

Meeting Minutes

General

Meeting Title: BRAC Cleanup Team Meeting - Former U.S. Disciplinary Barracks Lompoc
Date/Time: December 5, 2023 (13:00-14:00 PDT)
Project Title: Environmental Long-Term Monitoring, Former USDB Lompoc
Site Location: Lompoc, California
Contract Number: USACE Contract W912PL-18-D-0044, Delivery Order W912PL-21-F-0041
Meeting Location: MS Teams
Participants:

Organization	Name	Role	Email
CCRWQCB	Sheila Soderberg	Senior Engineering Geologist (outgoing)	sheila.soderberg@waterboards.ca.gov
	Bryan Little	Caseworker/Engineering Geologist	bryan.little@waterboards.ca.gov
	Amber Sellinger	Senior Engineering Geologist (Incoming)	amber.sellinger@waterboards.ca.gov
	Angela Schroeter	Supervising Engineering Geologist for DOD Sites	angela.schroeter@waterboards.ca.gov
BRAC	Stephanie Santiago	BRAC Program Manager	stephanie.n.santiago3.civ@army.mil
	Kyle Russell	BRAC Environmental Coordinator (Calibre)	kyle.russell@calibresys.com
USACE	Jeffrey Luong	Proxy for Kevin Yu (COR)	jeffrey.a.luong@usace.army.mil
Ahtna	Sommer Carter	Program Manager	scarter@ahtna.net
	Leslie Davis	Project Manager	ldavis@ahtna.net
	Connor Dunn	Project Lead	cdunn@ahtna.net
SBCEHS	Yosuke Yamada	Santa Barbara County Local Environmental Inspector	yyamada@sbcphd.org

Minutes

- 1) L. Davis (Ahtna) welcomed the meeting participants and began the meeting with a round-robin of introductions from the meeting attendees. L. Davis then reviewed the objectives of the meeting:
 - a) Present results of the latest inspections at the Former Army Landfill and Wood Dump
 - b) Discuss the status of project documents – Especially comments or concerns on the Draft Tech Memo: Site Maintenance Work Plan that is currently under review.
 - c) Summarize recently completed and upcoming fieldwork and maintenance tasks
 - d) Discuss potential future activities at the Washrack Site and paths toward site closure
- 2) L. Davis reviewed the presentation slides (included as an attachment to these meeting notes). Site summaries of the Wood Dump, Former Army Landfill, and Washrack were provided as background for the new BCT Team members.
- 3) L. Davis recapped the 2022 activities at the Wood Dump:

- a) Army/Ahtna Inspection: November 2022
 - b) Santa Barbara County Environmental Health Services (SBCEHS): April and August 2022
 - c) Bureau of Prisons (BOP) quarterly inspections: Feb, May, August, and November 2022
 - d) Recommendations from the *2022 Annual Inspection Report, Wood Dump and Former Army Landfill* – finalized in March 2023 were completed by the BOP as of the December 2023 inspection.
- 4) L. Davis summarized the history of the Former Army Landfill and recent inspections:
- a) Quarterly inspections are performed by prison staff and showed no deficiencies in 2022.
 - b) Semiannual inspection by the SBCEHS in 2022 recommended vegetative cover maintenance and rodent control measures performed.
 - c) L. Davis noted the recommendations by the SBCEHS are addressed in the *Draft Tech Memo: Maintenance Work Plan*
- 5) L. Davis summarized the background of the Washrack Site and current monitoring program
- a) The site is located immediately north of the prison and includes a groundwater plume contaminated with chlorinated volatile organic compounds: tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride
 - b) An enhanced reductive dechlorination (ERD) program was implemented from 2002-2008 as a time-critical removal action and greatly reduced contaminant concentrations. The ERD program used injections of potable water mixed with molasses and powdered cheese whey.
 - i) Injection wells and associated infrastructure were destroyed in 2009
 - c) Following the end of the ERD program, monitoring was performed according to the:
 - i) *Post Mitigation Monitoring Plan* (2009) and associated Change Memoranda (2010)
 - ii) *Quality Assurance Project Plan/Work Plan* (2021)
 - d) 11 monitoring wells remain at the Site with 10 screened in the shallow A-Zone (~80-85 ft bgs) and one well in the deeper B-Zone (130-140 ft bgs)
 - e) Water levels declined at the site and, in 2016, the sampling method was switched from low-flow methods to passive diffusion bag (PDB) sampling
 - i) 9 wells are sampled in the first semiannual event (usually second quarter)
 - ii) 10 wells are sampled in the second semiannual event (usually fourth quarter)
- 6) L. Davis noted updates to the Draft Proposed Plan and Draft Record of Decision (ROD) for the sites is under preparation
- a) Updates will include the recommendations outlined in the *Final Groundwater Sampling Optimization Plan, October 2022* for the monitoring program and overall project, including additional ERD injections.
- 7) L. Davis summarized the data from the November 2022 sampling event at the Washrack site.
- a) November 2022 sampling resulted in five wells with COC concentrations above Maximum Contaminant Levels (MCLs). The typical VOCs including PCE and cis-1,2-DCE were detected above MCLs. L. Davis noted the increase in the number of wells with exceedances was related to the

