



Final FORMER MARINE CORPS AIR STATION (MCAS) El Toro 101th Restoration Advisory Board (RAB) Meeting Minutes

Meeting Location: Irvine City Hall, Conference Training Center, Irvine California
Meeting Date/Time: 10 November 2010/6:40pm - 7:40pm
Minutes Prepared by: Carlos Melvin, CDM Federal Programs Corporation (CDM)

Attachment:

Presentation Slides: "Remedial Design Operable Unit 2C, Anomaly Area 3 Update."

WELCOME/INTRODUCTIONS/AGENDA REVIEW:

Mr. Jim Callian (Base Realignment and Closure [BRAC] Environmental Coordinator [BEC] and Navy RAB Co-Chair) welcomed everyone and introduced the RAB community Co-Chairman, Mr. Bob Woodings. A total of 21 attendees were present. Mr. Callian asked Ms. Marcia Rudolph (RAB member, Subcommittee Chair) to lead the Pledge of Allegiance.

ANNOUNCEMENTS/ REVIEW OF ACTION ITEMS

Mr. Callian began the meeting with the following announcements and discussion:

- Mr. Callian referenced the meeting agenda and began the self-introductions.
- Mr. Callian reviewed the RAB meeting agenda; no changes to the agenda were suggested by the RAB. He announced that tonight's presentation would be about Anomaly Area (AA) 3.
- Mr. Callian presented a series of slides listing dates and times for the upcoming quarterly RAB meetings. In addition, he presented slides listing key Navy and Regulatory Agency contacts, RAB points of contact, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Administrative Record (AR) File and Information Repository (IR) locations and hours, and environmental and reuse/redevelopment websites.
- Mr. Hersh (RAB member) asked if Mr. Callian could repeat the 2011 El Toro RAB meeting dates. Mr. Callian stated that meetings on January 26, April 27, August 31, and November 09, 2011 have been scheduled.
- Mr. Callian reiterated the RAB's focus on environmental issues and restoration and not on reuse.
- Mr. Callian reminded everyone to sign-in for tonight's RAB meeting.

APPROVAL OF 25 AUGUST 2010 RAB MEETING MINUTES

Mr. Woodings opened the floor for discussion, questions, or corrections to the 25 August 2010 RAB meeting minutes. No comments, corrections, or questions were made, so the 25 August 2010 meeting minutes were approved as final.

SUBCOMMITTEE MEETING REPORT

Ms. Rudolph began her subcommittee meeting report by noting some suggestions for topics of discussion for the 2011 RAB meetings. She stated that a "State of the Station" presentation should be presented. Ms. Rudolph stated that the "State of the Station" should present an update on accomplishments and project/site schedules. The second meeting topic recommendation was an update on funding. Ms. Rudolph recommended a summary of funding be presented to the group that contains information regarding the funding stability for current projects, what has been spent to date and what is required to move forward. Ms. Rudolph also suggested that a schedule of studies for 2011 be presented. She also suggested an update on Installation Restoration Program (IRP) Site 1, which could include the perchlorate and the biological (i.e., the Gnatcatcher and Fairy Shrimp) concerns. The last suggestion by Ms. Rudolph was for an update on the Federal Bureau of Investigations (FBI) activities on the site. She explained that the community should be aware of any future plans by the FBI. Ms. Rudolph suggested that the RAB meetings would be a good forum for the FBI to share information. She emphasized that no national secret information is being requested.

RAB ELECTIONS

Mr. Callian stated that RAB community Co-Chairman elections will be further discussed at the January 2011 RAB meeting. He asked that all RAB members think about nominations for the RAB community Co-Chairman position. It has been approximately two years since the last election was held.

REGULATORY AGENCY UPDATE

Mr. Quang Than (DTSC)

Mr. Quang Than provided the following update to the RAB:

- Finding of Suitability for Transfer (FOST) # 6 is at the Draft Final stage and comments have been provided to the Navy. FOST #6 should be finalized by the end of the year.
- Mr. Quang also discussed how in conjunction with the FOST #6, the Covenant to Restrict Use of Property (CRUP) is moving forward. The general terms of the CRUP were defined by Mr. Quang.
- The Draft Final Feasibility Study Report for Groundwater at IRP Sites 1 and 2 is under review.
- DTSC is also reviewing the Explanation of Significant Differences for IRP Sites 2 and 17. This document outlines the reduction in the buffer zones from 1,000 feet to 100 feet.

Mr. Hersh inquired about who made the request to reduce the buffer zones from 1,000 to 100 feet. Mr. Quang responded that the Navy made the request. Mr. Callian stated that in the Record of Decision (ROD), landfill gas monitoring was required in support of and prior to implementing the recommendation.

