

DOCKET

08-AFC-3

DATE

APR 08 2010

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April 8, 2010

Dockets Unit California Energy Commission 1516 Ninth Street, MS 4 Sacramento, CA 95814

RE: Marsh Landing Generating Station
Application for Certification 08-AFC-03

On behalf of Mirant Marsh Landing, LLC, the applicant for the Marsh Landing Generating Station (MLGS), we are pleased to submit the *Addendum to Facility Investigation and Risk Assessment Work Plan* prepared by AMEC Geomatrix, Inc. on behalf of PG&E. This work plan was submitted to DTSC by PG&E to address investigations being conducted by PG&E to bring the MLGS site to regulatory closure through DTSC.

This document is submitted to the Dockets Unit and to the Proof of Service list electronically, and one print copy will be sent to the Docket Unit.

Please include this document in the AFC record.

URS Corporation

Ine C. Camel

Anne Connell Project Manager

Attachment

CC: Mike Monasmith Alvin Greenberg



David Harnish Manager Environmental Remediation 3401 Crow Canyon Road San Ramon, CA 94583

925) 415-6357 dehn@pge.com

April 7, 2010

Mr. Tony Natera
Hazardous Substances Engineer
Northern California Coastal Cleanup Operations Branch
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, California 94710

Subject: Addendum to Facility Investigation and Risk Assessment Work Plan

Marsh Landing Generating Station Mirant Contra Costa Power Plant Contra Costa County, California

Dear Mr. Natera:

PG&E is pleased to provide two copies of the enclosed *Addendum to the Facility Investigation* and *Risk Assessment Work Plan* for the Marsh Landing Generating Station (MLGS) at Mirant's Contra Costa Power Plant (CCPP). The Addendum was prepared by AMEC Geomatrix, Inc. on our behalf. The enclosed *Addendum* addresses soil sampling from beneath the aboveground storage tanks at the MLGS site once Mirant has removed the tanks.

Please note that as we completed this Addendum for submittal this afternoon, we became aware that DTSC has reconsidered its recommended use of TPH fractionation data in risk assessments as described in the June 16, 2009 Interim Guidance, Evaluating Human Health Risks from Total Petroleum Hydrocarbons. In order to avoid delaying DTSC's review of our Facility Investigation Work Plan, we are submitting the enclosed Addendum even though it currently includes the TPH fractionation analyses that we understand is no longer necessary. We look forward to discussing the appropriate approach to use for TPH risk assessment along with DTSC's other comments, and will make the appropriate revisions to the sample analysis and risk assessment approach in preparing our response to comments/revised work plan.

If you have any questions, please contact our consulting project manager Ken Simas of WAU and Associates at (925) 997-6093.

Sincerely,

David Harnish

Manager, Environmental Remediation

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cc: Jon Sacks, Mirant Delta, LLC Barbara Benson, PG&E

Ken Simas, P.G, WAU & Company

Jennifer Patterson, P.E., AMEC Geomatrix, Inc.

Enclosure: Addendum to Facility Investigation and Risk Assessment Work Plan (two copies)



April 7, 2010

Project 15317.000

Mr. David Harnish Pacific Gas & Electric Company Environmental Services Department 3401 Crow Canyon Road San Ramon, CA 94583

Subject: Addendum to Facility Investigation and Risk Assessment Work Plan

Marsh Landing Generating Station Mirant Contra Costa Power Plant Contra Costa County, California

Dear Mr. Harnish:

On behalf of the Pacific Gas and Electric Company (PG&E), AMEC Geomatrix (AMEC), has prepared this addendum to the *Facility Investigation and Risk Assessment Work Plan* which was submitted to the California Department of Toxic Substances Control (DTSC) on March 15, 2010 (Work Plan). This addendum proposes to conduct soil sampling beneath the aboveground storage tanks (ASTs) at the Marsh Landing Generating Station (the site; MLGS; Figure 1). The MLGS site is located within the Contra Costa Power Plant (CCPP) property at 3201 Wilbur Avenue, Contra Costa County, California (Figure 2).

The entire CCPP property, including the MLGS site, is currently owned by Mirant Delta, LLC (Mirant Delta). Mirant Marsh Landing, LLC (Mirant Marsh Landing), an affiliate of Mirant Delta, has submitted an Application for Certification to the California Energy Commission (CEC) to construct and operate the MLGS, a new natural gas-fired power plant. Mirant Delta intends to subdivide the MLGS site as a separate parcel, which will be transferred to Mirant Marsh Landing for the new power generating station. PG&E is conducting this work because, as the former property owner, it retained certain defined responsibility to remediate, as necessary, hazardous substance releases that were present at the time of its sale of the CCPP in 1999.

