



DEPARTMENT OF THE NAVY
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
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MCAS EL TORO
SSIC NO. 5090.3.A

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DEC 22 2009

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Remedial Project Manager
U.S. Environmental Protection Agency,
Region IX
75 Hawthorne St, (Mail Code SFD-8-1)
San Francisco, CA 94105

Mr. Quang Than
Remedial Project Manager
California Department of Toxic Substances Control
Office of Military Facilities
5796 Corporate Ave.
Cypress, CA 90630

Mr. John Broderick
Remedial Project Manager
California Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501

Fellow Federal Facility Agreement (FFA) Representatives:

**SUBJECT: FEDERAL FACILITY AGREEMENT APPENDIX A SCHEDULE EXTENSION
REQUEST FOR INSTALLATION RESTORATION PROGRAM SITES 1 AND 2,
FORMER MARINE CORPS AIR STATION EL TORO, CALIFORNIA**

This letter is written to request an extension to the former Marine Corps Air Station (MCAS) El Toro Federal Facility Agreement (FFA) Appendix A Schedule for groundwater at Installation Restoration Program (IRP) Site 1 (former Explosive Ordnance Disposal [EOD] Training Range) and IRP Site 2 (Magazine Road Landfill).

Revised deliverable dates for groundwater at IRP Sites 1 and 2 are required for the Draft Final Feasibility Study (FS), Draft Proposed Plan (PP), and Draft Record of Decision (ROD) based on requiring additional time to complete technical documentation to support subsequent project decisions. As discussed at previous Base Realignment and Closure (BRAC) Cleanup Team (BCT) meetings, the Navy is in the process of performing a Pilot Study to evaluate the feasibility for *in situ* bioremediation of perchlorate-impacted groundwater within and downgradient of IRP Site 1, including an evaluation of the effectiveness of these *in situ* treatments on commingled trichloroethylene (TCE)-impacted groundwater downgradient at IRP Site 2. Results of this Pilot Study will be used in the Draft Final version of the FS Report for groundwater at IRP Sites 1 and 2 to refine the cost estimates and remedial time frames.

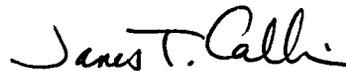
Ultimately, the results of this Pilot Study will support the selection of the optimal effective remediation strategy for perchlorate- and TCE-impacted groundwater at these sites. The additional time will result in a more robust evaluation of remedial alternatives in the FS.

The following table identifies the submittals and the associated schedule extensions relating to this request, which is made pursuant to FFA Section 9.2(d) and (g) for IRP Sites 1 and 2 Groundwater. Enclosure (1) presents our FFA Appendix A with the revised primary and draft final milestones included. Enclosure (2) presents the detailed project schedule.

IRP Site 1 & IRP Site 2 Groundwater Submittals	Current Deliverable Date	Revised Deliverable Date	Extension
Draft Final Feasibility Study	12/22/2009	7/2/2010	~ 6 months
Draft Proposed Plan	3/24/2010	10/4/2010	~ 6 months
Draft Record of Decision	12/3/2010	6/15/2011	~ 6 months

Thank you for your cooperation and continued support. Should you have questions or need additional information, please contact me at (619) 532.0952.

Sincerely,



JAMES T. CALLIAN
BRAC Environmental Coordinator
By direction of the Director

Enclosures: (1) Federal Facility Agreement Appendix A Schedule, Former MCAS El Toro
(December 22, 2009)

(2) Comprehensive Schedule, IRP Site 1, Former MCAS El Toro

Copy to:
Mr. Crispin Wanyoike, P.E.
Senior Program Director
AECOM Technical Services
999 Town & Country Road
Orange, CA 92868

MARINE CORPS AIR STATION EL TORO

Federal Facility Agreement

Appendix A

Submittal Milestones

Site 1 Soil (Former Explosive Ordnance Disposal [EOD] Training Range)

Primary Submittal	Deliverable Date
Draft Remedial Investigation	06-03-2005
Draft Feasibility Study	01-29-2007
Draft Proposed Plan	03-24-2010
Draft Record of Decision	12-03-2010

Draft Final Submittal	Deliverable Date
Draft Final Feasibility Study	08-29-2008

Site 1 (Former EOD Training Range) 1 & Site 2 (Magazine Road Landfill) Groundwater

Primary Submittal	Deliverable Date
Draft Proposed Plan	10-04-2010
Draft Record of Decision	06-15-2011

Draft Final Submittal	Deliverable Date
Draft Final Feasibility Study	07-02-2010

Sites 2 & 17 (Magazine Road and Communication Station Landfills)

Primary Submittal	Deliverable Date
Draft Final Remedial Design	07-19-2004
Draft Sites 2 and 17 Operation and Maintenance Plan	09-14-2007
Site 2 Draft Remedial Action Completion Report	10-24-2008
Site 17 Draft Remedial Action Completion Report	10-24-2008

Sites 3 & 5 (Original and Perimeter Road Landfills)