Ms. Mary Aycock (U.S. EPA)

Ms. Aycock provided the following update to the RAB:

- The U.S. EPA is working with the Navy to finalize FOST #6. U.S. EPA does not have significant comments and the review should be finalized in the coming months.
- In September 2010, U.S. EPA finalized the review of the Operating Properly and Successfully (OPS) Report for IRP Site 24. The report was reviewed by the U.S. EPA hydrogeologist and approved. U.S. EPA has issued the OPS determination letter.
- U.S. EPA is reviewing a design package for the replacement Well IRWD-78. The design package is part of the remedial action for IRP Site 18 and will hopefully be installed and tested in the next year.
- Review of replacement well locations for IRP Site 16 is also being conducted.

Mr. Callian stated that the U.S. EPA OPS designation means that systems and procedures are in-place to assure that the remedy remains protective of human health and the environment until the remedial goals are achieved. Part of this process includes 5-year reviews, during which the remedies are evaluated every 5 years to assure they remain protective.

100th RAB MEETING ACKNOWLEDGEMENT

Mr. Callian stated that the last MCAS El Toro RAB meeting was the 100th RAB meeting and Ms. Mary Aileen Matheis (RAB Member) was not present to receive her certificate of appreciation. Mr. Callian reminded the audience how Congress intended the RAB meetings to be a means to collect input from the community. Ms. Matheis thanked the Navy for the certificate of appreciation and acknowledged the RAB for all its hard work and support. She noted that she appreciated U.S. EPA's efforts to issue the OPS for IRP Site 24.

PRESENTATION: REMEDIAL DESIGN OPERABLE UNIT 2C, ANOMALY AREA 3 UPDATE

Mr. Callian introduced the feature presentation for the evening and Mr. Cardinale as the Navy Remedial Project Manager for the project. Mr. Cardinale, along with Mr. Doug Bielskis (ERRG), will give tonight's presentation. A summary of the topics presented by Mr. Cardinale and Mr. Bielskis included:

Mr. Cardinale provided an overview of the presentation (Slide 2) which includes site overview and history, previous investigations, site closure process, remedial action (RA) objectives, components of the selected remedy, details of the remedial design (RD), and project schedule. He noted that Mr. Bielskis will expand on the major components of the design package. Mr.

Cardinale also stated that a list of acronyms for the presentation has been provided in the handout.

Slide 3 provides the site overview and history of the project. The site was used for borrow materials from 1972 to 1988. Some of the borrow pits were backfilled with construction debris and covered with soil.

Slide 4 shows the vicinity of AA 3 at the former MCAS El Toro. Mr. Cardinale described the key features of the figure/project and where the site is located in relation to the entire Base.

Slide 5 shows a photograph of the site (looking east). Mr. Cardinale described several features in the photograph.

Mr. Cardinale reviewed the key previous investigations (from the 1993 aerial photograph evaluation through the 2009 Remedial Investigation [RI]/Feasibility Study [FS] Report) over the duration of the project in Slide 6. He reminded the audience that the reports can be reviewed and found at the repositories that Mr. Callian mentioned early in the meeting.

Slides 7, 8, and 9 present the conclusions from the RI Report and include methane gas detected at the landfill, no volatile organic compounds have been reported in soil gas, groundwater is not impacted, and no radiological concerns exist for the site.

Slide 10 presented an overview of the site closure process and the reports that will be completed for the project.

The RA objectives were described in Slide 11 and include minimizing direct contact with landfill wastes; controlling run-on, runoff, and erosion; mitigate landfill gas; and minimize contact between the surface water, Agua Chinon Wash, and the landfill waste. Mr. Cardinale also stated that the buffer zone will be 100 feet.

Mr. Cardinale then introduced Mr. Bielskis and turned the presentation over to him on Slide 12.

Mr. Hersh asked for clarification on the source of methane gas. Mr. Bielskis stated a probable source is wood or organic debris. He also stated the landfill cap will consist of a soil cover (no flexible membrane liner), which would increase the potential for migration of methane.

Mr. Bielskis reviewed the components of the selected remedy presented in Slide 12. They include waste consolidation and limited grading; construction of a finger dike and riprap; construction of passive/active landfill gas control system; implementing institutional controls; long-term monitoring for landfill gas and groundwater; and operations and maintenance. Mr. Bielskis stated that the components of the selected remedy are documented in the ROD, which was finalized in August 2010.

Slide 13 provides information on the details of the remedial design including waste consolidation and limited grading. Slide 14 provides additional information on the finger dike and riprap and the associated construction process. Mr. Bielskis defined a finger dike and riprap and explained that riprap was shown to RAB members during the IRP Site 2 tour

(located near the edges of the cover). He also mentioned that the drainage swale will address storm water management for the site.

Slide 15 shows a figure that includes the location of the finger dike, 100 foot buffer zone, drainage swale, the debris removal areas, and the final grading. Mr. Bielskis briefly highlighted each key item on the figure. Slide 16 shows a photograph of the area where the finger dike will be constructed and a portion the existing wash area.