Mirant Delta is removing product from and demolishing five ASTs, along with the associated piping and support infrastructure, from the tank farm area of the MLGS property (Figure 2). The AST removal activities will likely be completed before the Work Plan is implemented. Therefore, this addendum has been prepared to include sampling of soil in the footprint area of former ASTs as part of the Work Plan.

BACKGROUND INFORMATION

The site is located within the CCPP property located at 3201 Wilbur Avenue within unincorporated Contra Costa County, near the City of Antioch and on the southern side of the San Joaquin River. The CCPP property was undeveloped prior to 1952. PG&E constructed the Contra Costa Power Plant (CCPP) in 1952 and 1953. The CCPP is situated on approximately 114 acres. The MLGS property consists of approximately 27 acres of the CCPP. The outline of

AMEC Geomatrix, Inc. 2101 Webster Street, 12th Floor Oakland, California USA 94612-3066 Tel (510) 663-4100 Fax (510) 663-4141 www.amecgeomatrixinc.com





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the MLGS boundary within the larger CCPP property is shown on Figure 2. The proposed MLGS is generally within the footprint of the area currently occupied by the five 120,000-barrel bulk ASTs and an adjacent construction yard immediately east of the ASTs.

The five ASTs at the MLGS (Tanks 1 through 5) were installed between 1951 and 1953 and each had a capacity of 5,040,000 gallons. These tanks, along with three larger tanks south of the MLGS property (Tanks 6 through 8), contained Number 6 fuel oil, which was used to fuel the power plant from 1952 until approximately 1998. Since that time, the power plant has used natural gas for power generation. Only residual quantities of Number 6 fuel oil remain in the ASTs. The structural integrity of the tanks is unknown. The tank foundations consist of compacted crushed rock and sand (based on construction drawings dated March 21, 1949). The areas surrounding the ASTs are unpaved.

Mirant Delta is currently removing the residual product remaining in the ASTs and removing the five AST structures. This work is scheduled to be completed in May 2010. AMEC proposes that following removal of the ASTs, sampling of the soil in the footprint of the former ASTs be conducted in conjunction with the activities proposed in the Work Plan.

OBJECTIVE

The objective of the investigation proposed in this addendum is to assess the possible presence of petroleum hydrocarbons and related constituents in the soil beneath Tanks 1 through 5. This data will be used in the health risk assessment (HRA) described in the Work Plan.

SCOPE OF WORK

To accomplish the objective outlined above, AMEC proposes to collect soil samples at a minimum of four locations per tank footprint (borings SB-60 through SB-79; Figure 3). In general, the tank footprint will be divided into thirds and a boring will be advanced in the middle of each section. A boring will be advanced in the center of the tank footprint, as well. However, if stained soil is observed, those locations will be targeted for sampling, and additional borings may be advanced based on field observations. Pre-field activities and sampling methodology will be conducted as described in the Work Plan. Soil borings will be advanced using a hand auger to a depth of 5 feet below ground surface (bgs) and soil samples will be collected from each boring at depths of 1, 3, and 5 feet below the aggregate base tank foundation. The sample collected from 5 feet bgs will be placed on hold pending the analytical results of the shallower samples. A revised sampling and analysis plan that includes the additional proposed samples is presented in Table 1.

Samples will be analyzed by Creek Environmental Laboratories, Inc., of San Luis Obispo, California. Soil samples will be analyzed for the constituents indicated on Table 1 using the following methods:

 Total petroleum hydrocarbons (TPH) quantified as diesel (TPHd) and motor oil (TPHmo) using U.S. Environmental Protection Agency (EPA) Method 8015M with silica gel preparation prior to analysis, and



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 Polynuclear aromatic hydrocarbons (PAHs) using EPA Method 8270C in selective ion monitoring (SIM) mode.

If TPHd and/or TPHmo is detected in a sample, the following analyses will also be conducted:

- TPH Fractionation based on the DTSC's Interim Guidance on Evaluating Human Health Risks from TPH;¹
- Naphthalene, 1-methylnaphthalene, and 2-methylnaphtalene using EPA Method 8270C; and
- Hexane using EPA Method 8260.

Investigation-derived waste will be managed as described in the Work Plan and field activities and data evaluation will be conducted in accordance in the Quality Assurance Project Plan as presented in Section 6.0 of the Work Plan.

DATA EVALUATION AND REPORTING

Analytical data from soil samples collected beneath the ASTs will be incorporated in the HRA. The work proposed herein will be included in the report described in the Work Plan.

