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ARCADIS Project No.: RC000699.0092

Subject:

Attachment B

Proposed Revisions to the Groundwater Monitoring Program for Existing Agricultural Treatment Units (ATUs) Presented in the Draft Monitoring and Reporting Program R6V-2014-TENTATIVE for the Pacific Gas and Electric Groundwater Remediation Project: ATUs

Pacific Gas and Electric Company Hinkley Compressor Station, Hinkley, California

Pacific Gas and Electric (PG&E) has reviewed the Monitoring and Reporting Program (MRP) for the existing agricultural treatment units (ATUs) that was proposed in Attachment E of Board Order No. R6V-2014-(TENTATIVE), Waste Discharge Requirements (WDRs) for PG&E Groundwater Remediation Project: ATUs issued on December 13, 2013.

This memorandum provides suggested revisions to the groundwater monitoring well sampling program. As described below, revisions to the MRP are suggested to:

- clarify the objectives of the monitoring program
- modify the well network so that it is better aligned with the monitoring objectives, and provides better lateral and vertical coverage
- modify the frequency of sampling to better align with monitoring objectives

Monitoring Objectives

To guide the specification of sampling locations and frequency, it is suggested that the MRP describe the following two primary types of monitoring wells:

- Domestic Well Protection Wells. The objective for these wells is to monitor the
 potential migration of agricultural by-products (total dissolved solids [TDS], nitrate, and
 potentially uranium and radionuclides if indicated by WTR-MM-5) that may impact
 domestic wells.
- 2. **Characterization Wells**. The objective for these wells is to monitor for changes in by-product concentrations (TDS, nitrate, and potentially uranium and radionuclides if indicated by WTR-MM-5) in groundwater that may be associated with operation of ATUs.

These wells will also be monitored for total dissolved chromium and hexavalent chromium (Cr[VI]).

Proposed Revisions to Monitoring Well Locations

For the characterization monitoring well program, revisions to the proposed groundwater monitoring program presented in the draft MRP (Table E-2) are proposed to provide better lateral and vertical coverage. The proposed revisions are presented in Figure 1 and Table 1. Table 1 includes the original program design as proposed by the Water Board in Table E-2 of the draft MRP is presented in Table 1, as well as the rationale for any modification from this original design. To provide better lateral coverage, modifications are suggested as noted in Table 1. To provide consistent depth coverage across both the upper upper aquifer (UUA) and lower upper aquifer (LUA), modifications were made to use available well pairs, as noted in Table 1. Monitoring of the LUA is recommended to assess for potential downward vertical migration of byproducts that may result from drawdown of the water table.

In addition, designations of monitoring wells for domestic well protection are provided in Table 1. Particle track modeling was used to predict groundwater movement for 3 years of operation of the existing ATUs at rates consistent with the current pumping plan for 2014. Domestic well protection wells were identified in areas where there is potential for groundwater impacted with ATU byproducts to migrate toward domestic wells, as listed in Table 1 and shown on Figure 1.

Proposed Revisions to Sampling Frequency

As analyzed in the Feasibility Study and addenda, the anticipated timeframe for a remedy of combined in situ and agricultural treatment to achieve 3.1 micrograms per liter Cr(VI) is on the order of approximately 40 years (Alternative 4C-2). It is recommended that this timeframe be considered when designating monitoring frequencies such that more frequent sampling is focused on areas where rapid changes in water quality are anticipated or protection of domestic

wells is the objective, and less frequent sampling for longer term changes in groundwater quality over the course of remedy implementation and when protection of domestic wells is not an objective.

Based on this rationale, frequent quarterly sampling is proposed for the monitoring wells that are designated for the domestic well protection sampling, where particle track modeling indicates potential for migration of agricultural byproducts toward domestic wells. Monitoring wells designated for the characterization monitoring program only are located in areas where groundwater flow moves toward the pumping wells and is captured. Concentrations of byproducts in these areas are expected to change slowly, as it takes years for groundwater with higher concentrations of byproducts due to evaporation to recharge to the water table. Given that groundwater at these locations are within the capture zone of the system and that changes in concentrations will be on the scale of many years, less frequent biannual sampling (i.e. sampling every two years) is proposed for these locations. The proposed sampling frequency for the wells in the proposed monitoring network is presented in Table 1.

ATU Groundwater Monitoring within the Overall Monitoring Program

The draft ATU WDRs and MRP provide a compliance monitoring framework for the existing ATUs. Additional groundwater monitoring wells are routinely sampled across the site for other programs, including the in situ treatment programs and general monitoring of the Cr(VI) plume. In addition, sampling programs will evolve over time as remedial systems are added and, ultimately, as the plume is treated and remedial systems are turned off. In order to create greater transparency for compliance, to aid in optimizing the overall sampling effort across programs, and to allow for flexibility in the monitoring program as conditions and remedial system evolve overtime, a master monitoring and report program is proposed that will define objectives for each monitoring program and will be updated periodically, similar to the annual modeling and monitoring requirements that are specified the Mitigation Monitoring and Reporting Program (MMRP) that was attached to the draft WDRs. As part of the comprehensive monitoring program document, a master sampling table that provides a matrix of all site monitoring wells, the various monitoring programs, analytes and sampling frequencies is recommended. This table will aid in tracking compliance as requirements evolve over time and will aid in optimizing the sampling requirements across monitoring programs. An example of such a table is provided in the attached Table 2.

Attachments

Figure 1	Proposed Monitoring Program Revisions for Existing Agricultural Treatment Units
Table 1	Proposed Revisions to Groundwater Monitoring for Existing ATUs
Table 2	DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project

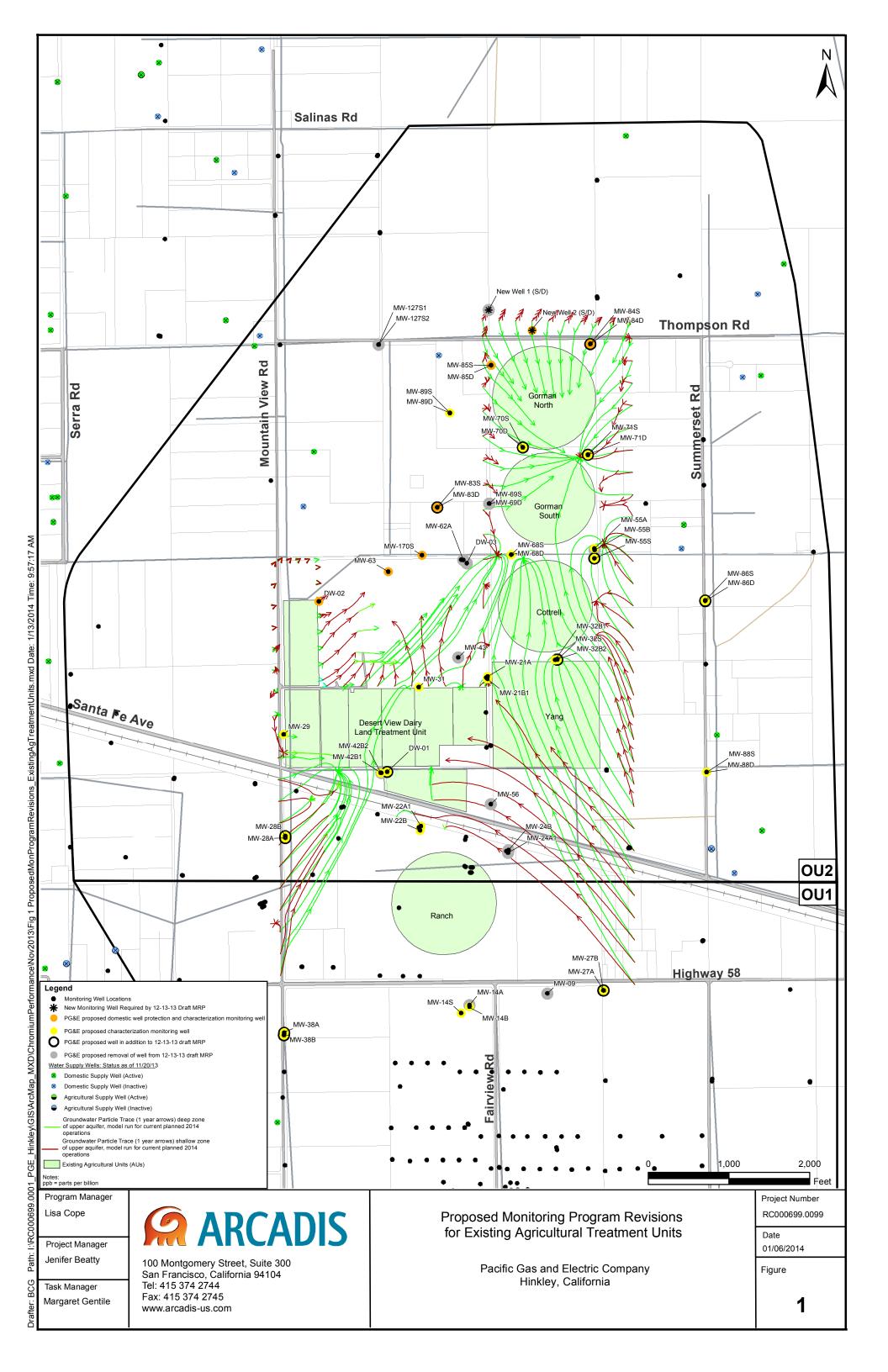


Table 1.