successful sampling of two wells that were not sampled due to previous obstructions.

- b) L. Davis noted that sampling was performed successfully at wells with previous obstructions using smaller diameter PDB bags.
- 8) L. Davis summarized the status of documents for the site:
- a) *Technical Memorandum – Site Maintenance Work Plan*. Draft version shared with regulators on 11/9.
 - b) *2022 Second Semiannual Groundwater Monitoring Report* submitted as pre-draft to Army on 11/7
- 9) L. Davis presented the path forward for the sites based on the *Groundwater Sampling Optimization Plan*:
- a) Finalize the ROD to select in-situ remediation (additional injections) and natural attenuation with LTM as the remedy for the Washrack Site.
 - b) Proceed with planning documents (i.e. Remedial Design)
 - c) Perform injection fieldwork, including reapplications as needed
 - d) Perform performance monitoring
 - e) Perform LTM as needed until concentrations reduce to acceptable levels or decreasing contaminant trends are observed. LTM tasks might also include:
 - i) Installing additional monitoring wells to define the plume extents at the MCLs
 - ii) Implementing decision logic for reducing monitoring program over time
 - f) Once Response Complete is met; obtain regulatory concurrence on the Remedial Action Completion Report. If unlimited use / unrestricted exposure (UU/UE) is not achieved, the first Five-Year Review will be conducted after the ROD is signed
- 10) Comments/Questions/Discussions
- a) B Little:
 - i) Encouraging to see the resumption of the ROD, the Water Board concurs with the path forward laid out for the Washrack site
 - ii) No significant comments coming on the work plan tech memo for the maintenance/repair tasks
 - b) Y Yamada:
 - i) Surface erosion from January 2023 storms was seen at landfill sites all over the county. However, Y Yamada interpreted the erosion at the Wood Dump to be within the refuse boundary based on historical documents. No refuse was actually seen at the site. What is the plan to perform the repairs and when will the repairs happen?
 - (1) L. Davis: The Plan is to use the eastern borrow area and perform erosion repairs with a mini excavator. It will either match the grade or make it slightly less steep
 - ii) Y Yamada: We are in the rainy season already so when will the repairs happen?
 - (1) L. Davis: As soon as we can finalize the plan, we will get out there ASAP. Acknowledge it's a priority to get out there and try to beat the rains as much as we can. Looking at February to finalize the work plan and then get out there

- c) B. Little: Since comments on the work plan are going to be minor, the Water Board can probably give approval to proceed with field implementation ahead of finalizing the work plan.
 - i) S. Carter: Ahtna is ready to implement the repairs so long as all involved parties agree
- d) B. Little: The Water Board is prepared to give the green light now. Ahtna/regulators discussed and agreed that the meeting minutes from this meeting can be written documentation of the approval. B. Little will also send a follow-up email.