SCHEDULE

The work described herein will be conducted in conjunction with implementation of the Work Plan. We anticipate that all the field activities will begin within 2 weeks of receiving DTSC comments and/or approval of this work plan, depending on contractor availability, and will require approximately 7 days to complete. We currently anticipate field work to be conducted in May 2010. Based on this planned schedule, we expect to submit the draft investigation report along with the HHRA to DTSC in July 2010.

¹ DTSC, 2009a, Interim Guidance, Evaluating Human Health Risks from Total Petroleum Hydrocarbons (TPH), Human and Ecological Risk Division, June 16.



David Harnish Pacific Gas & Electric Company April 7, 2010 Page 4

Please contact either of the undersigned if you have any questions.

Sincerely yours, AMEC Geomatrix, Inc.

Rollet A. Chry

Robert H. Cheung Senior Toxicologist Jennifer L. Patterson, Senior Engineer

RHC/JLP/jh

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cc: Ken Simas, PG, WAU & Company

Attachments: Table 1

Figures 1-3



SAMPLING AND ANALYSIS PLAN - REVISED¹

Sampling Location ²	,	Media	Sample Depths to be Analyzed (ft bgs)	TPHd with Silica Gel Cleanup	TPHmo with Silica Gel Cleanup	TPH Fractionation	Naphthalene, 1-methylnaphthalene, 2-methylnaphthalene	Hexane	VOCs	Lead	PCBs	Title 22 Metals	PAHs
Tank Farr													
SB-16	Assess TPH fractionation	Soil	0.5	Х	Х	*	*	*					
			1.5	Х	Х	*	*	*					
			2.5	(X)	(X)	*	*	*					
SB-17	Assess the presence of lead and	Soil	0.5							Х	Х		
	PCBs adjacent to the ASTs		1.5							Х	Х		
SB-18	Assess the presence of lead and	Soil	0.5							Х	Х		
	PCBs adjacent to the ASTs		1.5							Х	Х		
SB-19	Assess TPH fractionation	Soil	0.5	Х	Х	*	*	*					
			1.5	Х	Х	*	*	*					
			2.5	(X)	(X)	*	*	*					
SB-20	Assess the presence of lead and	Soil	0.5	` '	` '					Х	Х		
	PCBs adjacent to the ASTs		1.5							Х	Х		
SB-21	Assess the presence of lead and	Soil	0.5							Х	Х		
	PCBs adjacent to the ASTs		1.5							Х	Х		
SB-22	Assess TPH fractionation	Soil	0.5	Х	Х	*	*	*					
			1.5	Х	Х	*	*	*					ŀ
SB-23 ³	Assess the presence of lead and	Soil	0.5							Х	Х		
02 20	PCBs adjacent to the ASTs		1.5							Х	Х		ŀ
	Assess TPH fractionation	GW	Water Table ⁴	Х	Х	*	*	*					
SB-24	Assess the presence of lead and	Soil	0.5							Х	Х		
	PCBs adjacent to the ASTs		1.5							Х	Х		
SB-25	Assess TPH fractionation	Soil	0.5	Х	Х	*	*	*					
			1.5	Х	Х	*	*	*					
			2.5	(X)	(X)	*	*	*					
SB-26	Assess the presence of lead and	Soil	0.5	` /	` '					Х	Х		
	PCBs adjacent to the ASTs		1.5							Х	X		
	Assess TPH fractionation	GW	Water Table 4	Х	Х	*	*	*					
SB-27	Assess the presence of lead and	Soil	0.5							Х	Х		
00 2.	PCBs adjacent to the ASTs	0011	1.5							X	X		
SB-28	Assess TPH fractionation	Soil	0.5	Х	Х	*	*	*					
02 20	, tooos II	0011	1.5	X	X	*	*	*					
			2.5	(X)	(X)	*	*	*					
SB-29	Assess TPH fractionation	Soil	0.5	X	X	*	*	*					
OD-23	7.00000 II I	COII	1.5	X	x	*	*	*					