Proposed Revisions to Groundwater Monitoring for Existing ATUs

			Dr	oposed Revi	sion	
			Domestic	oposea Kevi	51011	-
		Draft MRP	Well	Charact-	Sampling	
Monitoring Well ID	Aquifier	Table E-2	Protection	erization	Frequency	Rationale
DW-01	UUA			X	BA	Proposed for UUA monitoring.
DW-02	UUA	Q	X	X	Q	Concur with location and sampling frequency.
DW-03	UUA	Q				Propose to remove. This well has root intrustion issues; MW-170S was constructed as a replacement and is proposed for monitoring.
MW-09	LUA	Q				Propose to remove - use data from MW-14 and MW-27 for upgradient characterization which provide better depth coverage.
MW-127S1	UUA	Q				Propose to remove - particle tracks suggest groundwater not moving in this direction.
MW-127S2	UUA	Q				Propose to remove - particle tracks suggest groundwater not moving in this direction.
MW-14A	UUA	Q				Propose to remove - use data from MW-14S for UUA characterization.
MW-14B	LUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-14S	UUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-170S	UUA	Q	X	X	Q	Concur with location and sampling frequency.
MW-21A	UUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-21B1	LUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-22A1	UUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-22B	LUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-24A1	UUA	Q				Propose to remove - location MW-22A is more suited for downgradient characterization of the UUA based on particle tracks.
MW-24B	LUA	Q				Propose to remove - location MW-22B is more suited for downgradient characterization of the LUA based on particle tracks.
MW-27A	UUA			X	BA	Proposed as alternative to location MW-09.
MW-27B	LUA			X	BA	Proposed as alternative to location MW-09.
MW-38A	UUA			X	BA	Proposed addition to monitor upgradient of ATUs on western side of system.
MW-38B	LUA			X	BA	Proposed addition to monitor upgradient of ATUs on western side of system.
MW-29	UUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-31	LUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-32B1	LUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-32B2	LUA	Q				Propose to replace - use MW-32S for characterization of UUA.
MW-32S	UUA			Y	BA	Proposed as alternative to MW-32B2 for characterization of UUA.
MW-38A	UUA			X	BA	Proposed as alternative to liviv-32B2 for characterization of 50A. Proposed as alternative to location MW-09.
MW-38B	LUA			X	BA	Proposed as alternative to location MW-09.
MW-42B1	LUA	Q				Propose to remove. Adequate LUA characterization with location MW-42B2.
MW-42B2	LUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-43	LUA	Q				Propose to remove - adequate LUA characterization with locations MW-21B1 and MW-31.
MW-55A	LUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-55B	LUA	0				Propose to remove - sufficient characterization of LUA in this area with MW-55A.
MW-55S	UUA	ч		X	BA	Proposed for UUA monitoring.
MW-56	LUA		+			Proposed for GOA monitoring. Propose to remove - not optimal for monitoring downgradient of Ranch based on particle tracks. Use MW-22B for characterization.
MW-62A	LUA	Q Q				Propose to remove - not optimal for monitoring downgradient of Ranch based on particle tracks. Use MW-22B for characterization. Propose to remove - adequate LUA characterization with location MW-68D.
MW-63	UUA	Q	X	X	Q	Concur with location and sampling frequency.
MW-68D	LUA	Q		X		Concur with location and sampling frequency. Concur with location but propose biannual sampling for characterization within capture zone.
MW-68S	UUA	Q		X	BA BA	
MW-69D	LUA	Q				Concur with location but propose biannual sampling for characterization within capture zone. Propose to remove a particle tracks indicate ungradient of Gorman South field. Use data from MW 83D in this area instead.
MW-69S						Propose to remove - particle tracks indicate upgradient of Gorman South field. Use data from MW-83D in this area instead
MW-70D	UUA LUA	Q		 V	 D A	Propose to remove - particle tracks indicate upgradient of Gorman South field. Use data from MW-83S in this area instead
MW-70S	UUA			X	BA	Proposed for LUA monitoring.
MW-71D	LUA	Q		X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
				X	BA	Proposed for LUA monitoring.
MW-71S	UUA	Q	 V	X	BA	Concur with location but propose biannual sampling for characterization within capture zone.
MW-83D	LUA		X	X	Q	Propose to add to supplement MW-83S with LUA location.
MW-83S	UUA	Q	X	X	Q	Concur with location and sampling frequency.
MW-84D	LUA		X	X	Q	Proposed to complement MW-84S with LUA location.
MW-84S	UUA	Q	X	X	Q	Concur with location and sampling frequency.

Table 1. **Proposed Revisions to Groundwater Monitoring for Existing ATUs**

			Pr	oposed Revi	sion	
			Domestic			
		Draft MRP	Well	Charact-	Sampling	
Monitoring Well ID	Aquifier	Table E-2	Protection	erization	Frequency	Rationale
MW-85D	LUA	Q	Х	X	Q	Concur with location and sampling frequency.
MW-85S	UUA	Q	X	X	Q	Proposed to complement MW-84S with LUA location.
MW-86D	LUA			X	BA	Proposed for upgradient LUA monitoring.
MW-86S	UUA			Χ	BA	Proposed for upgradient UUA monitoring.
MW-88D	LUA			X	BA	Proposed for upgradient LUA monitoring.
MW-88S	UUA			Χ	BA	Proposed for upgradient UUA monitoring.
MW-89D	LUA	Q		X	BA	Particle tracks suggest location is upgradient. Propose biannual sampling.
MW-89S	UUA	Q		X	BA	Particle tracks suggest location is upgradient. Propose biannual sampling.
New well 1 D	LUA	Q	X			Propose to remove - adequate coverage with MW-84, MW-85 and New Well 2 based on particle tracks and location of supply wells
New well 1 S	UUA	Q	Х			Propose to remove - adequate coverage with MW-84, MW-85 and New Well 2 based on particle tracks and location of supply wells
New well 2 D	LUA	Q	Х	Х	Q	Concur with location and sampling frequency.
New well 2 S	UUA	Q	X	Χ	Q	Concur with location and sampling frequency.

LUA = Lower upper aquifier
UUA = Upper upper aquifier
Q = Quarterly sampling
BA = biannual sampling
-- = No sampling
LTU = Land treatment unit
MRP- Monitoring and Reporting Program

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring		mance toring			Sumn	nary A	nalyte	e Sam	pling	Frequ	encie	s ^e		
	Analy	ytical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eeded	(Cr6)	ım (CrT)	DS)				(Mn)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
BW-01D	MON	LUA							TBD	TBD	TBD										
BW-01S	MON	UUA							TBD	TBD	TBD										
C-01	AGR	UA						AN	TBD	AN	AN										
C-02	AGR	UUA						AN	TBD	AN	AN										
C-03	AGR	UUA						AN	TBD	AN	AN										
C-04	AGR	UA						AN	TBD	AN	AN										
CA-EX-01	EXT	UUA						AN	TBD	AN	AN										
CA-EX-02	EXT	UUA						AN	TBD	AN	AN										
CA-MW-101	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-101D	MON	LUA					Q		TBD	Q	Q			Ю	Ю	Ø	Q				
CA-MW-102D	MON	LUA					Q		TBD	Q	Q			Ю	Ю	Ø	Q				
CA-MW-102S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-103	MON	UUA					Q		TBD	Q	Q			Q	О	Q	Q				
CA-MW-103D	MON	LUA					Q		TBD	Q	Q			О	О	Q	Q				
CA-MW-104D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-104S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-105	MON	UUA					Q		TBD	Q	Q			О	Ø	Q	Q				
CA-MW-105D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-106D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-106S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-107D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-107S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-108D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-108S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-109D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-109S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-110	MON	UUA							TBD	TBD	TBD										
CA-MW-201	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-202	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-203	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-204D	MON	LUA					А		TBD	Α	Α			Α	Α	Α	Α				