11) BOP Meeting Minute Comments:

- a) B. Halbeisen, the representative for the BOP, was unable to attend the meeting. However, after review of the draft meeting minutes, the BOP had the following comments:
 - i) The BOP is concerned that the proposed raptor predator control identified in the *Technical Memorandum – Site Maintenance Work Plan* will not be as effective at reducing pests as the poison bait stations that are currently deployed.
 - ii) The BOP noted that currently the FAL is mowed just shy of the dirt and the necessity for additional native vegetation cover may not be needed if the vegetation is allowed to grow longer and become more prevalent.
 - iii) The BOP stated to please proceed as the BRAC Cleanup Team sees fit.

➤ **ACTION ITEMS**

(1) Action Item: Ahtna to update the BCT team contact list and re-circulate.

(2) Ahtna to move forward on maintenance tasks identified in the Draft Tech Memo: Maintenance Work Plan. Meeting minutes

Attachments

- 1) BCT Meeting Presentation



Former U.S. Disciplinary Barracks Lompoc

BRAC Cleanup Team Meeting

Tuesday, December 5, 2023



Location: Lompoc, California

Sites: Former Army Landfill (FAL), Wood Dump, Washrack

Meeting Participants:

- Army Representatives: BRAC, USACE, Ahtna
- Central Coast Regional Water Quality Control Board
- County of Santa Barbara
- Federal Bureau of Prisons



Meeting Purpose

The purpose of the meeting is to discuss the following:

- Results of the latest inspections at the Former Army Landfill and Wood Dump
- Status of project documents
- Upcoming and recently-completed fieldwork
- Potential future activities at the Washrack Site and paths toward site closure