Primary Submittal	Deliverable Date
Draft Remedial Design/Remedial Action Work Plan*	09-02-2008
Draft Operation and Maintenance Plan/Long-Term Monitoring Plan**	07-15-2009
Draft Interim-Remedial Action Completion Report***	04-07-2010
Draft Operating Properly and Successfully Report	02-24-2011

* Includes Construction Quality Assurance (CQA) Plan, Construction Quality Control (CQC) Plan, and Contingency Plan

** Includes Long-Term Contingency Plan

***Equivalent to Project Closeout Report

MARINE CORPS AIR STATION EL TORO

Federal Facility Agreement

Appendix A

Submittal Milestones

Anomaly Area 3

Primary Submittal	Deliverable Date
Draft Remedial Investigation/Feasibility Study	12-06-2005
Draft Proposed Plan	06-23-2008
Draft Record of Decision	11-17-2009

Sites 8 (DRMO Storage Yard) & 12 (Sludge Drying Beds)

Primary Submittal	Deliverable Date
Draft Remedial Design/Remedial Action Work Plan	09-12-2007
Construction Quality Assurance Plan	09-12-2007
Construction Quality Control Plan	09-12-2007
<i>Draft Remedial Action Completion Report</i>	<i>02-18-2010</i>

Site 16 (Crash Crew Pit No. 2)

Primary Submittal	Deliverable Date
Draft Remedial Design/Remedial Action MNA Work Plan	11-18-2003
Draft Remedial Design	07-27-2005
Draft Operating Properly and Successfully Report	03-02-2006

Site 18 (VOC Regional Groundwater Plume)

Primary Submittal	Deliverable Date
Preliminary Remedial Design (90% Design)	03-14-2005
Final Remedial Design (100% Design)	05-31-2005
Draft Operation & Maintenance Plan	01-11-2007
Draft Project Closeout Report / Interim – Remedial Action Completion Report	05-14-2007

Site 24 (VOC Source Area – Shallow Groundwater Unit)

Primary Submittal	Deliverable Date
Preliminary Remedial Design (90% Design)	06-02-2004
Final Remedial Design (100% Design)	12-13-2004
Draft Operation & Maintenance Plan	01-11-2007
Draft Project Closeout Report / Interim – Remedial Action Completion Report	05-14-2007

ID	Task Name	Duration	Start	Finish	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
1846	Site 1	4551 days	Wed 3/8/00	Wed 8/16/17										
1861	Remedial Investigation and Report	47 days	Thu 10/26/06	Fri 12/29/06										
1863	Feasibility Study	104 days	Tue 11/7/06	Fri 3/30/07										
1866	IRP Site 1 Soil Remedy	1696 days	Fri 6/1/07	Fri 11/29/13										
1867	Site 1 Soil FS	376 days	Fri 6/1/07	Fri 11/7/08										
1868	Supplemental Munitions & Groundwater Sampling	376 days	Fri 6/1/07	Fri 11/7/08										
1881	Munitions Characterization	317 days	Tue 7/31/07	Wed 10/15/08										
1897	Issue RTCs for Soil Alternatives in Draft FS	0 days	Mon 8/11/08	Mon 8/11/08										
1898	Draft Final FS	137 days	Thu 2/21/08	Fri 8/29/08										
1902	Regulatory Agency Concur or Dispute	22 days	Mon 9/1/08	Tue 9/30/08										
1903	Interim Removal Action	306 days	Mon 6/15/09	Mon 8/16/10										
1904	Action Memorandum/Removal Action Work Plan (AM/RAWP)	164 days	Mon 6/15/09	Thu 1/28/10										
1907	Draft AM	30 days	Tue 10/20/09	Mon 11/30/09										
1908	Draft RAWP	27 days	Tue 11/10/09	Wed 12/16/09										
1909	Regulatory Agency Review	21 days	Thu 12/17/09	Thu 1/14/10										
1910	Final AM/RAWP	10 days	Fri 1/15/10	Thu 1/28/10										
1911	Explosive Safety Submission (ESS)	158 days	Mon 6/15/09	Wed 1/20/10										
1919	Removal Action	33 days	Fri 1/29/10	Tue 3/16/10										
1920	Mobilization	5 days	Fri 1/29/10	Thu 2/4/10										
1921	Vegetation Trimming/Geophysical Survey	20 days	Mon 2/1/10	Fri 2/26/10										