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitorino	ı Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring		mance toring			Sumn	nary A	nalvte	e Sam	nolina	Freau	encie	s ^e		
		tical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	Cr6, C	rT and products eeded	(Cr6)						(Mn)	,				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
CA-MW-204S	MON	UUA					A		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-301	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
CA-MW-302D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-302S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-303D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-303S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-304	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-305	MON	UUA		-			Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-306D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-306S	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-307D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-307S	MON	UUA					A		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-308	MON	UUA					A		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-309	MON	UUA					A		TBD	A	A			A	Α	Α	Α		Α	Α	
CA-MW-310D	MON	LUA					A		TBD	A	A			A	Α	Α	Α		Α	Α	
CA-MW-310S	MON	UUA					A		TBD	A	A			A	Α	Α	Α		A	A	
CA-MW-311	MON	UUA					A		TBD	A	A			A	Α	Α	A		A	A	
CA-MW-312D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
CA-MW-312S	MON	UUA					<u>Q</u>		TBD	TBD	TBD										
CA-IVIVV-3123	MON	UUA					Q		TBD	Q	Q Q			Q	Q	Q	Q		Q	Q	
CA-MW-314	MON	UUA					A A		TBD	A	A A			A	A	A	A		A	A	
CA-IVIVV-314 CA-MW-315D	MON	LUA					A		TBD	A	A			A	A	A	A		A	A	
CA-MW-315S	MON	UUA														_				_	
		UUA					A		TBD	Α	Α			A	A	A	A		A	A	
CA-MW-316	MON						A		TBD	A	Α			A	A	Α	Α		A	A	
CA-MW-317D	MON	LUA					A		TBD	A	A			Α_	A	A	Α		A	Α	
CA-MW-317S	MON	UUA					A		TBD	Α	Α			A	Α	Α	A		Α	Α	
CA-MW-401	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
CA-MW-402D	MON	LUA					A		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-402S	MON	UUA					A		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-403D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-403S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitorino	n Program	ATU WD	R Complia	ince Monitoring	IR7	Z Monitoring		mance toring			Sumn	nary A	ınalyte	e Sam	nplina	Fregu	iencie	s ^e		
		ytical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	Cr6, C	crT and products eeded	(Cr6)			,			(Mn)	,				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
CA-MW-404D	MON	LUA					A		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-404S	MON	UUA					A		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-405D	MON	LUA					A		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-405S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-406	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-407	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-408	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-409D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-409S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-410	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-411D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-411S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
CA-MW-412D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
CA-MW-412S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
CA-MW-501D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-501S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-502	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-503D	MON	LUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-503S	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-504	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-505	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-506D	MON	LUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-506S	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-507	MON	UUA					A		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-508D	MON	LUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-508S	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-509	MON	UUA					A		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-510D	MON	LUA					A		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-510S	MON	UUA					A		TBD	Α	Α			Α	Α	Α	Α				
CA-MW-511	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-601	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	a Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring		mance			Sumr	nary A	nalvte	e Sam	nplina	Freau	encie	s ^e		
		ytical Suite	Cr6, CrT	, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	Cr6, C	oroducts	(Cr6)						(Mn)	•				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (Cl)	Uranium (U)
CA-MW-602	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-MW-603	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
CA-RW-13	EXT	UA						AN	TBD	AN	AN			AN	AN	AN	AN				
CA-RW-16	EXT	UA						AN	TBD	AN	AN			AN	AN	AN	AN				
CA-RW-17	EXT	UA						AN	TBD	AN	AN			AN	AN	AN	AN				
CA-RW-21	EXT	UA						AN	TBD	AN	AN			AN	AN	AN	AN				
CA-RW-22	EXT	UA						AN	TBD	AN	AN			AN	AN	AN	AN				
CA-RW-23	EXT	UA						AN	TBD	AN	AN			AN	AN	AN	AN				
CPVT (Cottrell)	PVT	NA			Q				TBD	Q	Q	Q	Q								Q
DVD-BS-01 (DVD)	PVT	NA			Q				TBD	Q	Q	Q	Q								Q
DW-01	MON	UUA		BA					TBD	BA	BA	BA	BA								
DW-02	MON	UUA	Q	Q					TBD	Q	Q	Q	Q								
DW-03	MON	UUA							TBD	TBD	TBD										
EX-01	EXT	UA						AN	TBD	AN	AN										
EX-02	EXT	UA						AN	TBD	AN	AN										
EX-03	EXT	UA						AN	TBD	AN	AN										
EX-04	EXT	LUA						AN	TBD	AN	AN										
EX-05	EXT	UUA						AN	TBD	AN	AN										
EX-06	MUW	UA							TBD	TBD	TBD										
EX-07	MUW	UA							TBD	TBD	TBD										
EX-08	MUW	UA							TBD	TBD	TBD										
EX-09	EXT	UUA						AN	TBD	AN	AN										
EX-10	MUW	UUA							TBD	TBD	TBD										
EX-13	MUW	UA							TBD	TBD	TBD										
EX-14	MUW	UA							TBD	TBD	TBD										
EX-15	EXT	UA						AN	TBD	AN	AN										
EX-16	EXT	UA						AN	TBD	AN	AN										
EX-17	MUW	UUA							TBD	TBD	TBD										
EX-20	EXT	UA						AN	TBD	AN	AN										
EX-21	EXT	UA							TBD	TBD	TBD										<u> </u>
EX-22	EXT	UA							TBD	TBD	TBD										
L/ 22	LAI	UΛ							יטטו	יטטו	טטו										

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	ince Monitoring	IRZ	Z Monitoring		mance			Sumn	nary A	ınalyte	e Sam	pling	Frequ	encie	s ^e		
	Analy	ytical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ by	oroducts	(Cr6)	ım (CrT)	(SQ				Ju)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (Mn)	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
EX-23	EXT	UA						AN	TBD	AN	AN										
EX-24	EXT	UA						AN	TBD	AN	AN										
EX-25	EXT	UA						AN	TBD	AN	AN										
EX-26	EXT	UA						AN	TBD	AN	AN										
EX-27	EXT	UA						AN	TBD	AN	AN										
EX-28	EXT	UA						AN	TBD	AN	AN										
EX-29	EXT	UA						AN	TBD	AN	AN										
EX-30	EXT	UA						AN	TBD	AN	AN										
EX-31	EXT	UA						AN	TBD	AN	AN										
EX-32	EXT	UA						AN	TBD	AN	AN										
EX-33	EXT	UA						AN	TBD	AN	AN										
EX-34	EXT	UA						AN	TBD	AN	AN										
EX-35	EXT	UA						AN	TBD	AN	AN										
FW-01	WTR	UA						AN	TBD	AN	AN										
FW-02	WTR	UUA						AN	TBD	AN	AN										
G-1R	AGR	UA						AN	TBD	AN	AN										
G-2R	AGR	UA						AN	TBD	AN	AN										
G-5R	AGR	UA						AN	TBD	AN	AN										
GPVTN	PVT	NA			Q				TBD	Q	Q	Q	Q								Q
GPVTS	PVT	NA			Q				TBD	Q	Q	Q	Q								Q
IW-01	AGR	UA						AN	TBD	AN	AN										
IW-02	AGR	UA						AN	TBD	AN	AN										
IW-03	AGR	UA						AN	TBD	AN	AN										
MB-A2	MON	UA							TBD	TBD	TBD										
MW-01	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				
MW-02	MON	LUA							TBD	TBD	TBD										
MW-03	MON	LUA							TBD	TBD	TBD										
MW-03A	MON	UUA							TBD	TBD	TBD										
MW-04	MON	UUA				SA			TBD	SA	SA	SA									
MW-05	MON	UUA				Q/SA			TBD	Q	Q	SA					SA				
MW-06	MON	UUA					A		TBD	A	A			Α	Α	Α	A				
					1		• •					1									

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitorino	n Program	ATU WD	R Complia	ince Monitoring	IR7	Z Monitoring	Perfor Moni	mance toring			Sumn	nary A	ınalyte	e Sam	nplina	Frequ	encie	s ^e		
		tical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	Cr6, C	rT and products eeded	(Cr6)						(Mn)	•				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-07	MON	UUA				SA			TBD	SA	SA	SA					SA				
MW-08	MON	LUA				SA			TBD	SA	SA	SA									
MW-09	MON	LUA							TBD	TBD	TBD										
MW-10	MON	LUA				SA			TBD	SA	SA	SA									
MW-100C	MON	LA							TBD	TBD	TBD										
MW-101D	MON	LUA							TBD	TBD	TBD										
MW-101S	MON	UUA							TBD	TBD	TBD										
MW-102D	MON	LUA							TBD	TBD	TBD										
MW-102S	MON	UUA							TBD	TBD	TBD										
MW-103D	MON	LUA							TBD	TBD	TBD										
MW-103S	MON	UUA							TBD	TBD	TBD										
MW-104D	MON	LUA							TBD	TBD	TBD										
MW-104S1	MON	UUA							TBD	TBD	TBD										
MW-104S2	MON	UUA							TBD	TBD	TBD										
MW-105D	MON	LUA							TBD	TBD	TBD	I							-	ł	
MW-105S	MON	UUA							TBD	TBD	TBD	-							-	ł	
MW-106D	MON	LUA							TBD	TBD	TBD										
MW-106S	MON	UUA							TBD	TBD	TBD										
MW-107D	MON	LUA							TBD	TBD	TBD										
MW-107S	MON	UUA							TBD	TBD	TBD										
MW-108D	MON	LUA							TBD	TBD	TBD										
MW-108S	MON	UUA							TBD	TBD	TBD										
MW-109	MON	UUA							TBD	TBD	TBD										
MW-110D	MON	LUA							TBD	TBD	TBD										
MW-110S	MON	UUA							TBD	TBD	TBD										
MW-111D	MON	LUA							TBD	TBD	TBD										
MW-111S1	MON	UUA							TBD	TBD	TBD										
MW-111S2	MON	UUA							TBD	TBD	TBD										
MW-112D	MON	LUA							TBD	TBD	TBD										
MW-112S	MON	UUA							TBD	TBD	TBD										
MW-113D	MON	LUA							TBD	TBD	TBD										