SAMPLING AND ANALYSIS PLAN - REVISED¹

			Sample Depths		TPHmo with		Naphthalene,						
Sampling			to be Analyzed	Silica Gel	Silica Gel	TPH	1-methylnaphthalene,					Title 22	
Location ²	Objective	Media	(ft bgs)	Cleanup	Cleanup	Fractionation	2-methylnaphthalene	Hexane	VOCs	Lead	PCBs	Metals	PAHs
SB-30	Assess the presence of lead and	Soil	0.5							Х	Х		
	PCBs adjacent to the ASTs		1.5							Х	Х	<u> </u>	
SB-31	Assess TPH fractionation	Soil	0.5	X	Χ	*	*	*				<u> </u>	
			1.5	X	Χ	*	*	*				<u> </u>	
			2.5	(X)	(X)	*	*	*					
	Assess the presence of lead and	Soil	0.5							Х	Х	<u> </u>	
	PCBs adjacent to the ASTs		1.5							Х	Х	<u> </u>	
	Assess groundwater conditions at upgradient boundary	GW	Water Table ⁴	Х	Х	*	*	*	Х			Х	
	Assess groundwater conditions at upgradient boundary	GW	Water Table ⁴	Х	х	*	*	*	Х			Х	
SB-35	Assess the presence of PAHs	Soil	1.0										Х
			3.0										Х
			4.5										X
			6.0										X
			8.0										(X)
			10.0										(X)
SB-36	Assess the presence of PAHs	Soil	1.0										X
	'		3.0									1	Х
			4.5										Х
			6.0										Х
			8.0										(X)
			10.0										(X)
SB-60	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*				1	X
			3.0	Х	Х	*	*	*				l	Х
			5.0	(X)	(X)	*	*	*				l	(X)
SB-61	Characterize soil benath ASTs	Soil	1.0	X	X	*	*	*				1	X
			3.0	X	X	*	*	*				i	X
			5.0	(X)	(X)	*	*	*					(X)
SB-62	Characterize soil benath ASTs	Soil	1.0	X	X	*	*	*					X
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)



SAMPLING AND ANALYSIS PLAN - REVISED¹

Sampling Location ²	Objective	Media	Sample Depths to be Analyzed (ft bgs)	TPHd with Silica Gel Cleanup	TPHmo with Silica Gel Cleanup	TPH Fractionation	Naphthalene, 1-methylnaphthalene, 2-methylnaphthalene	Hexane	VOCs	Lead	PCBs	Title 22 Metals	PAHs
SB-63	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Х
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)
SB-64	Characterize soil benath ASTs	Soil	1.0	X	X	*	*	*					X
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)
SB-65	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Χ
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)
SB-66	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Х
			3.0	X	Х	*	*	*					Χ
			5.0	(X)	(X)	*	*	*					(X)
SB-67	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Х
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)
SB-68	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Х
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)
SB-69	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Χ
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)
SB-70	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Χ
			3.0	Х	Х	*	*	*					Χ
			5.0	(X)	(X)	*	*	*					(X)
SB-71	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					X
			3.0	Х	Х	*	*	*					X
			5.0	(X)	(X)	*	*	*					(X)
SB-72	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					X
			3.0	Х	Х	*	*	*					X
			5.0	(X)	(X)	*	*	*					(X)
SB-73	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					X
			3.0	Х	Х	*	*	*					X
			5.0	(X)	(X)	*	*	*					(X)
SB-74	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Х
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)



SAMPLING AND ANALYSIS PLAN - REVISED¹

			Sample Depths	TPHd with	TPHmo with		Naphthalene,						
Sampling			to be Analyzed	Silica Gel	Silica Gel	ТРН	1-methylnaphthalene,					Title 22	
Location ²	Objective	Media	(ft bgs)	Cleanup	Cleanup	Fractionation	2-methylnaphthalene	Hexane	VOCs	Lead	PCBs	Metals	PAHs
SB-75	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Х
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)
SB-76	Characterize soil benath ASTs	Soil	1.0	X	Х	*	*	*					X
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)
SB-77	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Х
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)
SB-78	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Х
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)
SB-79	Characterize soil benath ASTs	Soil	1.0	Х	Х	*	*	*					Х
			3.0	Х	Х	*	*	*					Х
			5.0	(X)	(X)	*	*	*					(X)
Construct	ion Yard Area												
SB-37	Assess TPH fractionation	Soil	0.5	Х	Х	*	*	*					
			1.5	Х	Х	*	*	*					
SB-38	Assess TPH fractionation	Soil	0.5	Х	Х	*	*	*					
			1.5	Х	Х	*	*	*					
SB-39	Assess TPH fractionation	Soil	0.5	Х	Х	*	*	*					
			1.5	Х	Х	*	*	*					
	Assess TPH fractionation	GW	Water Table 4	Х	Х	*	*	*					
SB-40	Assess TPH fractionation	Soil	0.5	Х	Х	*	*	*					
			1.5	Х	Х	*	*	*					