ID	Task Name	Duration	Start	Finish	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
1922	Anomaly Evaluation	15 days	Fri 2/12/10	Thu 3/4/10				2/12/10 3/4/10						
1923	Munitions Removal	15 days	Mon 2/22/10	Fri 3/12/10				2/22/10 3/12/10						
1924	Demobilization	2 days	Mon 3/15/10	Tue 3/16/10				3/15/10 3/16/10						
1925	After Action Report (AAR)	96 days	Wed 3/3/10	Wed 7/14/10										
1931	Removal Action Report (RAR)	119 days	Wed 3/3/10	Mon 8/16/10										
1934	Draft RAR	15 days	Wed 5/5/10	Tue 5/25/10				5/5/10 5/25/10						
1935	Regulatory Agency Review	22 days	Wed 5/26/10	Thu 6/24/10				5/26/10 6/24/10						
1936	Draft Final RAR	15 days	Fri 6/25/10	Thu 7/15/10				6/25/10 7/15/10						
1937	Regulatory Agency Concur/Dispute	22 days	Fri 7/16/10	Mon 8/16/10				7/16/10 8/16/10						
1938	Final RAR	0 days	Mon 8/16/10	Mon 8/16/10				◆ 8/16/10						
1939	Revised Draft Final FS	74 days	Thu 2/11/10	Tue 5/25/10										
1942	Issue Revised DF Soil FS	15 days	Wed 5/5/10	Tue 5/25/10				5/5/10 5/25/10						
1943	Regulatory Agency Concur or Dispute	22 days	Wed 5/26/10	Thu 6/24/10				5/26/10 6/24/10						
1944	Final FS	0 days	Thu 6/24/10	Thu 6/24/10				◆ 6/24/10						
1945	Proposed Plan IRP Site 1 Soil Remedy	183 days	Wed 6/2/10	Fri 2/11/11										
1955	Record of Decision IRP Site 1 Soil Remedy	189 days	Wed 1/12/11	Mon 10/3/11										
1995	IRP Site 1 GW Remedy	2628 days	Mon 7/23/07	Wed 8/16/17	—————									
1996	Pilot Study	770 days	Mon 7/23/07	Fri 7/2/10	—————									
1997	Pilot Study Work Plan	464 days	Mon 7/23/07	Thu 4/30/09	—————									
2003	Pilot Study Implementation	156 days	Mon 8/24/09	Mon 3/29/10										
2012	Pilot Study Technical Memorandum	112 days	Thu 1/28/10	Fri 7/2/10										

ID	Task Name	Duration	Start	Finish	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
					2015	Draft Tech Memo	15 days	Mon 4/12/10	Fri 4/30/10				4/12/10 4/30/10	
2016	Regulatory Review	22 days	Mon 5/3/10	Tue 6/1/10				5/3/10 6/1/10						
2017	Final Tech Memo	22 days	Thu 6/3/10	Fri 7/2/10				6/3/10 7/2/10						
2018	Groundwater FS Report	97 days	Mon 3/22/10	Tue 8/3/10										
2019	Site 1 and Site 2	97 days	Mon 3/22/10	Tue 8/3/10										
2022	Draft Final FS (Appendix A : 12/22/09)	22 days	Thu 6/3/10	Fri 7/2/10				6/3/10 7/2/10						
2023	Regulatory Agency Concur or Dispute	22 days	Mon 7/5/10	Tue 8/3/10				7/5/10 8/3/10						
2024	Final FS	0 days	Tue 8/3/10	Tue 8/3/10				◆ 8/3/10						
2025	Proposed Plan Site 1 and 2 Groundwater	192 days	Mon 7/5/10	Tue 3/29/11										
2028	Draft PP	21 days	Mon 9/6/10	Mon 10/4/10				9/6/10 10/4/10						
2029	Regulatory Agency Review (Appendix A : 3/24/10)	44 days	Tue 10/5/10	Fri 12/3/10				10/5/10 12/3/10						
2030	Draft Final PP	22 days	Mon 12/6/10	Tue 1/4/11				12/6/10 1/4/11						
2031	Regulatory Agency Concur/Dispute	22 days	Wed 1/5/11	Thu 2/3/11				1/5/11 2/3/11						
2032	Final PP	0 days	Thu 2/17/11	Thu 2/17/11				◆ 2/17/11						
2033	Public Comment	23 days	Fri 2/25/11	Tue 3/29/11				2/25/11 3/29/11						
2034	Public Meeting	0 days	Thu 3/10/11	Thu 3/10/11				◆ 3/10/11						
2035	Record of Decision Site 1 and 2 Groundwater	185 days	Fri 2/18/11	Thu 11/3/11										
2038	Draft ROD	22 days	Tue 5/17/11	Wed 6/15/11				5/17/11 6/15/11						
2039	Responsiveness Summary	0 days	Wed 6/15/11	Wed 6/15/11				◆ 6/15/11						

ID	Task Name	Duration	Start	Finish	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
2040	Regulatory Agency Review (Appendix A : 12/3/10)	44 days	Thu 6/16/11	Tue 8/16/11				6/16/11	8/16/11					
2041	Draft Final ROD	35 days	Wed 8/17/11	Tue 10/4/11				8/17/11	10/4/11					
2042	Regulatory Agency Concur/Dispute	22 days	Wed 10/5/11	Thu 11/3/11				10/5/11	11/3/11					
2043	Final ROD	0 days	Thu 11/3/11	Thu 11/3/11					◆ 11/3/11					