Overview of Wood Dump Site from Western Perimeter – Dec 2023

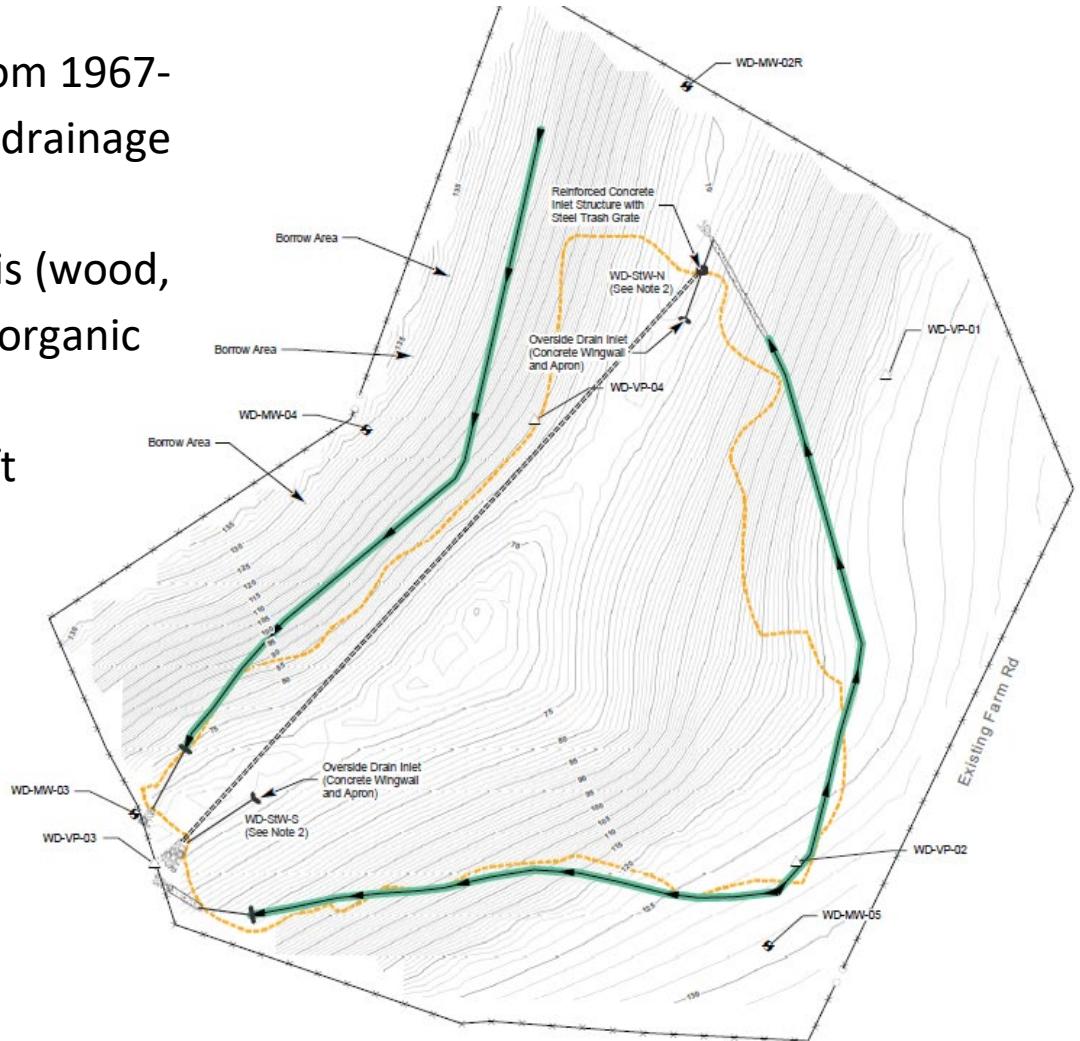


Wood Dump – Site Layout

- Disposal at Site occurred from 1967-1978 by infilling an existing drainage ditch
- Primarily construction debris (wood, bricks, concrete) and some organic matter (i.e. grasses)
- Waste limit ~700 ft by 450 ft

LEGEND:

- △ Gas Monitoring Vapor Point
- ⚡ Groundwater Monitoring Well
- 24" Corrugated Metal Pipe Culvert
- 12" HDPE Drain Pipe
- Drain Inlet
- Permanent Erosion Control Mat Lined Ditch
- Fence
- Gate
- ▨ Concrete V-Ditch
- ▨ Rip Rap
- Limit of Waste
- 1-foot Contour Interval





Wood Dump – Site Background



- Site investigations began in 1992:
 - No indication of soil contamination below Wood Dump
 - Methane and low-level VOCs within waste mass but not at perimeter probes
 - Little to no impacts to surface or groundwater
- No evidence that hazardous substances requiring remediation
- Army implemented a voluntary non-time critical removal action (NTCRA) at the Wood Dump site in October 2003 as “site mitigation” and not as a regulatory closure.
- Purpose was to address solid waste-related concerns and complete site restoration in order to reduce environmental liability following property transfer to the U.S. Department of Justice



Groundwater Monitoring Well (WD-MW-0) in foreground, Wood Dump cover in background



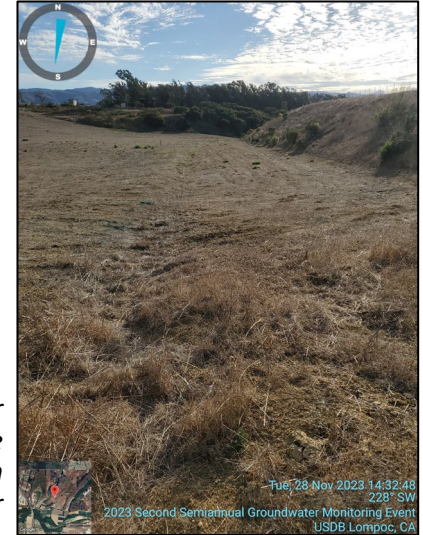
Entrance to Wood Dump, Groundwater Monitoring Well (WD-MW-05) in foreground, Wood Dump cover in background



Wood Dump – Site Mitigation Implementation



- Site mitigation included rehab of culverts, installation of engineered soil cover, installation of surface water controls, and groundwater LTM.
- The 2005 *Post Site Mitigation Maintenance and Monitoring Plan for the Wood Dump (MMP)* outlined the LTM program.
- Groundwater monitoring discontinued in 2010
- Current fieldwork follows the MMP and includes:
 - Semiannual inspections and methane measurements performed by SBCEHS
 - Annual inspection performed by Army (Ahtna)
 - Periodic maintenance performed by Bureau of Prisons (staff/inmates)
- Land use controls include fencing and signage
- The presumptive remedy is a CERCLA Municipal Landfill designation, with long-term management requirements (i.e., LUCs, inspections, monitoring), and Five-Year Reviews (FYRs).