SAMPLING AND ANALYSIS PLAN - REVISED¹

			Sample Depths	TPHd with	TPHmo with		Naphthalene,						
Sampling			to be Analyzed		Silica Gel	TPH	1-methylnaphthalene,					Title 22	
Location ²	Objective	Media	(ft bgs)	Cleanup	Cleanup	Fractionation	2-methylnaphthalene	Hexane	VOCs	Lead	PCBs	Metals	PAHs
	Assess TPH fractionation	Soil	0.5	Х .	х .	*	*	*					
			1.5	Х	Х	*	*	*					
	Assess TPH fractionation	GW	Water Table 4	Х	Х	*	*	*					
SB-42	Assess TPH fractionation	Soil	0.5	Х	Х	*	*	*					
			1.5	X	X	*	*	*					
SB-43	Assess TPH fractionation; delineate PAHs in southeast area	Soil	0.5	Х	Х	*	*	*					Х
			1.5	Х	Х	*	*	*					Х
	Delineate PAHs in southeast		3,0										X
	area		4.5										Χ
			6.0										(X)
			8.0										(X)
			10.0										(X)
	Assess groundwater conditions at upgradient boundary	GW	Water Table ⁴	Х	Х	*	*	*	Х			Х	
SB-44	Delineate PAHs in southeast	Soil	0.5										Χ
	area		3.0										Χ
			4.5										X
			6.0										X
			8.0										(X)
			10.0										(X)
	Delineate PAHs in southeast	Soil	0.5										Х
	area		3.0										Х
			4.5										Х
			6.0										X
			8.0										(X)
			10.0										(X)
	Delineate PAHs in southeast	Soil	0.5										X
	area		3.0										X
			4.5										X
			6.0										X
			8.0										(X)
			10.0					<u> </u>	L	<u> </u>			(X)



SAMPLING AND ANALYSIS PLAN - REVISED¹

Sampling Location ²	Objective	Media	Sample Depths to be Analyzed (ft bgs)	TPHd with Silica Gel Cleanup	TPHmo with Silica Gel Cleanup	TPH Fractionation	Naphthalene, 1-methylnaphthalene, 2-methylnaphthalene	Hexane	VOCs	Lead	PCBs	Title 22 Metals	
SB-47	Delineate PAHs in southeast	Soil	0.5		·		· ·						Х
	area		3.0										Х
			4.5										Х
			6.0										Х
			8.0										(X)
			10.0										(X)
SB-48	Delineate PAHs in southeast	Soil	0.5										Х
	area		3.0										X
			4.5										X
			6.0										X
			8.0										(X)
			10.0										(X)
SB-49	Delineate PAHs in southeast	Soil	0.5										Х
	area		3.0										X
			4.5										X
			6.0										X
			8.0										(X)
			10.0										(X)
SB-50	Delineate PAHs in southeast	Soil	0.5										Х
	area		3.0										X
			4.5										Х
			6.0										X
			8.0										(X)
			10.0										(X)
SB-51	Delineate PAHs in southeast	Soil	0.5										X
	area		3.0										Х
			4.5										Х
			6.0										Х
			8.0										(X)
			10.0										(X)
SB-52	Delineate PAHs in southeast	Soil	0.5										X
	area		3.0										X
			4.5										X
			6.0									<u> </u>	Х
			8.0										(X)
			10.0					1					(X)



SAMPLING AND ANALYSIS PLAN - REVISED¹

Sampling Location ²	Objective	Media	Sample Depths to be Analyzed (ft bgs)	TPHd with Silica Gel Cleanup	TPHmo with Silica Gel Cleanup	TPH Fractionation	Naphthalene, 1-methylnaphthalene, 2-methylnaphthalene	Hexane	VOCs	l ead	PCBs	Title 22	
SB-53	Delineate PAHs in southeast	Soil	0.5	Giodinap	Giodinap	Tractionation	2	Похано			. 020	motaro	X
02 00	area	0011	3.0										X
	a. o.a		4.5										X
			6.0										X
			8.0										(X)
			10.0										(X)
SB-54	Delineate PAHs in southeast	Soil	0.5										X
	area		3.0										Х
			4.5										Х
			6.0										Х
			8.0										(X)
			10.0										(X)
SB-55	Delineate PAHs in southeast	Soil	0.5										(X)
	area		3.0										(X)
			4.5										(X)
			6.0										(X)
			8.0										(X)
			10.0										(X)
SB-56	Delineate PAHs in southeast	Soil	0.5										(X)
	area		3.0										(X)
			4.5										(X)
			6.0										(X)
			8.0										(X)
			10.0										(X)
SB-57	Delineate PAHs in southeast	Soil	0.5										(X)
	area		3.0										(X)
			4.5										(X)
			6.0										(X)
			8.0										(X)
OD 50	Delinente DALle in conthe cot	0-:1	10.0										(X)
SB-58	Delineate PAHs in southeast	Soil	0.5					1				-	(X)
	area		3.0 4.5					1					(X)
								1					(X)
			6.0					1					(X)
			8.0					1					(X)
	ĺ	1	10.0			1					I		(X)



SAMPLING AND ANALYSIS PLAN - REVISED¹

Marsh Landing Generating Station Mirant Contra Costa Power Plant Contra Costa County, California