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

Analytical Suite Cr6, CrT, Nitrate, and TDS ¹ Analytical Suite Cr6, CrT, TOC, Fe, Ind., As, ions for well rehab, if used as needed as ne		e	encies	Frequ	pling l	e Sam	nalyte	nary A	Sumn			mance		Z Monitoring	IRZ	ince Monitoring	R Complia	ATU WD	g Program	Monitorino	
MW-113S1 MON UUA				(20	Mn)				(SQ.	ım (CrT)	(Cr6)	oroducts	IRZ byp	Mn, As, ions for well	Cr6, CrT, TDS, and/or	Cr6, CrT, Nitrate, TDS,	, Nitrate,	Cr6, CrT			
MW-113S2 MON UUA	Chloride (Cl) Uranium (U)	Orthophosphate	Sulfate	Total Organic Carbon (T	Dissolved Manganese (N	Dissolved Iron (Fe)	Dissolved Arsenic (As)	Nitrate (as N)	Total Dissolved Solids (T	Total Dissolved Chromic	Hexavalent Chromium	Chromium Monitoring	Extraction Wells ^d	2010 IRZ NOA and Performance Monitoring Program ^c	2009 SCRIA/NWFI NOA Monitoring Program	ATU Irrigation Water Monitoring ^b	Characterization ^a	Domestic Well Protection ^a	Aquifer		Location ID
MW-114D1 MON LUA										-										_	
MW-114D2 MON LUA																					
MW-114S MON UUA										_											
MW-115D MON LUA										TBD	TBD	TBD								MON	
MW-115S MON UUA										TBD	TBD	TBD							UUA	MON	MW-114S
MW-116D1 MON LUA										TBD	TBD	TBD							LUA	MON	MW-115D
MW-116D2 MON LUA										TBD	TBD	TBD							UUA	MON	MW-115S
MW-116S MON UUA										TBD	TBD	TBD							LUA	MON	MW-116D1
MW-117D MON LUA <										TBD	TBD	TBD							LUA	MON	MW-116D2
MW-117S1 MON UUA										TBD	TBD	TBD							UUA	MON	MW-116S
MW-117S2 MON UUA										TBD	TBD	TBD							LUA	MON	MW-117D
MW-118S MON UUA TBD TBD TBD										TBD	TBD	TBD							UUA	MON	MW-117S1
MW-119D MON LUA TBD TBD TBD										TBD	TBD	TBD							UUA	MON	MW-117S2
MW-119S MON UUA TBD TBD TBD										TBD	TBD	TBD							UUA	MON	MW-118S
MW-11A MON UUA A A TBD A A A A A										TBD	TBD	TBD							LUA	MON	MW-119D
										TBD	TBD	TBD							UUA	MON	MW-119S
MANUATE MONITOR A TENTRAL A A A A A A A A A A A A A A A A A A				Α	Α	Α	Α			Α	Α	TBD		Α					UUA	MON	MW-11A
INVINGE TO A TOUR TOUR TOUR AND THE TOUR TOUR TOUR TOUR TOUR TOUR TOUR TOUR				Α	Α	Α	Α			Α	Α	TBD		Α					LUA	MON	MW-11B
MW-11C MON LA TBD TBD TBD										TBD	TBD	TBD							LA	MON	MW-11C
MW-121D MON LUA TBD TBD TBD										TBD	TBD	TBD							LUA	MON	MW-121D
MW-121S MON UUA TBD TBD TBD											-										
MW-122D MON LUA TBD TBD TBD																					
MW-122S MON UUA TBD TBD TBD										_		TBD							UUA	MON	MW-122S
MW-123S1 MON UUA TBD TBD TBD												TBD							UUA	MON	MW-123S1
MW-123S2 MON UUA TBD TBD TBD										_	1									_	
MW-124D MON LUA TBD TBD TBD											-										
MW-124S1 MON UUA TBD TBD TBD											-									_	
MW-124S2 MON UUA TBD TBD TBD																					
MW-125S1 MON UUA TBD TBD TBD										1	1										
MW-125S2 MON UUA TBD TBD TBD		-						-					-								
MW-126S1 MON UUA TBD TBD TBD										_											

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitorino	n Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring		mance toring			Sumn	nary A	ınalyte	e Sam	pling	Frequ	encie	s ^e		
		tical Suite	Cr6, CrT	, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eeded	(Cr6)	ım (CrT)	(SQ.				(Mn)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (Cl)	Uranium (U)
MW-126S2	MON	UUA							TBD	TBD	TBD										
MW-127S1	MON	UUA							TBD	TBD	TBD										
MW-127S2	MON	UUA							TBD	TBD	TBD										
MW-128S1	MON	UUA							TBD	TBD	TBD										
MW-128S2	MON	UUA							TBD	TBD	TBD										
MW-128S3	MON	UUA							TBD	TBD	TBD										
MW-129S	MON	UUA							TBD	TBD	TBD										
MW-12A	MON	UUA							TBD	TBD	TBD										
MW-12B	MON	LUA							TBD	TBD	TBD										
MW-13	MON	LUA				Q/SA			TBD	Q	Q	SA									
MW-130S1	MON	UUA							TBD	TBD	TBD										
MW-130S2	MON	UUA							TBD	TBD	TBD										
MW-131S1	MON	UUA							TBD	TBD	TBD										
MW-132S	MON	UUA							TBD	TBD	TBD										
MW-133S1	MON	UUA							TBD	TBD	TBD										
MW-133S2	MON	UUA							TBD	TBD	TBD										
MW-135S1	MON	UUA							TBD	TBD	TBD										
MW-135S2	MON	UUA							TBD	TBD	TBD										
MW-136S1	MON	UUA							TBD	TBD	TBD										
MW-136S2	MON	UUA							TBD	TBD	TBD										
MW-137S1	MON	UUA							TBD	TBD	TBD										
MW-137S2	MON	UUA							TBD	TBD	TBD										
MW-137S3	MON	UUA							TBD	TBD	TBD										
MW-138S1	MON	UUA							TBD	TBD	TBD										
MW-138S2	MON	UUA							TBD	TBD	TBD										
MW-139S1	MON	UUA							TBD	TBD	TBD										
MW-139S2	MON	UUA							TBD	TBD	TBD										
MW-140S1	MON	UUA							TBD	TBD	TBD										
MW-140S2	MON	UUA							TBD	TBD	TBD										
MW-140S3	MON	UUA							TBD	TBD	TBD										
MW-141D	MON	UNK							TBD	TBD	TBD										

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring		mance toring			Sumn	nary A	nalyte	e Sam	pling	Frequ	encie	s ^e		
	Analy	ytical Suite		「, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eeded	(Cr6)	ım (CrT)	(SQ.				(Mn)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-141S1	MON	UNK							TBD	TBD	TBD										
MW-141S2	MON	UNK							TBD	TBD	TBD										
MW-142S1	MON	UUA							TBD	TBD	TBD										
MW-142S2	MON	UUA							TBD	TBD	TBD										
MW-142S3	MON	UUA							TBD	TBD	TBD										
MW-143D1	MON	LUA							TBD	TBD	TBD										
MW-143D2	MON	LUA							TBD	TBD	TBD										
MW-143S	MON	UUA							TBD	TBD	TBD										
MW-144D1	MON	LUA							TBD	TBD	TBD										
MW-144D2	MON	LUA							TBD	TBD	TBD										
MW-144S	MON	UUA							TBD	TBD	TBD										
MW-145D1	MON	LUA							TBD	TBD	TBD										
MW-145D2	MON	LUA							TBD	TBD	TBD										
MW-145S	MON	UUA							TBD	TBD	TBD										
MW-146D1	MON	LUA							TBD	TBD	TBD										
MW-146D2	MON	LUA							TBD	TBD	TBD										
MW-146S	MON	UUA							TBD	TBD	TBD										
MW-147D	MON	LUA							TBD	TBD	TBD										
MW-147S	MON	UUA							TBD	TBD	TBD										
MW-148S	MON	UUA							TBD	TBD	TBD										
MW-149S	MON	UUA							TBD	TBD	TBD										
MW-14A	MON	UUA				SA	Q		TBD	Q	Q			Q	Q	Q	Q				
MW-14B	MON	LUA		BA		SA			TBD	SA	SA	SA									
MW-14C	MON	LA							TBD	TBD	TBD										
MW-14S	MON	UUA		BA			Q		TBD	Q	Q			Q	Q	Q	Q				
MW-15	MON	UUA							TBD	TBD	TBD										
MW-150S1	MON	UUA							TBD	TBD	TBD										
MW-150S2	MON	LUA							TBD	TBD	TBD										
MW-151D1	MON	LUA							TBD	TBD	TBD										
MW-151D2	MON	LUA							TBD	TBD	TBD										
MW-151S	MON	UUA							TBD	TBD	TBD										
	141014	55/1					1			נ	ים כי										