Slide 17 provides additional information on the landfill gas monitoring and control system within the 100-foot buffer zone. Mr. Bielskis stated the remedy will consist of landfill gas vents, six collection trenches (25-foot offset from the edge of the waste), and six perimeter landfill gas probes (50 feet outside of waste boundary).

Slide 18 provides additional information for the institutional controls, environmental monitoring, and operation and maintenance. Slide 19 is a figure identifying the locations of various remedy components. Mr. Bielskis identified each element on the figure.

Slide 20 is a schematic drawing of a passive landfill gas vent constructed above ground and how the conversion would be completed for active extraction. Mr. Bielskis briefly described the key elements and how the system functions. Mr. Bielskis then turned the presentation back over to Mr. Cardinale.

Mr. Cardinale presented the schedule on Slide 21. He stated that the Draft RD (60 percent design) and Remedial Action Work Plan (RAWP) was submitted to the agencies on 12 October 2010. The Draft Long-Term Monitoring/Operations and Maintenance Plan will be submitted in January 2011. The Draft Final RD (90 percent design) and RAWP will be submitted in March 2011. A Fact Sheet will be distributed in April 2011. The Final RD and RAWP will be submitted in May 2011. The RA construction will be performed from May 2011 to July 2011. The Final Long-Term Monitoring/Operations and Maintenance Plan will be submitted in July 2011.

Slide 22 presents the acronyms used in the presentation.

Ms. Matheis inquired about the final soil cover and is it similar to other sites. Is the composition liner similar to other sites? Mr. Bielskis responded that the cover for the proposed project does not include a geomembrane layer. The cap at IRP Sites 3 and 5 does include a geomembrane liner. Mr. Callian stated that minor amounts of methane have been reported in the central portion of AA 3, but no methane has been detected at IRP Sites 3 and 5.

OPEN QUESTIONS AND COMMENTS

Mr. Callian opened the meeting to general questions and comments.

Mr. Woodings inquired about the upgrades to Well IRWD-78 and how it is being designed. Mr. John Hills (Irvine Ranch Water District [IRWD]) mentioned that the project is moving forward and they are working with the City of Irvine. The project will be completed in March/April 2012. He also stated that some drilling activity will be conducted 24 hours per day during the construction period. Mr. Woodings mentioned that Woodbridge Village Association may have some interest in the new well. Mr. Hill clarified that Mr. Woodings is referencing a different

project (the well to fill the lagoon). He mentioned how that project is using IRWD potable water. Mr. Woodings noted that the interest in the well may be a water rights issue and not associated with the RAB. Mr. Callian clarified that Well IRWD-78 work will begin next spring and it will take about one year to complete.

Mr. Bill Turner (community member) asked whether any studies on the contents of the landfill at AA 3 were conducted. Mr. Callian responded that studies were completed (photographic reviews and well data) on the landfill. Mr. Turner asked if the Navy is confident about the contents of the landfill (i.e., potential substances of concern). Mr. Callian responded that the Navy is as confident as the data allows. He also stated that no current impacts to groundwater exist, and on-going groundwater monitoring will be implemented.

Mr. Woodings asked about the landfill gas collection trench that was described in the AA 3 presentation. He clarified that he would like further explanation about this trench. Mr. Bielskis defined it as a trench with permeable material that provides a preferential pathway collecting landfill gas migrating from the fill. The trench will be installed 15 feet beneath the surface with a vertical riser to vent out gas and will be used for monitoring. Mr. Callian stated that the trench will be backfilled with gravel material and a perforated pipe will be used, which will draw in any nearby gases.

MEETING EVALUATION AND CLOSING

Mr. Woodings asked for questions or comments from the audience.

Mr. Hersh noted the following items for potential meetings in 2011.

- More site visits (maybe in the Spring).
- Provide a status update on groundwater cleanup in the first half of 2011.
- Update on the removal of the runways. What would be identified, if the runways were removed? Can the Navy provide an update at the January meeting? Mr. Callian stated that an update from the Navy would consist of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) comeback policy. If any contaminated materials were to be discovered under the runways that were the result of Navy activities, the Navy would be responsible for the cleanup under the comeback policy.

Mr. Hill (IRWD) stated that the IRWD would volunteer to host a tour of their facilities for the RAB in the Spring of 2011.

In closing, Mr. Callian thanked everyone for participating.