Sampling Location ²	Objective	Media	Sample Depths to be Analyzed (ft bgs)		TPH Fractionation	Naphthalene, 1-methylnaphthalene, 2-methylnaphthalene	Hexane	VOCs	Lead	PCBs	Title 22 Metals	
SB-59	Delineate PAHs in southeast	Soil	0.5									(X)
	area		3.0									(X)
			4.5									(X)
			6.0									(X)
			8.0									(X)
			10.0									(X)

Analysis

Samples to be analyzed for: TPHd and TPHmo using EPA Method 8015M with silica gel preparation; TPH Fractionation based on the DTSC Interim Guidance on Evaluating Human Health Risks from TPH; naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene using EPA Method 8270C; hexane and VOCs using EPA Method 8260B; lead using EPA Method 6010B; PCBs using EPA Method 8082; Title 22 metals using EPA Methods 200.8/7470; and PAHs using EPA Method 8270C with selective ion monitoring.

Notes

- 1. Table 1 is revised to include additional sampling in the Tank Farm area (i.e., sampling locations SB-60 through SB-79).
- 2. Sample locations are shown on Figure 18.
- 3. A blind duplicate groundwater sample will be collected at the SB-23 location.
- 4. Sampling interval will be from water table (anticipated to be at approximately 10 to 15 feet bgs) to 5 feet below.

Abbreviations

- * = indicates sample will be analyzed for indicated constituents only if TPHd and/or TPHmo are detected in the sample.
- () = indicates that sample will be held and analyzed based on results of shallower or nearby samples.

DTSC = Department of Toxic Substances Control

EPA = U. S. Environmental Protection Agency

ft bgs = feet below ground surface

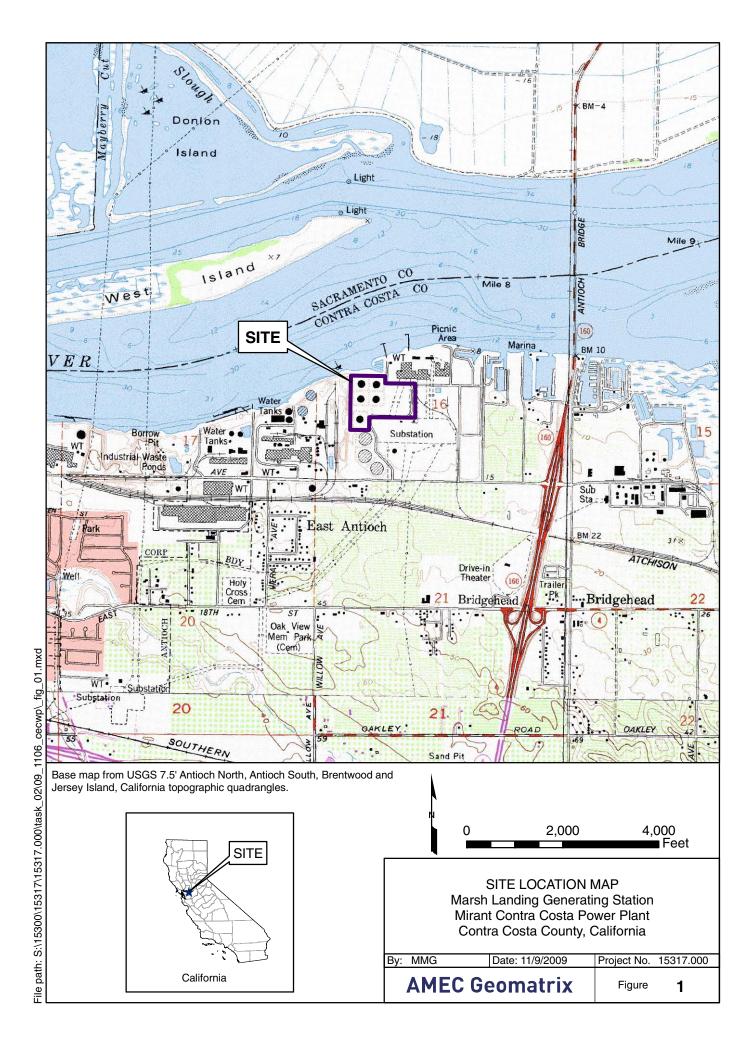
PAHs = polynuclear aromatic hydrocarbons