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring	Perfor Moni	mance toring			Sumn	nary A	nalyte	e Sam	pling	Frequ	encie	s ^e		
	Analy	rtical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eeded	(Cr6)	ım (CrT)	(SQ.				(Mn)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-152D1	MON	LUA							TBD	TBD	TBD										
MW-152D2	MON	LUA							TBD	TBD	TBD										
MW-152S	MON	UUA							TBD	TBD	TBD										
MW-153S	MON	LUA							TBD	TBD	TBD										
MW-154S1	MON	UUA							TBD	TBD	TBD										
MW-154S2	MON	UUA							TBD	TBD	TBD										
MW-155D	MON	LUA							TBD	TBD	TBD										
MW-155S	MON	UUA							TBD	TBD	TBD										
MW-156S	MON	UUA							TBD	TBD	TBD										
MW-157S	MON	UUA							TBD	TBD	TBD										
MW-158C	MON	LA							TBD	TBD	TBD										
MW-158S	MON	UUA							TBD	TBD	TBD										
MW-159C	MON	LA							TBD	TBD	TBD										
MW-159D	MON	UUA							TBD	TBD	TBD										
MW-159S	MON	UUA							TBD	TBD	TBD										
MW-16	MON	UUA				Q/SA	Α		TBD	Q	Q	SA		Α	Α	Α	Α				
MW-160C	MON	LA							TBD	TBD	TBD										
MW-160D	MON	UUA							TBD	TBD	TBD										
MW-160S	MON	UUA							TBD	TBD	TBD										
MW-161S1	MON	UUA							TBD	TBD	TBD										
MW-161S2	MON	UUA							TBD	TBD	TBD										
MW-161S3	MON	UUA							TBD	TBD	TBD										
MW-162S1	MON	UUA							TBD	TBD	TBD										
MW-162S2	MON	UUA							TBD	TBD	TBD										
MW-162S3	MON	UUA							TBD	TBD	TBD										
MW-163D	MON	UUA							TBD	TBD	TBD										
MW-163S	MON	UUA							TBD	TBD	TBD										
MW-164D	MON	LUA							TBD	TBD	TBD										
MW-164S	MON	UUA							TBD	TBD	TBD										
MW-165D	MON	UUA							TBD	TBD	TBD										
MW-165S	MON	UUA							TBD	TBD	TBD										
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Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring		mance toring			Sumn	nary A	ınalyte	e Sam	pling l	Frequ	encie	s ^e		
	Analy	ytical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	oroducts	(Cr6)	ım (CrT)	(SQ.				(Mn)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-166S1	MON	UUA							TBD	TBD	TBD										
MW-166S2	MON	UUA							TBD	TBD	TBD										
MW-167D	MON	LUA							TBD	TBD	TBD										
MW-167S1	MON	UUA							TBD	TBD	TBD										
MW-167S2	MON	LUA							TBD	TBD	TBD										
MW-168D	MON	LUA							TBD	TBD	TBD										
MW-168S	MON	UUA							TBD	TBD	TBD										
MW-169D	MON	LUA							TBD	TBD	TBD										
MW-169S1	MON	UUA							TBD	TBD	TBD										
MW-169S2	MON	UUA							TBD	TBD	TBD				-						
MW-17	MON	UUA					Q		TBD	Q	TBD					Q					
MW-170S	MON	UUA	Q	Q					TBD	Q	Q	Q	Q								
MW-171D1	MON	LUA							TBD	TBD	TBD										
MW-171D2	MON	LUA							TBD	TBD	TBD										
MW-171S	MON	UUA							TBD	TBD	TBD										
MW-172S1	MON	UUA							TBD	TBD	TBD										
MW-172S2	MON	UUA							TBD	TBD	TBD										
MW-173D	MON	LUA							TBD	TBD	TBD										
MW-173S1	MON	UUA							TBD	TBD	TBD										
MW-173S2	MON	UUA							TBD	TBD	TBD										
MW-174S1	MON	UUA							TBD	TBD	TBD										
MW-174S2	MON	UUA							TBD	TBD	TBD										
MW-174S3	MON	UUA							TBD	TBD	TBD										
MW-175D	MON	LUA							TBD	TBD	TBD										
MW-175S1	MON	UUA							TBD	TBD	TBD										
MW-175S2	MON	UUA							TBD	TBD	TBD										
MW-176S	MON	UUA							TBD	TBD	TBD										
MW-177D	MON	LUA					Q		TBD	Q						Q					
MW-177S	MON	UUA					Q		TBD	Q						Q					
MW-178D	MON	LUA					Q		TBD	Q						Q					
MW-178S	MON	UUA					Q		TBD	Q						Q					
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Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring		mance toring			Sumn	nary A	ınalyte	e Sam	pling	Frequ	encie	s ^e		
	Analy	tical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	oroducts	(Cr6)	ım (CrT)	DS)				(Mn)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-179D	MON	LUA					Q		TBD	Q						Q					
MW-179S	MON	UUA					Q		TBD	Q						Q					
MW-17D	MON	LUA					Q		TBD	Q						Q					
MW-18	MON	UUA							TBD	TBD	TBD										
MW-180RD	MON	UUA					Q		TBD	Q						Q					
MW-180RS	MON	LUA					Q		TBD	Q						Q					
MW-181D	MON	LUA					Q		TBD	Q						Q					
MW-181S	MON	UUA					Q		TBD	Q				-		Q			-		
MW-182D	MON	LUA					Q		TBD	Q					-	Ø					
MW-182S	MON	UUA					Q		TBD	Q						Q					
MW-183D	MON	LUA					Q		TBD	Q						Q					
MW-183S	MON	UUA					Q		TBD	Q						Q					
MW-184S1	MON	UUA							TBD	TBD	TBD										
MW-184S2	MON	UUA							TBD	TBD	TBD										
MW-184S3	MON	UUA							TBD	TBD	TBD										
MW-185S1	MON	UUA							TBD	TBD	TBD										
MW-185S2	MON	UUA							TBD	TBD	TBD										
MW-185S3	MON	UUA							TBD	TBD	TBD										
MW-186S1	MON	UUA							TBD	TBD	TBD										
MW-186S2	MON	UUA							TBD	TBD	TBD										
MW-186S3	MON	UUA							TBD	TBD	TBD										
MW-187D1	MON	UUA							TBD	TBD	TBD										
MW-187D2	MON	LUA							TBD	TBD	TBD										
MW-187S1	MON	UUA							TBD	TBD	TBD										
MW-188S1	MON	UNK							TBD	TBD	TBD										
MW-188S2	MON	UNK							TBD	TBD	TBD										
MW-188S3	MON	UUA							TBD	TBD	TBD										
MW-189D1	MON	UUA							TBD	TBD	TBD										
MW-189D2	MON	UUA							TBD	TBD	TBD										
MW-189D3	MON	LUA							TBD	TBD	TBD										
MW-19	MON	UUA							TBD	TBD	TBD										
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Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitorino	a Program	ATU WD	R Complia	ince Monitoring	IRZ	Z Monitoring		mance toring			Sumr	nary A	ınalvte	e Sam	nplina	Freau	encie	s ^e		
		ytical Suite	Cr6, CrT	, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	Cr6, C	rT and products eeded	(Cr6)						(Mn)	•				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-190D1	MON	UUA							TBD	TBD	TBD										
MW-190D2	MON	LUA							TBD	TBD	TBD										
MW-190S1	MON	UUA							TBD	TBD	TBD										
MW-191D1	MON	UUA							TBD	TBD	TBD										
MW-191D2	MON	UUA							TBD	TBD	TBD										
MW-191D3	MON	LUA							TBD	TBD	TBD										
MW-192D	MON	LUA							TBD	TBD	TBD										
MW-192S	MON	UUA							TBD	TBD	TBD										
MW-193S1	MON	UUA							TBD	TBD	TBD										
MW-193S2	MON	UNK							TBD	TBD	TBD										
MW-193S3	MON	UNK							TBD	TBD	TBD										
MW-194S1	MON	UNK							TBD	TBD	TBD										
MW-194S2	MON	UNK							TBD	TBD	TBD										
MW-194S3	MON	UNK							TBD	TBD	TBD										
MW-195S1	MON	UNK							TBD	TBD	TBD										
MW-195S2	MON	UUA							TBD	TBD	TBD										
MW-195S3	MON	UUA							TBD	TBD	TBD										
MW-196S1	MON	UNK							TBD	TBD	TBD										
MW-196S2	MON	UNK							TBD	TBD	TBD										
MW-196S3	MON	UNK							TBD	TBD	TBD										
MW-197S1	MON	UNK							TBD	TBD	TBD										
MW-197S2	MON	UNK							TBD	TBD	TBD										
MW-197S3	MON	UNK							TBD	TBD	TBD										
MW-198S1	MON	UNK							TBD	TBD	TBD										
MW-198S2	MON	UNK							TBD	TBD	TBD										
MW-198S3	MON	UNK							TBD	TBD	TBD										
MW-199D1	MON	UNK							TBD	TBD	TBD										
MW-199D2	MON	UNK							TBD	TBD	TBD										
MW-199S1	MON	UNK							TBD	TBD	TBD										
MW-20	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
MW-200S1	MON	UNK							TBD	TBD	TBD										

