sites 2/12 soil vapor extraction and treatment system (SVETS) had 100% operability through April 30, 2018. The Second Quarter 2018 Soil Gas Monitoring Program will be conducted May 21 to 25, 2018.

6. Operable Unit Carbon Tetrachloride Plume

a. Groundwater Remedy/Monitoring –

- On May 2, 2018 the baseline biological survey was completed, including the Year 3 (final) follow-up for 2015 well installations, the 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.
- The PG&E transformer replacement at the OU2 GWTP is being conducted today causing a temporary shutdown of EW-OU2-09-180 for approximately six hours.
- Results from the First Quarter 2018 GWMP were presented along with draft COC plume contour figures.
 - Enhanced in situ Bioremediation (EISB) Deployment Area 3A has had significant progress in reducing carbon tetrachloride (CT) concentrations compared to Fourth Quarter 2016 CT concentrations when EISB injections began.

- There is still no A-Aquifer CT plume observed under the City of Marina, and the mid-plume area is continuous again after MW-BW-36-A CT concentrations increased above the aquifer cleanup level (ACL).
- The Upper 180-Foot Aquifer and Lower 180-Foot Aquifer plume contours are similar to previous quarters.
- Two wells (MW-BW-17-A and MP-BW-41-231) met the QAPP criteria to be moved from quarterly to annual sampling frequency. Last several monitoring events at MW-BW-17-A CT was not detected (ND) and MW-BW-41-231 was below the ACL. Min Wu with DTSC inquired why MW-BW-17-A had a rapid decline in CT concentrations in 2013. This is likely due to its proximity to EISB Deployment Areas 1C and 2A.
- 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).
- 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).

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 validation is in progress.
- The Final Sampling Plan for Units 25 and 28 was submitted.
- Sampling was completed at Units 25, 28, and 31 and sample results are pending laboratory analysis.
- The update to the Comprehensive BRA Report is in progress.

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. The rainy season is over and only minor control activities are needed. Will work with the Army to coordinate any work needed before the next rainy season.

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 (2.5 acres at HA 34, 0.5 acre at HA 26, and 0.3 acre at HA 28).
- The phenology of target seed collection species is being monitored. Reconnaissance is occurring on target species Monterey ceanothus and Silver bush lupine with seed collection anticipated to begin mid-May.

- The HA 26 irrigation system is ready for the first irrigation event. Installed a lock, cable, and cover for the irrigation pump. The first event may occur on the week of May 21st. Ten irrigation events will occur during the year.
- The spring monitoring season is in progress including HMP annuals surveys and species richness surveys.
- Commercial seed production plots include blue wildrye (200 pounds), white yarrow (0.5-acre plot), purple needlegrass (0.5-acre plot), and deerweed (plot discontinued due to poor seed production). Deerweed is an early successional pioneer species which has a three year life and will be reattempted next year.

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 Well Installation and Well Decommissioning Work Plans will be issued shortly.

9. Action Items

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

1. Finalize HTW BCT general minutes from April 11, 2018: **in progress**.
2. 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.
3. Document review and comment: **ongoing**, housekeeping action item to verbally review the document deliverable schedule.

10. Calendar Update

- 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**.
- The TRC is scheduled for **July 17, 2018. At 10:00 AM** in the BRAC Conference Room.