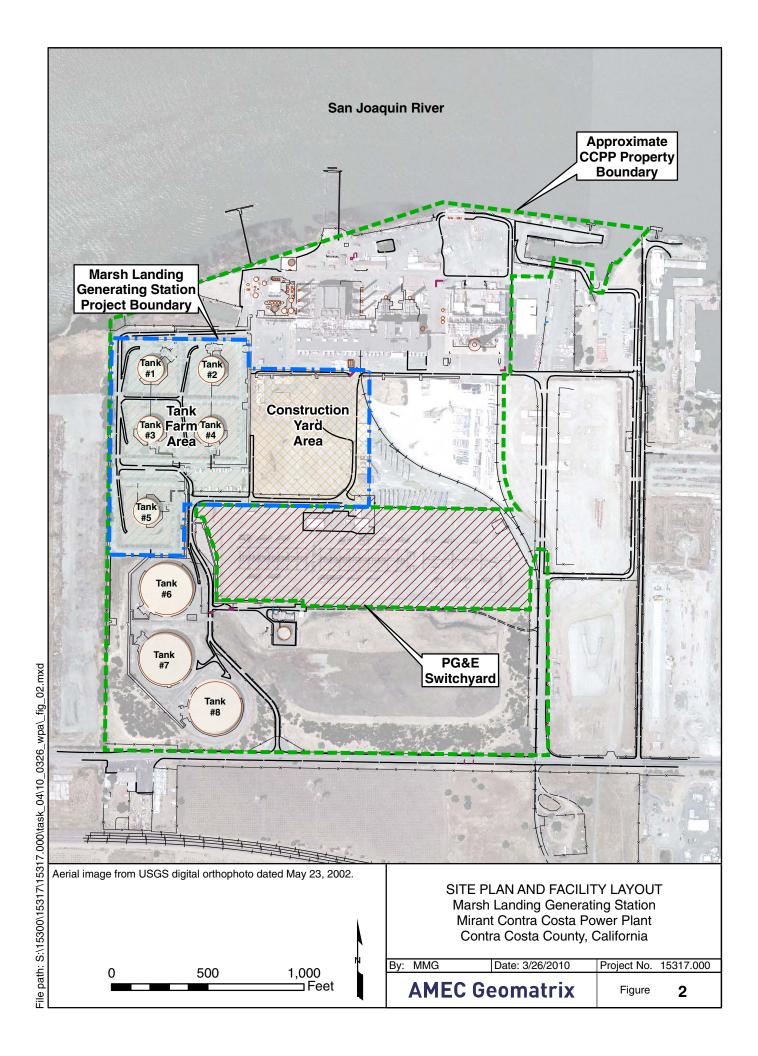
PCBs = polychlorinated biphenyls

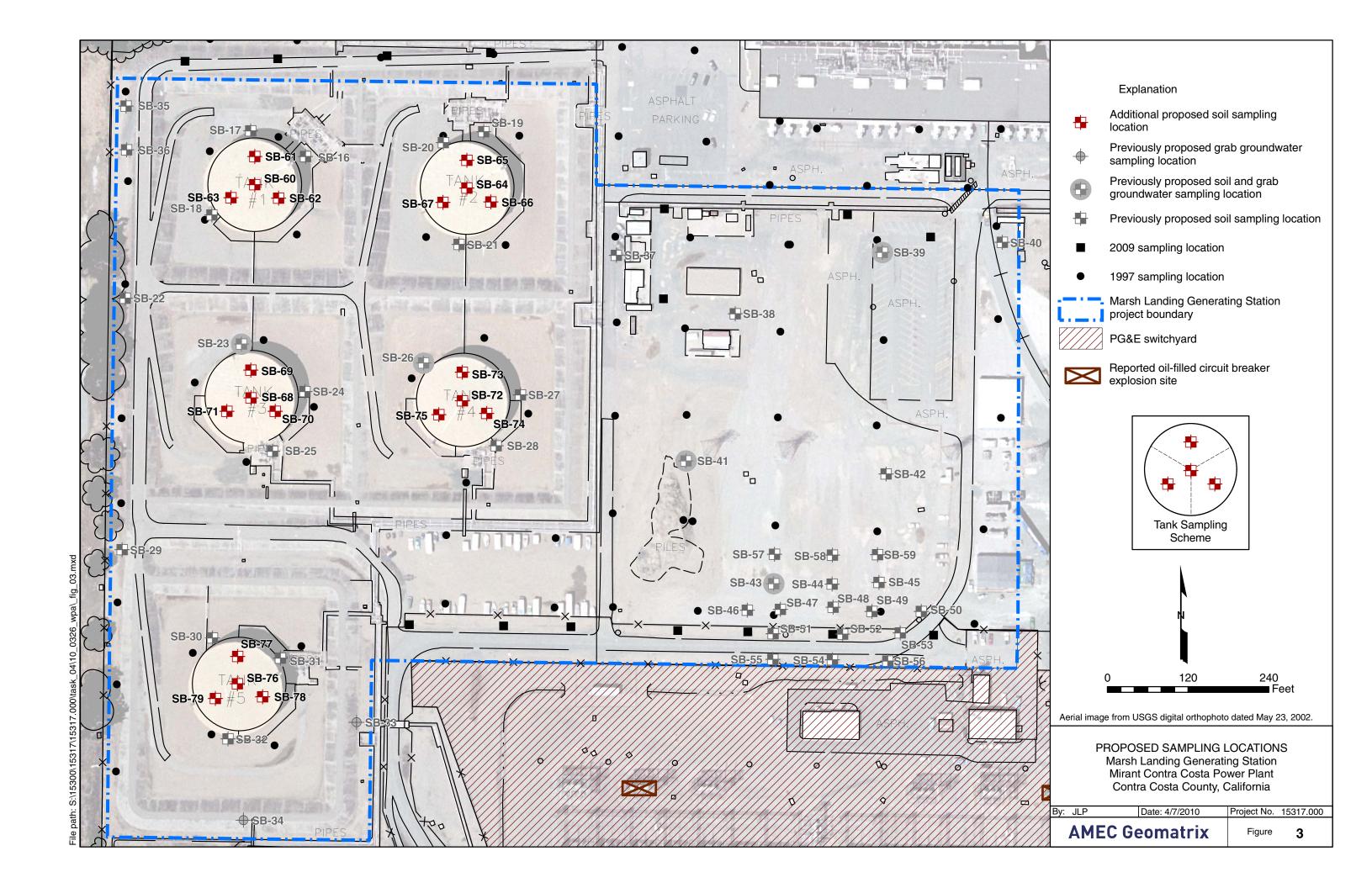
TPHd = total petroleum hydrocarbons quantified as diesel