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring	Perfor Moni	mance toring			Sumn	nary A	nalyte	e Sam	pling	Frequ	encie	s ^e		
	Analy	ytical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eded	(Cr6)	ım (CrT)	(SQ				(Mn)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-200S2	MON	UNK							TBD	TBD	TBD										
MW-200S3	MON	UNK							TBD	TBD	TBD										
MW-201S1	MON	UNK							TBD	TBD	TBD										
MW-201S2	MON	UNK							TBD	TBD	TBD										
MW-202S1	MON	UNK							TBD	TBD	TBD										
MW-202S2	MON	UNK							TBD	TBD	TBD										
MW-203D	MON	UNK							TBD	TBD	TBD										
MW-203S	MON	UNK							TBD	TBD	TBD										
MW-204D	MON	UNK							TBD	TBD	TBD										
MW-204S1	MON	UNK							TBD	TBD	TBD										
MW-204S2	MON	UNK							TBD	TBD	TBD										
MW-205S1	MON	UNK							TBD	TBD	TBD										
MW-205S2	MON	UNK							TBD	TBD	TBD										
MW-205S3	MON	UNK							TBD	TBD	TBD										
MW-21A	MON	UUA		BA					TBD	BA	BA	BA	BA								
MW-21B	MON	LUA							TBD	TBD	TBD										
MW-21B1	MON	LUA		BA					TBD	BA	BA	BA	BA								
MW-21C	MON	LA							TBD	TBD	TBD										
MW-2-2	MON	LUA							TBD	TBD	TBD										
MW-22A1	MON	UUA		BA					TBD	BA	BA	ВА	ВА						-		
MW-22A2	MON	UUA							TBD	TBD	TBD										
MW-22B	MON	LUA		BA					TBD	BA	BA	BA	BA								
MW-2-3	MON	LUA							TBD	TBD	TBD										
MW-23A	MON	UUA							TBD	TBD	TBD										
MW-23B	MON	LUA							TBD	TBD	TBD										
MW-23C	MON	LA							TBD	TBD	TBD										
MW-2-4	MON	LUA							TBD	TBD	TBD										
MW-24A1	MON	UUA							TBD	TBD	TBD										
MW-24A2	MON	LUA							TBD	TBD	TBD										
MW-24B	MON	LUA							TBD	TBD	TBD										
MW-2-5	MON	LUA							TBD	TBD	TBD										

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring		mance toring			Sumn	nary A	nalyte	e Sam	pling	Frequ	encie	s ^e		
	Analy	tical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eeded	(Cr6)	ım (CrT)	(SQ.				√In)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (Mn)	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-25A2	MON	UUA							TBD	TBD	TBD										
MW-25B	MON	LUA							TBD	TBD	TBD										
MW-26	MON	UUA							TBD	TBD	TBD										
MW-2-6	MON	LUA							TBD	TBD	TBD										
MW-27A	MON	UUA		BA					TBD	BA	BA	BA	BA								
MW-27B	MON	LUA		BA		SA			TBD	SA	SA	SA	BA								
MW-28A	MON	UUA				SA			TBD	TBD	TBD	SA									
MW-28B	MON	LUA				Q/SA			TBD	Q	Q	SA									
MW-28C	MON	LA							TBD	TBD	TBD										
MW-29	MON	UUA		BA		Q/SA			TBD	Q	Q	SA	BA								
MW-30A	MON	UA							TBD	TBD	TBD										
MW-30B1	MON	LUA							TBD	TBD	TBD										
MW-30B2	MON	LUA							TBD	TBD	TBD										
MW-31	MON	LUA		BA					TBD	BA	BA	ВА	ВА								
MW-31C	MON	LA							TBD	TBD	TBD										
MW-32B1	MON	LUA		BA					TBD	BA	BA	BA	ВА								
MW-32B2	MON	LUA							TBD	TBD	TBD										
MW-32S	MON	UUA		BA					TBD	BA	BA	ВА	ВА								
MW-33A	MON	UUA				SA			TBD	SA	SA	SA					SA				
MW-33B	MON	LUA				SA			TBD	SA	SA	SA					SA				
MW-34	MON	LA							TBD	TBD	TBD										
MW-35	MON	LUA				SA			TBD	SA	SA	SA					SA				
MW-36	MON	UUA				SA			TBD	SA	SA	SA									
MW-37	MON	UUA				SA			TBD	SA	SA	SA									
MW-38A	MON	UUA				SA	Q		TBD	Q	TBD					Q					
MW-38B	MON	LUA				SA	Q		TBD	Q	TBD					Q					
MW-39	MON	UUA					Q		TBD	Q	TBD					Q					
MW-39D	MON	LUA					Q		TBD	Q	TBD					Q					
MW-40	MON	LUA				Q/SA			TBD	Q	Q	SA									
MW-41A	MON	LUA							TBD	TBD	TBD										
MW-41B	MON	LUA							TBD	TBD	TBD										
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Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	ince Monitoring	IRZ	Z Monitoring	Perfor Moni	mance toring			Sumn	nary A	nalyte	e Sam	pling	Frequ	encie	s ^e		
	Analy	tical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eeded	(Cr6)	ım (CrT)	(SQ.				√In)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (Mn)	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-41S	MON	UUA							TBD	TBD	TBD										
MW-42B1	MON	LUA							TBD	TBD	TBD										
MW-42B2	MON	LUA		BA					TBD	BA	BA	BA	BA								
MW-42C	MON	LA							TBD	TBD	TBD										
MW-43	MON	LUA							TBD	TBD	TBD										
MW-44A	MON	UUA				Q/SA			TBD	Q	Q	SA									
MW-44B	MON	LUA				Q/SA			TBD	Q	Q	SA									
MW-45A	MON	UUA				SA			TBD	TBD	TBD	SA							-		
MW-45B	MON	LUA				Q/SA			TBD	Q	Q	SA									
MW-46	MON	UUA							TBD	TBD	TBD										
MW-47	MON	UUA				Q/SA			TBD	Q	Q	SA									
MW-47A	MON	UUA							TBD	TBD	TBD										
MW-47BR	MON	BR							TBD	TBD	TBD										
MW-48	MON	UUA							TBD	TBD	TBD										
MW-49A	MON	LUA				SA			TBD	SA	SA	SA					SA				
MW-49B	MON	LUA				SA			TBD	TBD	TBD	SA					SA				
MW-49S	MON	UUA							TBD	TBD	TBD										
MW-50A	MON	LUA							TBD	TBD	TBD										
MW-50B	MON	LUA							TBD	TBD	TBD										
MW-50S	MON	UUA							TBD	TBD	TBD										
MW-51	MON	UUA							TBD	TBD	TBD										
MW-52	MON	LUA							TBD	TBD	TBD										
MW-53	MON	UUA							TBD	TBD	TBD										
MW-54	MON	UUA				Q/SA			TBD	Q	Q	SA									
MW-55A	MON	LUA		BA					TBD	BA	BA	ВА	ВА								
MW-55B	MON	LUA							TBD	TBD	TBD										
MW-55C	MON	LA							TBD	TBD	TBD										
MW-55S	MON	UUA		BA					TBD	BA	BA	BA	ВА								
MW-56	MON	LUA							TBD	TBD	TBD										
MW-57	MON	UUA				SA			TBD	TBD	TBD	SA									
MW-57D	MON	LUA							TBD	TBD	TBD										
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Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring	Perfor Moni	mance toring			Sumn	nary A	nalyte	e Sam	pling	Frequ	encie	s ^e		
	Analy	ytical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eeded	(Cr6)	ım (CrT)	(SQ.				(Mn)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-58	MON	UUA				SA			TBD	SA	SA	SA									
MW-59	MON	UUA							TBD	TBD	TBD										
MW-61	MON	UUA				Q/SA			TBD	Q	Q	SA									
MW-62A	MON	LUA							TBD	TBD	TBD										
MW-62B	MON	LUA							TBD	TBD	TBD										
MW-62C	MON	LA							TBD	TBD	TBD										
MW-63	MON	UUA	Q	Q					TBD	Q	Q	Q	Q								
MW-64A	MON	UUA				SA			TBD	TBD	TBD	SA									
MW-64B	MON	LUA				SA			TBD	TBD	TBD	SA									
MW-65BR	MON	BR							TBD	TBD	TBD										
MW-66A	MON	UUA				Q/SA			TBD	Q	Q	SA									
MW-66BR	MON	BR							TBD	TBD	TBD										
MW-67A	MON	UUA				SA			TBD	TBD	TBD	SA									
MW-67B	MON	LUA				SA			TBD	TBD	TBD	SA									
MW-68C	MON	LA							TBD	TBD	TBD										
MW-68D	MON	LUA		BA					TBD	BA	BA	BA	BA								
MW-68S	MON	UUA		BA					TBD	BA	BA	BA	BA								
MW-69D	MON	LUA							TBD	TBD	TBD										
MW-69S	MON	UUA							TBD	TBD	TBD										
MW-70D	MON	LUA		BA					TBD	BA	BA	BA	BA								
MW-70S	MON	UUA		BA					TBD	BA	BA	BA	BA								
MW-71D	MON	LUA		BA					TBD	BA	BA	BA	BA								
MW-71S	MON	UUA		BA					TBD	BA	BA	BA	BA								
MW-72D	MON	LUA							TBD	TBD	TBD										
MW-72S	MON	UUA							TBD	TBD	TBD										
MW-73D	MON	LUA							TBD	TBD	TBD										
MW-73S	MON	UUA							TBD	TBD	TBD										
MW-74D	MON	UUA							TBD	TBD	TBD										
MW-74S	MON	UUA							TBD	TBD	TBD										
MW-75D	MON	LUA					Q		TBD	Q	TBD					Q					
MW-75S	MON	UUA							TBD	Q	TBD					Q					