Surface water drainage swale along western perimeter

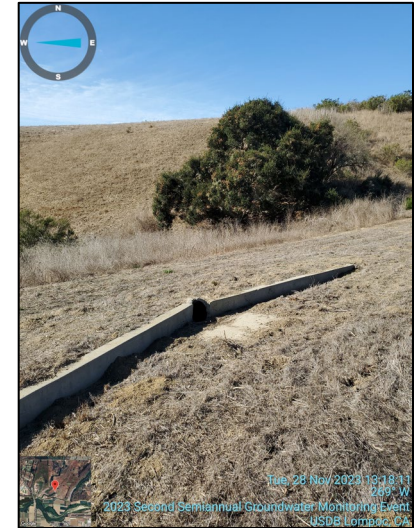


Land use controls include perimeter fencing around site



Wood Dump – 2022 Activities

- 2022 inspections:
 - Army/Ahtna: November 2022
 - Santa Barbara County Environmental Health Services (SBCEHS): April and August 2022
 - Bureau of Prisons (BOP) quarterly inspections: Feb, May, August, and November 2022
- Results summarized in the *2022 Annual Inspection Report, Wood Dump and Former Army Landfill* – finalized in March 2023
 - Wood dump in overall good condition
 - Low-level methane detection in August 2022 at one perimeter vapor probe (0.1%/v). No other methane detection reported.
 - Recommended actions:
 - Remove sediment and debris buildup from ditches and drain inlets.
 - *NOTE – Task completed as of Dec 2023 inspection*



Overview of Wood Dump showing vegetative maintenance; winged drainage inlet visible and clear of debris.





Wood Dump – Recent Activities

- 2023 Observations:
 - Surface erosion near northern drainage system reported following severe rain event in January 2023
 - SBCEHS and BOP 2023 inspections/maintenance will be included in the *2023 Annual Inspection Report, Wood Dump and Former Army Landfill* (in prep)
- Army/Ahtna inspection performed November 28, 2023.
 - Wood dump in overall good condition
 - Maintenance activities recommended in the 2022 annual report have been completed.
 - Location and extent of erosion at northern drainage confirmed. No significant impact on final cover.
- Army/Ahtna has prepared a *Draft Tech Memo: Maintenance Work Plan* to proactively address erosion issues.



Erosion at northern drainage inlet in foreground, Wood Dump cover in background



Vapor Probe (WD-VP-01) in foreground, Wood Dump cover in background



Former Army Landfill

- Former Army Landfill (FAL) established in 1940s, closed in 1959
- Site investigations began in 1996:
 - Geophysical survey showed 400 ft by 200 ft landfill with scattered metal debris. Soil sampling, soil gas survey, and groundwater monitoring showed only low-level/infrequent exceedances of Preliminary Remediation Goals (PRGs)
 - A Memorandum of No-Further-Action was submitted/approved in 2000
- 2004 inspection revealed that animal burrowing activities had brought some waste material to surface; burrows were backfilled in 2005.
 - Land Use Controls include 8-foot fencing with locked gate.
- Quarterly inspections performed by prison staff, no deficiencies noted by the BOP in 2022
- Semiannual inspection by the SBCEHS in 2022 recommended vegetative cover maintenance and rodent control measures performed.
- Recommendations addressed in the *Draft Tech Memo: Maintenance Work Plan*