LIST OF HANDOUTS PROVIDED AT THE MEETING

- 10 November 2010 Former MCAS El Toro RAB Meeting Agenda and Upcoming RAB Meeting Schedule
- Where to Get More Information & Environmental Websites

- Presentation Slides: “Remedial Design Operable Unit 2C, Anomaly Area 3 Update.”
- Former MCAS El Toro IRP Site Location Map
- Former MCAS El Toro RAB Mission Statement and Operating Procedures
- Former MCAS El Toro RAB Fact Sheet/Membership Application
- Former MCAS El Toro Mailing List Coupon

Copies of the meeting minutes and handouts provided at the 25 August 2010 RAB meeting are available at the IR for former MCAS El Toro located in the Government Publication Section of the Heritage Park Regional Library, Irvine, California. Library hours are 10 am to 9 pm Monday through Thursday; 10 am to 5 pm Friday and Saturday; and 12 pm to 5 pm on Sunday. The library may be reached at (949) 936-4040. In addition, copies of the meeting minutes and handouts are also available at the CERCLA AR maintained at Building 307 at former MCAS El Toro by Ms. Sue Rawal. Documents can be viewed by appointment; call Ms. Rawal at (949) 859-6014 between 9 am and 1 pm Monday through Thursday.

Final minutes from previous RAB meetings can be found on the internet at the Navy BRAC Program Management Office (PMO) website: www.bracpmo.navy.mil

INTERNET SITES

Navy and Marine Corps Internet Access

BRAC PMO Web Site (includes RAB meeting minutes): <http://www.bracpmo.navy.mil/>

Department of Defense - Environmental Cleanup Home Page Web Site:

<http://www.dtic.mil/envirodod/>

U.S. EPA:

Homepage: www.epa.gov

Superfund information: www.epa.gov/superfund

National Center for Environmental Assessment: www.epa.gov/ncea

Federal Register Environmental Documents: www.epa.gov/federalregister

Cal/EPA:

Homepage: www.calepa.ca.gov

Department of Toxic Substances Control: www.dtsc.ca.gov

Department of Health Services, reorganized into the Department of Health Care Services and the Department of Public Health: www.dhs.ca.gov

Santa Ana Regional Water Quality Control Board: www.waterboards.ca.gov/santaana

Additional Websites: Reuse and Redevelopment

Orange County Great Park: www.ocgp.org

Great Park Conservancy: www.orangecountygreatpark.org



Remedial Design Operable Unit 2C, Anomaly Area 3 Update

**Former Marine Corps Air Station El Toro
Restoration Advisory Board Meeting
10 November 2010**

Louie Cardinale, P.E., Navy Remedial Project Manager
Doug Bielskis, P.E., ERRG Project Manager



Overview



- **Site Overview and History**
- **Previous Investigations**
- **Site Closure Process**
- **Remedial Action Objectives**
- **Components of Selected Remedy**
- **Details of Remedial Design (RD)**
- **Schedule for Finalizing the RD and Implementing the Remedial Action (RA)**