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	ince Monitoring	IRZ	Z Monitoring	Perfor Moni	mance toring			Sumn	nary A	nalyte	e Sam	npling	Frequ	encie	s ^e		
		tical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eeded	(Cr6)	(CrT) mr	(SQ.				(Mn)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-76D	MON	LUA							TBD	TBD	TBD										
MW-76S	MON	UUA							TBD	TBD	TBD										
MW-77D	MON	LUA							TBD	TBD	TBD										
MW-77S	MON	UUA							TBD	TBD	TBD										
MW-78D	MON	LUA					Q		TBD	Q	TBD					Q					
MW-78S	MON	UUA					Q		TBD	Q	TBD					Q					
MW-79D	MON	LUA							TBD	TBD	TBD										
MW-79S	MON	UUA							TBD	TBD	TBD										
MW-80D	MON	LUA							TBD	TBD	TBD										
MW-80S	MON	UUA							TBD	TBD	TBD										
MW-81S	MON	UUA							TBD	TBD	TBD										
MW-82S	MON	UUA							TBD	TBD	TBD										
MW-83D	MON	LUA	Q	Q					TBD	Q	Q	Q	Q								
MW-83S	MON	UUA	Q	Q					TBD	Q	Q	Ø	Q				-		-	ł	
MW-84D	MON	LUA	Q	Q					TBD	Q	Q	Ø	Q				-		-	ł	
MW-84S	MON	UUA	Q	Q					TBD	Q	Q	Ø	Q				1		-	ł	
MW-85D	MON	LUA	Q	Q					TBD	Q	Q	Q	Q								
MW-85S	MON	UUA	Q	Q					TBD	Q	Q	Q	Q								
MW-86D	MON	LUA		BA					TBD	BA	BA	ВА	ВА								
MW-86S	MON	UUA		BA					TBD	BA	BA	ВА	ВА								
MW-87D	MON	LUA							TBD	TBD	TBD										
MW-87S	MON	UUA							TBD	TBD	TBD										
MW-88D	MON	LUA		BA					TBD	BA	BA	BA	ВА								
MW-88S	MON	UUA		BA					TBD	BA	BA	BA	ВА								
MW-89D	MON	LUA		BA					TBD	BA	BA	ВА	ВА								
MW-89S	MON	UUA		BA					TBD	BA	BA	ВА	ВА								
MW-90C	MON	LA							TBD	TBD	TBD										
MW-91C	MON	LA							TBD	TBD	TBD										
MW-92C	MON	LA							TBD	TBD	TBD										
MW-93C	MON	LA							TBD	TBD	TBD										
MW-94D	MON	UUA							TBD	TBD	TBD										

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	ince Monitoring	IRZ	Z Monitoring		mance toring			Sumn	nary A	nalyte	e Sam	pling l	Frequ	encie	s ^e		
	Anal	ytical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eeded	(Cr6)	ım (CrT)	(SQ				(Mn)	()00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
MW-94S	MON	UUA							TBD	TBD	TBD										
MW-95D	MON	LUA							TBD	TBD	TBD										
MW-95S	MON	UUA							TBD	TBD	TBD										
MW-96D	MON	LUA							TBD	TBD	TBD										
MW-96S	MON	UUA							TBD	TBD	TBD										
MW-97D	MON	UUA							TBD	TBD	TBD										
MW-97S	MON	UUA							TBD	TBD	TBD										
MW-98C	MON	LA							TBD	TBD	TBD										
MW-99C	MON	LA							TBD	TBD	TBD										
NA-MW-01A	MON	UUA							TBD	TBD	TBD										
NA-MW-01B	MON	LUA							TBD	TBD	TBD										
NA-MW-02A	MON	UUA							TBD	TBD	TBD										
NA-MW-02B	MON	LUA							TBD	TBD	TBD										
NA-MW-03A	MON	UUA							TBD	TBD	TBD										
NA-MW-03B	MON	LUA							TBD	TBD	TBD										
NA-RC-01	MUW	UA							TBD	TBD	TBD										
NA-RC-02	MUW	UA							TBD	TBD	TBD										
New well 1 D	MON	LUA							TBD	TBD	TBD										
New well 1 S	MON	UUA							TBD	TBD	TBD										
New well 2 D	MON	LUA	Q	Q					TBD	Q	Q	Q	Q								
New well 2 S	MON	UUA	Q	Q					TBD	Q	Q	Q	Q								
PGE-06	WTR	UA							TBD	TBD	TBD										
PGE-07	WTR	UA							TBD	TBD	TBD										
PGE-12	WTR	UA-LA							TBD	TBD	TBD										
PGE-13	WTR	UA-LA							TBD	TBD	TBD										
PGE-14	WTR	UA-LA						AN	TBD	AN	AN										
PGE-15	WTR	LA							TBD	TBD	TBD										
PMW-01	MON	LUA							TBD	TBD	TBD										
PMW-02	MON	LUA							TBD	TBD	TBD										
PMW-03	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q				
PMW-04	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
1 1VIVV-UT	IVIOIN	UUA					٧		טטו	ን	٧			γ	3	ž	×				

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitorino	n Program	ATU WD	R Complia	ince Monitoring	IRZ	Z Monitoring		mance toring			Sumn	nary A	nalvte	e Sam	plina	Freau	encie	s ^e		
		tical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	Cr6, C	eded	(Cr6)			,			(Mn)	,				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
PMW-05	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
PMW-06	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
PT1-EX-02	MUW	UA							TBD	TBD	TBD										
PT1-IW-01	MUW	UA							TBD	TBD	TBD										
PT1-IW-02	MUW	UA							TBD	TBD	TBD										
PT1-MW-01	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
PT1-MW-02	MON	UUA							TBD	TBD	TBD										
PT1-MW-03	MON	UUA							TBD	TBD	TBD										
PT1-MW-04	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
PT1-MW-05	MON	UUA							TBD	TBD	TBD										
PT1-MW-06	MON	UUA							TBD	TBD	TBD										
PT2-EX-02	MUW	UA							TBD	TBD	TBD										
PT2-IW-01	MUW	UA							TBD	TBD	TBD										
PT2-IW-02	MUW	UA							TBD	TBD	TBD										
PT2-MW-01	MON	UUA							TBD	TBD	TBD										
PT2-MW-02	MON	UUA							TBD	TBD	TBD										
PT2-MW-03	MON	UUA							TBD	TBD	TBD										
PT2-MW-04	MON	UUA							TBD	TBD	TBD										
PT2-MW-05	MON	UUA							TBD	TBD	TBD										
PT2-MW-06	MON	UUA							TBD	TBD	TBD										
PT2-MW-08	MON	LUA					А		TBD	Α	Α			Α	Α	Α	Α				
PT2-MW-09	MON	LUA					А		TBD	Α	Α			Α	Α	Α	Α				
PT2-MW-10	MON	LUA					А		TBD	Α	Α			Α	Α	Α	Α				
PT2-MW-11	MON	LUA					A		TBD	Α	Α			Α	Α	Α	Α				
PT3-EX-01	MUW	UA							TBD	TBD	TBD										
PT3-EX-02	MUW	UA							TBD	TBD	TBD										
PT3-IW-01	MUW	UA							TBD	TBD	TBD										
PT3-IW-02	MUW	UA							TBD	TBD	TBD										
PT3-IW-03	MUW	UA							TBD	TBD	TBD										
PT3-MW-01	MON	UA							TBD	TBD	TBD										
PT3-MW-02	MON	UA							TBD	TBD	TBD										