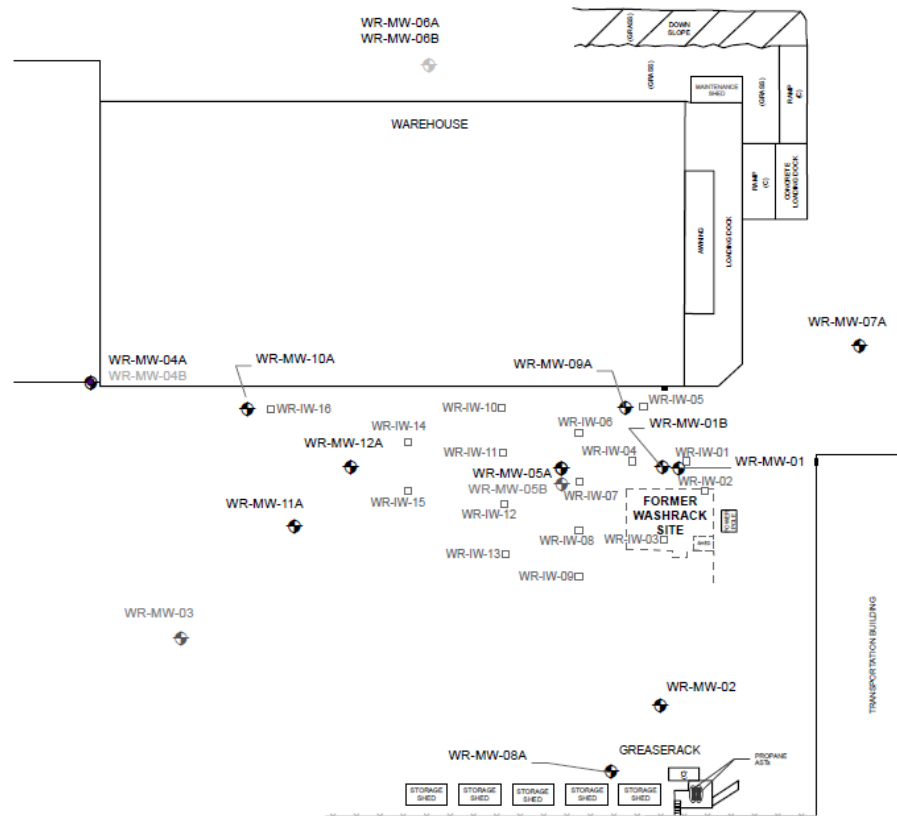


Washrack Site Background

- Site located immediately north of the prison
- Groundwater contamination with chlorinated volatile organic compounds (VOC) likely resulted from past vehicle maintenance in the area:

Contaminant of Concern (COC)	California MCL (µg/L)
Tetrachloroethene (PCE)	5
Trichloroethene (TCE)	5
Cis-1,2-dichloroethene (cDCE)	6
Vinyl chloride	0.5

- Enhanced reductive dechlorination (ERD) program implemented from 2002-2008 as a time-critical removal action (TCRA)
 - Injections of potable water mixed with molasses and powdered cheese whey
 - Injection wells destroyed in 2009 after greatly reducing COC concentrations





Washrack Site – Current Program

- Groundwater monitoring performed semiannually following specifications of:
 - *Post Mitigation Monitoring Plan (2009)*
 - *Change Memoranda to the PMM Plan (2010)*
 - *Quality Assurance Project Plan/Work Plan (2021)*
- 11 monitoring wells at the Site:
 - 10 screened in the shallow A-Zone: groundwater at ~80-85 ft bgs
 - 1 screened in the deeper B-Zone (130-140 ft bgs)
- Sampling performed using passive diffusion bags (PDBs) for VOC analysis
 - 9 wells sampled in first semiannual event (~2Q)
 - 10 wells sampled in second semiannual event (~4Q)
 - PDB sampling was necessitated in 2016 due to low water levels at the Site

Removing PDBs from well WR-MW-08A for sample collection



Before and after well maintenance performed to prevent soil and water infiltration into well boxes. Included new gasket, re-taped threads, and new bolts