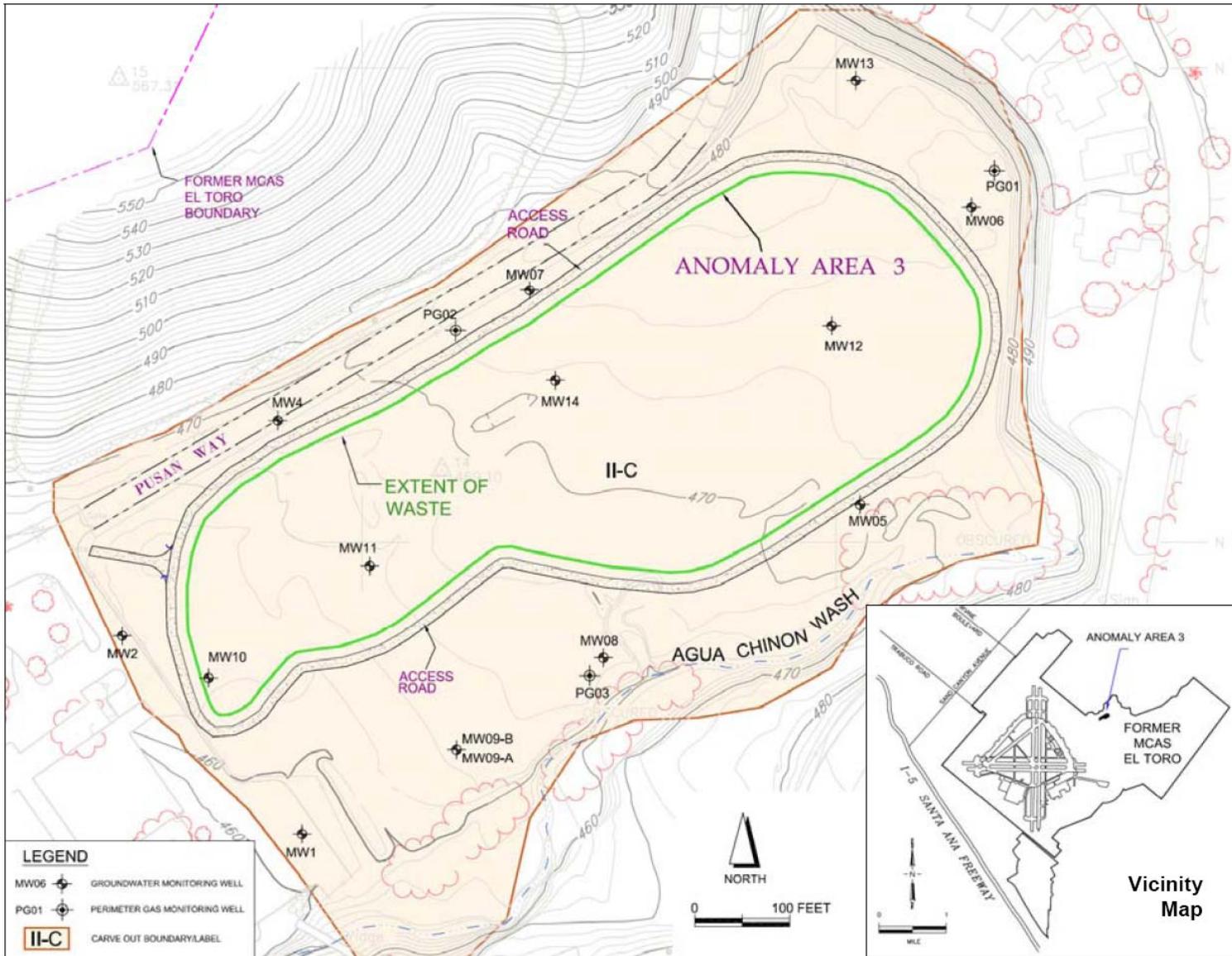
Site Overview and History



- **An approximate 5-acre site located in northwest portion of former Marine Corps Air Station (MCAS) El Toro**
 - Encompassed within Carve-Out Area (CO) II-C
 - Source of borrow material from 1972 to 1988
 - Some borrow pits backfilled with construction debris and later covered with soil
 - Average of approximately 4.5 feet of soil covers the site, with isolated areas having approximately 2 feet of cover



Site Location





NW Portion of Site (looking east)





Previous Investigations



- **1993: Aerial Photograph Evaluation**
- **1999 to 2000: Groundwater, Soil, and Soil Vapor Investigation, Geophysical Investigation, Trenching, and Radiological Screening**
- **2000: Final Historical Radiological Assessment**
- **2002 to 2005: Removal Site Evaluation, Risk Assessments, Expanded Site Inspection**
- **2006: Final Radiological Release Report**
- **2007 to 2008: Supplemental Groundwater Monitoring**
- **2008 to 2010: Semi-Annual Groundwater Monitoring**
- **2008 to 2009: Remedial Investigation/Feasibility Study (RI/FS) Report**



Previous Investigation (cont.)



RI CONCLUSIONS

Landfill Contents

- Primarily concrete, asphalt, and metal debris with smaller amounts of plastic and wood debris

Soil Gas

- Methane in soil gas is confined to the central portion of the site and is not migrating to the perimeter of the site
- No volatile organic compounds (VOCs) reported in soil gas within the debris placement area



Previous Investigation (cont.)



RI CONCLUSIONS (cont.)

Surface Soil and Sediment

- Chemical concentrations are generally less than risk-based criteria or are within background concentrations
- Risks associated with potential exposure to chemicals at AA 3 are within risk management range

Groundwater

- Historical activities at AA 3 have not impacted groundwater, no further action is required

Radionuclides

- Agencies concurred that AA 3 met the criteria for unrestricted radiological release; and therefore, no further action is required



Previous Investigation (cont.)



➤ RI CONCLUSIONS (cont.)

- Evaluate response actions because of:
 - presence of construction-related debris at the site
 - the proximity of waste to groundwater
 - the presence of elevated methane concentrations in the central portion of AA 3



Site Closure Process



Completed
August 2010

Record of Decision (ROD)

Document that describes the selected remedy at AA 3 and reasons for the selection based on the nine criteria in the NCP.

In Progress
Estimated
Completion
May 2011

RD / RA Work Plan (RAWP)

Document that provides the actual design of the remedy (RD) at AA 3 and plans for how the remedy will be constructed (RAWP).

Long-Term Monitoring (LTM) and O&M Plan

Document that details the requirements for long-term environmental monitoring and operation & maintenance of the AA 3 remedy.

To Follow RA
Estimated
Completion
March 2013

Remedial Action Completion Report (RACR)

Document that demonstrates that the remedy for AA 3 has been constructed and RAOs have been accomplished.

Operating Properly and Successfully (OPS) Report

Document that demonstrates that the remedy for AA 3 has been constructed as designed and is operating properly and successfully.