TPHmo = total petroleum hydrocarbons quantified as motor oil

VOCs = volatile organic compounds









BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 - WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION FOR THE MARSH LANDING GENERATING STATION

DOCKET NO. 08-AFC-3

PROOF OF SERVICE (REVISED 2/17/2010)

APPLICANT

Chuck Hicklin, Project Manager Mirant Corporation P.O. Box 192 Pittsburg, CA 94565 *E-mail preferred* chuck.hicklin@mirant.com

Jonathan Sacks, Project Director Steven Nickerson Mirant Corporation 1155 Perimeter Center West Atlanta, GA, 30338 E-mail preferred jon.sacks@mirant.com steve.nickerson@mirant.com

CONSULTANTS

Anne Connell
Dale Shileikis
URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105-1917
E-mail preferred
Anne Connell@URSCorp.com

Anne_Connell@URSCorp.com
Dale_shileikis@URSCorp.com

COUNSEL FOR APPLICANT

Lisa Cottle
Takako Morita
Winston & Strawn LLP
101 California Street
San Francisco, CA 94111-5802
E-mail preferred
lcottle@winston.com
tmorita@winston.com

INTERESTED AGENCIES

California ISO _e-recipient@caiso.com *Jennifer Jennings
Public Adviser
publicadviser@energy.state.ca.us

INTERVENORS

California Unions for Reliable
Energy ("CURE")
Gloria D. Smith & Marc D. Joseph
Adams Broadwell Joseph &
Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, California
94080
gsmith@adamsbroadwell.com
mdjoseph@adamsbroadwell.com

ENERGY COMMISSION

JAMES D. BOYD Vice Chair & Presiding Member jboyd@energy.state.ca.us

KAREN DOUGLAS
Chair & Associate Member
kldougla@energy.state.ca.us

Paul Kramer Hearing Officer pkramer@energy.state.ca.us

Mike Monasmith
Project Manager
mmonasmi@energy.state.ca.us

Dick Ratliff
Staff Counsel
dratliff@energy.state.ca.us

^{*} indicates change

DECLARATION OF SERVICE

I, <u>Catherine Short</u>, declare that on <u>April 8, 2010</u>, I served and filed copies of the attached <u>Addendum to Facility Investigation and Risk Assessment Work Plan</u>. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: **[http://www.energy.ca.gov/sitingcases/marshlanding/index.html]**. The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

For se	ervice to all other parties:
<u>X</u>	sent electronically to all email addresses on the Proof of Service list;
	by personal delivery or by depositing in the United States mail at <u>San Francisco</u> , <u>California</u> with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses NOT marked "email preferred."
AND	
For fili	ng with the Energy Commission:
<u>X</u>	sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (<i>preferred method</i>);
OR	
	depositing in the mail an original and 12 paper copies, as follows:
	CALIFORNIA ENERGY COMMISSION
	Attn: Docket No. 08-AFC-3 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512
	docket@energy.state.ca.us

* indicates change

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I declare under penalty of perjury that the foregoing is true and correct.