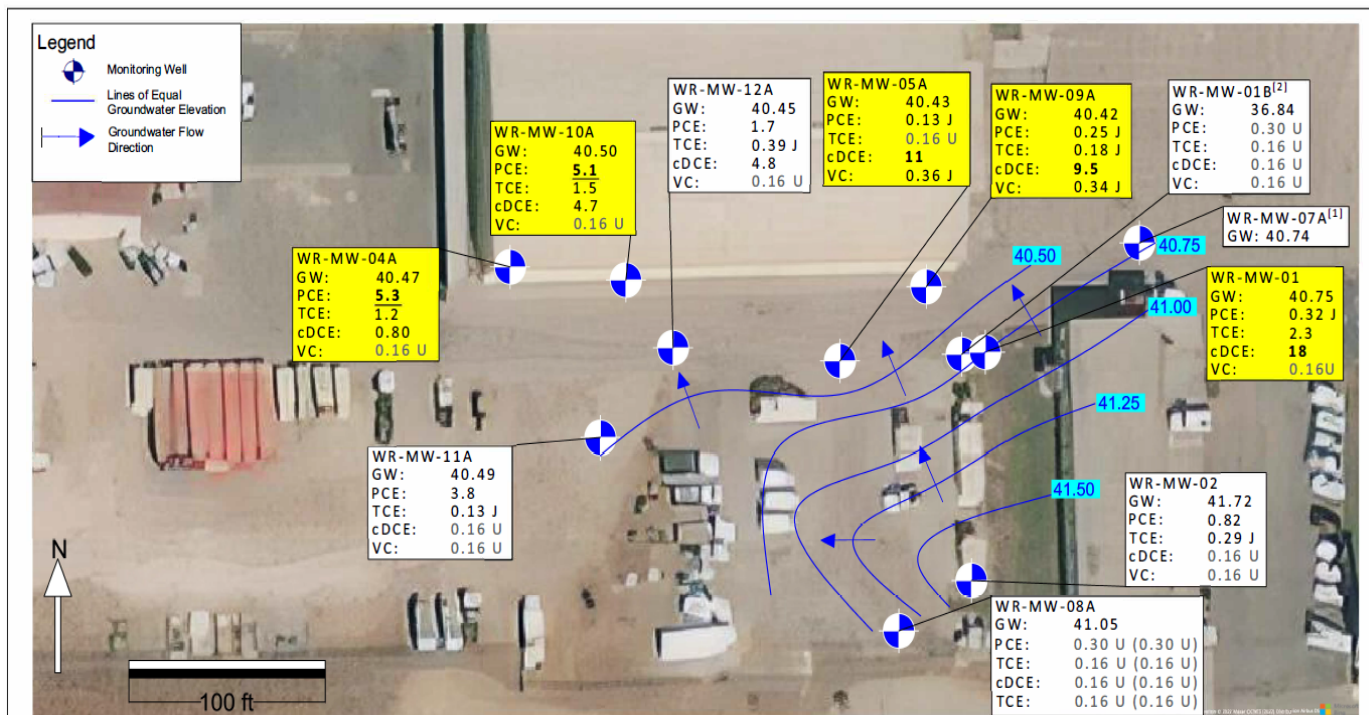


Washrack Site – Recent Data

- 2022 Second Semiannual Groundwater Monitoring Event performed in November 2022
- 5 wells with MCL exceedances

Maximum concentrations:

- **PCE: 5.3 µg/L**
- TCE: 2.3 µg/L
- **cDCE: 18.0 µg/L**
- Vinyl Chloride: 0.36 J µg/L



Ahtna

Notes:
 [1] Well WR-MW-07A is not sampled under the current monitoring program.
 [2] Well WR-MW-01B was excluded from contouring, because it is screened in the B-Zone aquifer.
 Sample collection and water level measurements were performed on November 29, 2022
 All concentrations are reported in micrograms per liter (µg/L).
 Yellow boxes indicate locations of maximum contaminant level (MCL) exceedances.
BOLD: indicates concentration exceeding the California MCL
UNDERLINE: indicates concentration exceeding the Federal MCL
 Field duplicate results are shown in parentheses

cDCE: cis-1,2-Dichloroethene
 GW: groundwater elevation in feet above mean sea level
 PCE: tetrachloroethene
 TCE: trichloroethene
 VC: vinyl chloride

Aquifer Zone A Groundwater Potentiometric Surface Map and Contaminants of Concern Results
 2022 Second Semiannual Groundwater Monitoring Report
 Washrack Site
 Former USDB, Lompoc, CA