Remedial Action Objectives



- **Minimize direct contact with the landfill wastes**
- **Control run-on, runoff, and erosion; minimize infiltration and potential contaminant leaching to groundwater**
- **Mitigate any landfill gas (LFG) migration consistent with the Navy's agreement with California Integrated Waste Management Board (now CalRecycle)**
- **Minimize contact between surface water in Agua Chinon Wash and the landfill waste**



Components of Selected Remedy



- **Waste consolidation and Limited grading**
- **Constructing finger dike and placing riprap**
- **Constructing passive/active LFG control system**
 - Would be converted to active extraction (if needed based on LFG monitoring results)
- **Implementing institutional controls in the form of land use and activity restrictions**
- **Long-term monitoring environmental (LTM) for LFG and groundwater**
- **Operation and maintenance (O&M)**



Details of Remedial Design



Waste Consolidation and Limited Grading

- Waste consolidation to achieve a minimum buffer zone of 100 feet from the waste boundary to the CO II-C boundary
- Ensure the final cover has a minimum 4-foot thickness

Construction Process

- Removal of existing soil cover
- Waste consolidation
- Placement of final soil cover
- Hydroseed



Details of Remedial Design (cont.)



Finger Dike and Riprap

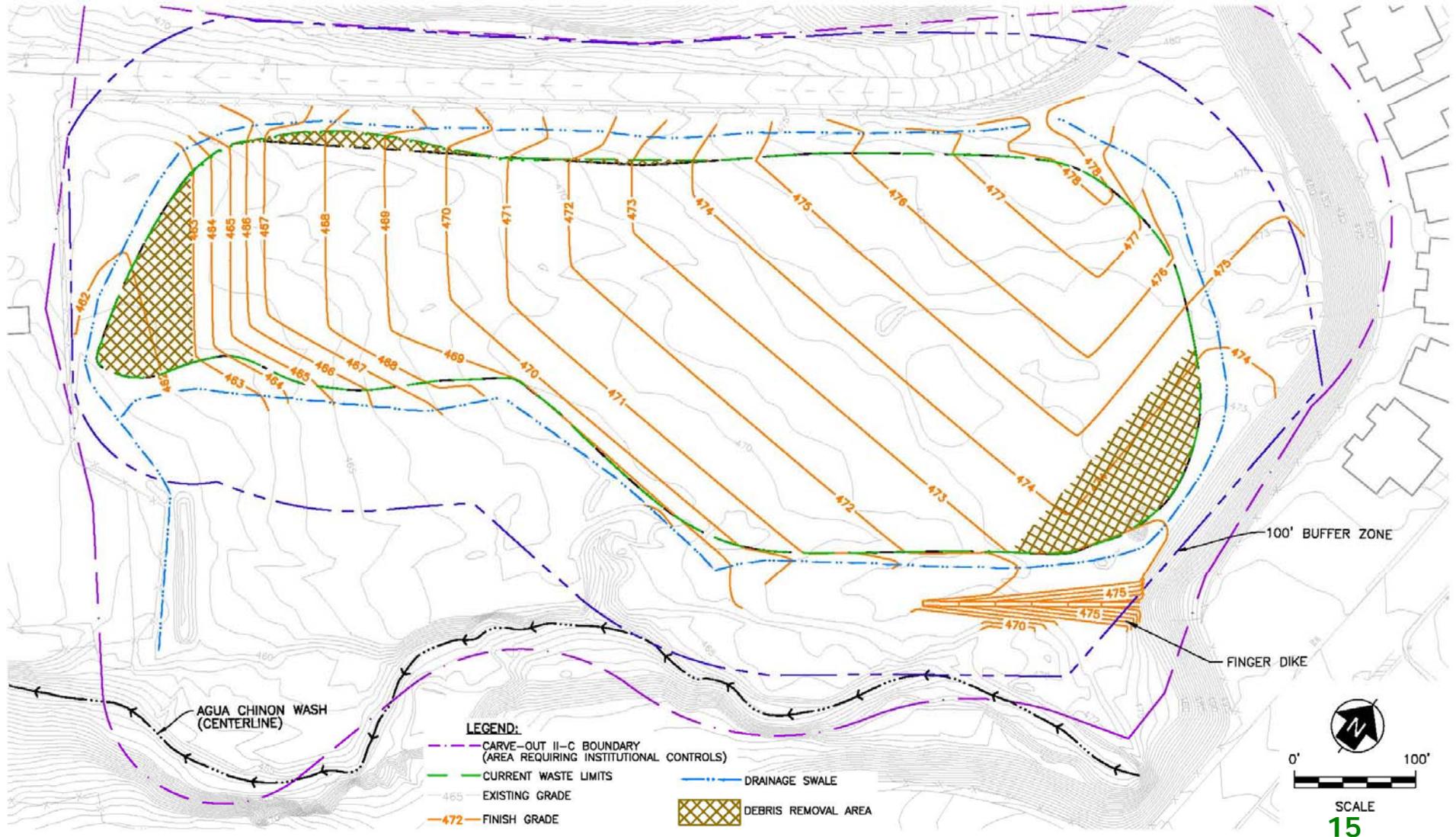
- To prevent erosion of the cover
- To control storm water in the vicinity of Agua Chinon Wash

Construction Process

- Construct Finger dike and armor with riprap
- Construct drainage swale



Details of Remedial Design (cont.)





SE Portion of Site (looking NW)





Details of Remedial Design (cont.)



LFG Monitoring and Control System

- To minimize or control potential LFG migration within the 100-foot buffer

Construction Process

- Installation of LFG vents
- Construction of LFG collection trenches
- Installation of perimeter LFG probes



Details of Remedial Design (cont.)



Institutional Controls

- Consists of legal and administrative mechanisms (deed restrictions, etc.) to restrict certain land uses and activities
- To limit potential exposure of future users of the property to hazardous substances and to maintain the integrity of the remedy

Environmental Monitoring

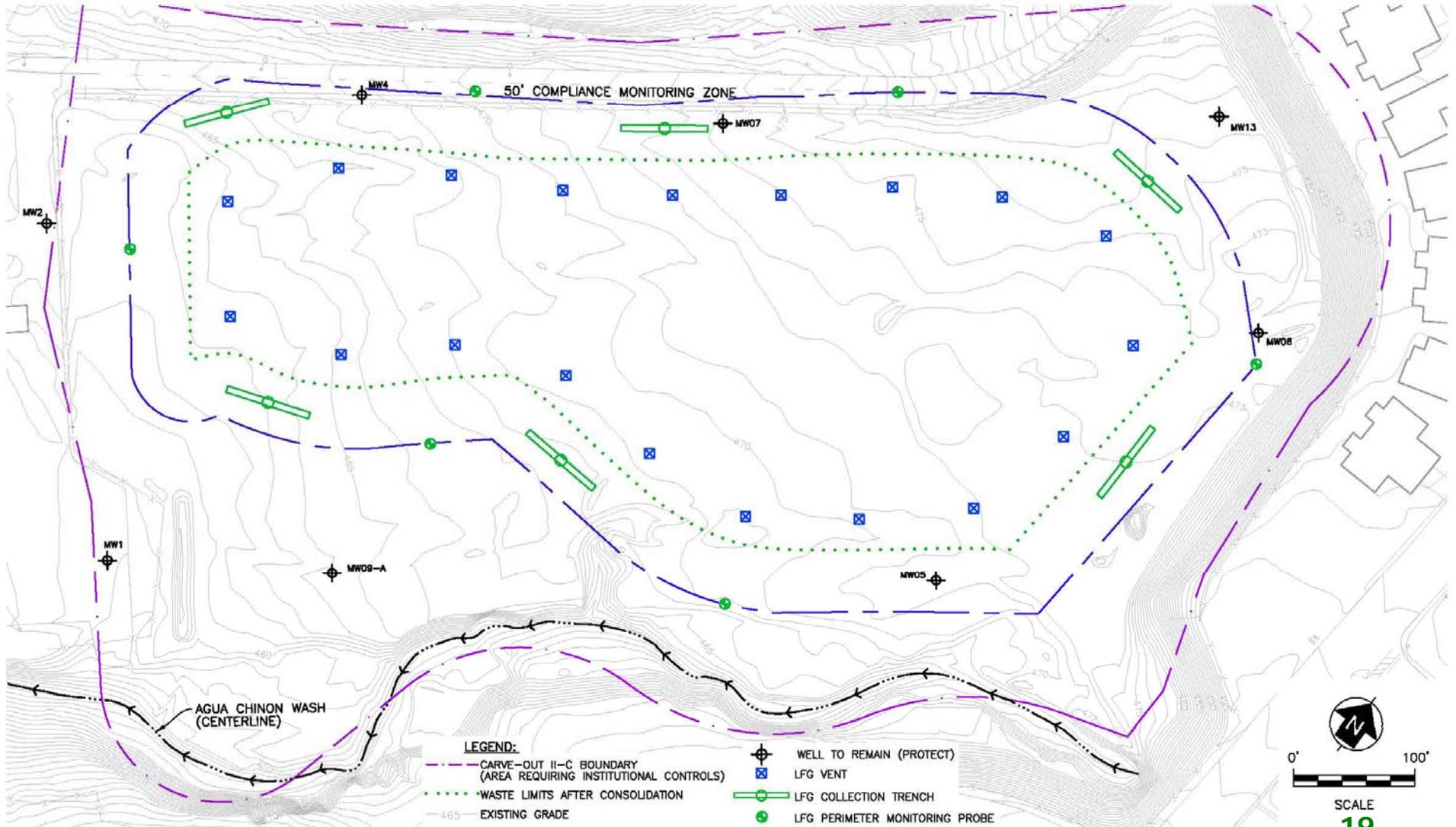
- Quarterly LFG monitoring
- Semi-annual groundwater monitoring