Figure
3

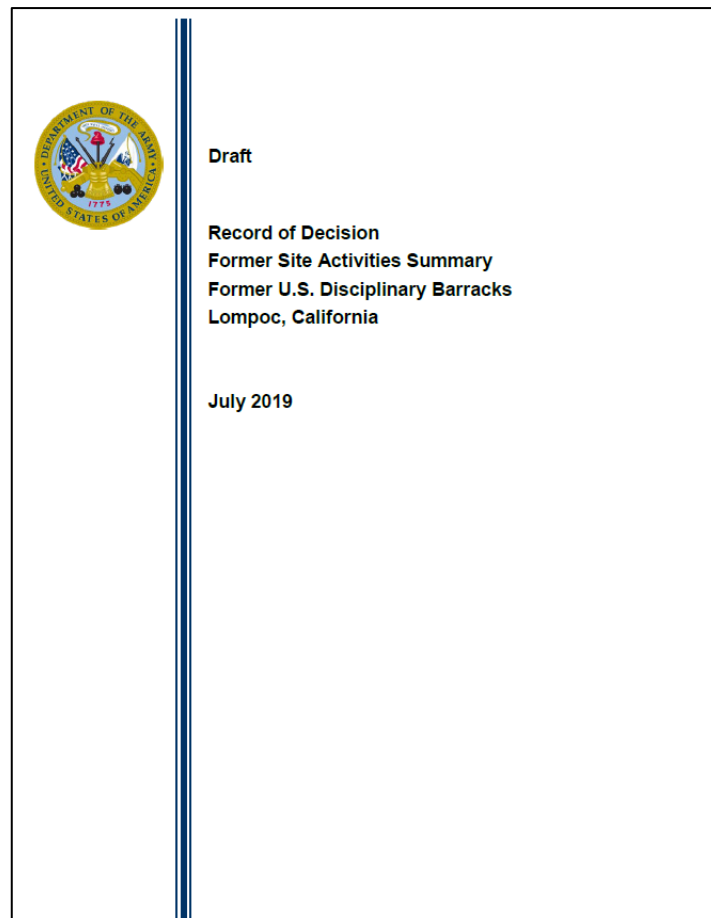


Washrack Site – Project Status

- Draft Record of Decision (ROD) submitted in 2019
 - Intended to formally select Natural Attenuation — long-term monitoring (LTM) as the remedy at Washrack Site
 - Water Board responded that additional ERD injections should be considered

- Army/Ahtna developed the *Final Groundwater Sampling Optimization Plan, October 2022*.
 - Includes detailed analysis of Washrack site data
 - Provides recommendations for the monitoring program and overall project, including additional ERD injections

- A Proposed Plan/ROD will be prepared to formally document the selected remedy and remaining restoration activities.





Washrack Site – Document Status

- Technical Memorandum – Site Maintenance Work Plan
 - Includes proactive maintenance tasks at: the Washrack Site, Wood Dump Site, and FAL:
 - Washrack Site - Groundwater Monitoring Well Video Logging and Repairs
 - Wood Dump Site – Earthwork erosion repairs and installation of straw wattles.
 - FAL – Landfill cap repair including top soil and hydroseed. Owl box installation.
 - Draft version submitted to regulators on 11/9; Comments requested by 12/8

- 2023 First Semiannual Groundwater Monitoring Report
 - Includes results of the June 2023 sampling event
 - Pre-Draft re-submitted to Army on 11/7





Washrack Site – Path Forward Discussion



Path forward for the Site based on recommendations from the *Washrack Groundwater Sampling Optimization Plan*:

1. Finalize the ROD to select in-situ remediation (additional injections) and natural attenuation with LTM as the remedy
2. Proceed with planning documents (i.e. Remedial Design)
3. Perform injection fieldwork, including reapplications as needed
4. Perform performance monitoring including trend analysis and plume stability evaluations
5. Perform groundwater water sampling as needed until concentrations reduce to acceptable levels. Tasks might also include:
 - A. Installing additional monitoring wells to define the plume extents at the MCLs
 - B. Implementing decision logic for reducing monitoring program over time
6. Once Response Complete is met; obtain regulatory concurrence on the Remedial Action Completion Report. If unlimited use / unrestricted exposure (UU/UE) is not achieved, the first Five-Year Review will be conducted after the ROD is signed



Questions/Comments/Action Items