Operation and Maintenance

- Periodic inspection of the landfill cover, settlement monuments, and monitoring components

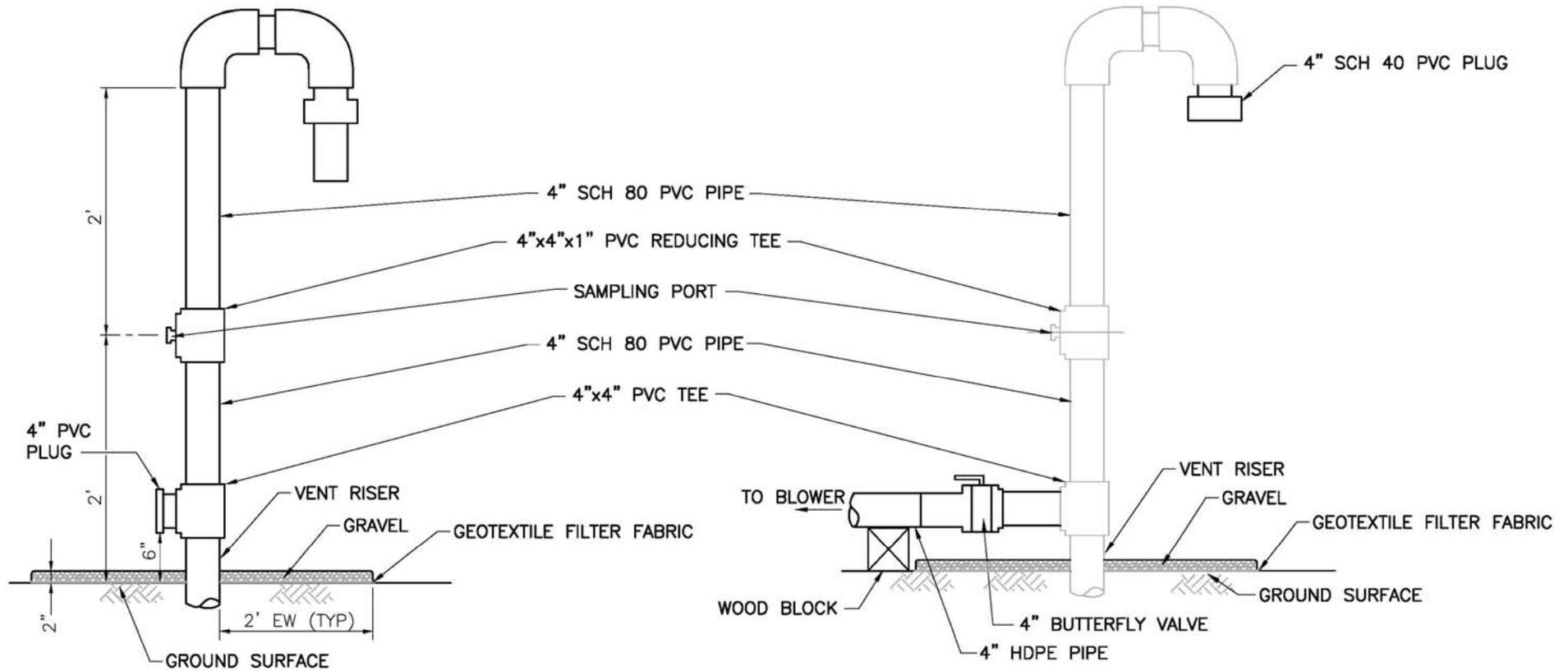


Details of Remedial Design (cont.)





Details of Remedial Design (cont.)



LFG VENT - ABOVE GROUND CONSTRUCTION
NTS

CONVERSION OF LFG VENT FOR ACTIVE EXTRACTION
NTS



Schedule



- **Draft RD (60 percent design) and RAWP submitted to agencies on October 12, 2010**
 - Comments due on December 13, 2010
- **Draft LTM/O&M Plan - January 2011**
- **Draft Final RD (90 percent design) & RAWP - March 2011**
- **Fact Sheet - April 2011**
- **Final RD (100 percent design) - May 2011**
- **RA construction - May to July 2011**
- **Final LTM/O&M Plan - July 2011**



List of Acronyms



AA 3	Anomaly Area 3
CO	carve-out area
FS	feasibility study
LFG	landfill gas
LTM	long-term monitoring
O&M	operation and maintenance
OPS	operating properly and successfully
OU	operable unit
RA	remedial action
RACR	remedial action completion report
RAWP	remedial action work plan
RD	remedial design
RI	remedial investigation
ROD	record of decision
VOC	volatile organic compound



Questions?