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring	Perfor Moni	mance toring			Sumn	nary A	nalyte	e Sam	pling	Frequ	encie	s ^e		
	Analy	tical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eded	(Cr6)	ım (CrT)	DS)				(Mn)	(00				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
PT3-MW-03	MON	UA							TBD	TBD	TBD										
PT3-MW-04	MON	UA							TBD	TBD	TBD										
PT3-MW-05	MON	UA							TBD	TBD	TBD										
PT3-MW-06	MON	UA							TBD	TBD	TBD										
PT3-MW-07	MON	UA							TBD	TBD	TBD										
PT3-MW-08	MON	UA							TBD	TBD	TBD										
PT3-MW-09	MON	UA							TBD	TBD	TBD										
PT3-MW-10	MON	UA							TBD	TBD	TBD										
PT3-MW-11	MON	UA							TBD	TBD	TBD										
PT3-MW-13	MON	UA							TBD	TBD	TBD										
PT3-MW-14	MON	UA							TBD	TBD	TBD										
RD-01	MON	UA							TBD	TBD	TBD										
RPVT	PVT	NA			Q				TBD	Q	Q	Q	Q								Q
RS-01	MON	UNK							TBD	TBD	TBD										
SA-MW-01D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-01S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-02D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-02S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-03D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-03S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-04D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-04S	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-05D	MON	LUA					А		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-05S	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-06D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-06S	MON	UUA					A		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-MW-07D	MON	LUA					A		TBD	Α	Α			Α	Α	Α	Α				
SA-MW-07S	MON	UUA					A		TBD	A	A			Α	Α	Α	Α				
SA-MW-08D	MON	LUA					A		TBD	A	A			Α	Α	Α	Α				
SA-MW-08S	MON	UUA					A		TBD	A	A			A	Α	Α	Α				
SA-MW-09D	MON	LUA					A		TBD	A	A			A	Α	Α	Α				

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SA-MW-09S MON UUA A A A A A A A A A A A A A A	S > P > P Total Organic Carbon (TOC) Sulfate P > P Orthophosphate	A
SA-MW-09S MON UUA A TBD A A A<	A A A A A A A	A
SA-MW-10D MON LUA A TBD A A A A A A SA-MW-10S MON UUA A A A A A A A A A A	A A A A A A	Α
SA-MW-10S MON UUA A TBD A A A A A	A A A	-
		Δ
SA-MW-11D MON LUA A TBD A A A A A	A	\rightarrow
	A	
	A	
	A	
	A	
SA-MW-13S MON UUA	A	
SA-MW-14D MON LUA A TBD A A A A A A	A	
SA-MW-14S MON UUA A A A A A A A A A A A	A	
SA-MW-15D MON LUA A A A A T TBD A A A A A A A	A	
SA-MW-15S MON UUA A A TBD A A A A A A	A	
SA-MW-16D MON LUA Q TBD Q Q Q Q Q Q	Q Q Q	Q
SA-MW-16S MON UUA Q TBD Q Q Q Q Q Q	Q Q Q	Q
SA-MW-17D MON LUA Q TBD Q Q Q Q Q Q	Q Q Q	Q
SA-MW-17S MON UUA Q TBD Q Q Q Q Q Q	Q Q Q	Q
SA-MW-18D MON LUA Q TBD Q Q Q Q Q Q	Q Q Q	Q
SA-MW-18S MON UUA Q TBD Q Q Q Q Q Q	Q Q Q	Q
SA-MW-19D MON LUA TBD TBD TBD		
	A A A	Α
	A A A	Α
	A A A	Α
	A A A	Α
	A A A	-
	A A A	
	A A A	Α
	A A A	

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitoring	g Program	ATU WD	R Complia	nce Monitoring	IRZ	Z Monitoring		mance toring			Sumn	nary A	nalyte	e Sam	pling l	Frequ	encie	s ^e		
		rtical Suite	Cr6, CrT	, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	rT and products eded	(Cr6)	um (CrT)	(SQ.				(Mn)	.oc)				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program [©]	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
SA-MW-25D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SA-MW-25S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SA-MW-26D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q				
SA-MW-26S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
SA-MW-27D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q				
SA-MW-27S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
SA-MW-28D	MON	LUA							TBD	TBD	TBD										
SA-MW-28S	MON	UUA							TBD	TBD	TBD										
SA-RC-01	MUW	UA							TBD	TBD	TBD										
SA-RW-22	EXT	UA						AN	TBD	AN	AN			AN	AN	AN	AN				
SA-RW-23	EXT	UA						AN	TBD	AN	AN			AN	AN	AN	AN				
SA-RW-24	EXT	UA						AN	TBD	AN	AN			AN	AN	AN	AN				
SA-RW-25	EXT	UA						AN	TBD	AN	AN			AN	AN	AN	AN				
SA-SM-01D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q				
SA-SM-01S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q				
SA-SM-02D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-02S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-03D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-03S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-04D	MON	LUA							TBD	TBD	TBD										
SA-SM-04S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-05D	MON	LUA							TBD	TBD	TBD										
SA-SM-05S	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-06D	MON	LUA					А		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-06S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-07D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-07S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-08D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-SM-08S	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-SM-09D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-09S	MON	UUA					А		TBD	Α	Α			Α	Α	Α	Α				

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	Monitoring	g Program	ATU WD	R Complia	ince Monitoring	IRZ	Z Monitoring		mance toring			Sumn	nary A	nalyte	e Sam	pling l	requ	encie	s ^e		
	Analy	tical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	IRZ byp	oroducts	(Cr6)	ım (CrT)	(SQ.				(Mn)	OC)				
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (N	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
SA-SM-10D	MON	LUA					A		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-10S	MON	UUA					A		TBD	Α	Α			Α	Α	Α	Α				
SA-SM-11D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SA-SM-11S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α		Α	Α	
SC-MW-01D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-01S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-02D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-02S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-03D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-03S	MON	UUA					Q		TBD	Q	Q			Q	Ø	Q	Ю		Ø	О	
SC-MW-04D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-04S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-05D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-05S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-06D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-06S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Ø		Q	Q	
SC-MW-07D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-07S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-08D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-08S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-09D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-09S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-10D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-10S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-11D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-11S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-12D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-12S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-13D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-13S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-14D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitorino	n Program	ATU WD	R Complia	ince Monitoring	IR7	Z Monitoring	Perfor Moni	mance			Sumn	nary A	nalyte	- Sam	nnlina	Fregu	encie	s ^e		
		tical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	Cr6, C	rT and products eeded	Cr6)			lary 7	riary	Joan	(Mn)	•	CHOIC	3		
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
SC-MW-14S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-15D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-15S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-16C	MON	LA							TBD	TBD	TBD										
SC-MW-16D	MON	LUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-16S	MON	UUA					Q		TBD	Q	Q			Q	Q	Q	Q		Q	Q	
SC-MW-17D	MON	LUA							TBD	TBD	TBD										
SC-MW-17S	MON	UUA							TBD	TBD	TBD										
SC-MW-21D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SC-MW-21S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SC-MW-22D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SC-MW-22S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SC-MW-23D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SC-MW-23S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SC-MW-26D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SC-MW-26S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SC-MW-32D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SC-MW-32S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SC-MW-38D	MON	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
SC-MW-38S	MON	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
TW-2S	MON	UUA							TBD	TBD	TBD										
WA-MW-01A	MON	UUA							TBD	TBD	TBD										
WA-MW-01B	MON	LUA							TBD	TBD	TBD										
WA-MW-02A	MON	UUA							TBD	TBD	TBD										
WA-MW-02B	MON	LUA							TBD	TBD	TBD										
WA-MW-03A	MON	UUA							TBD	TBD	TBD										
WA-MW-03B	MON	LUA							TBD	TBD	TBD										
WA-MW-04A	MON	UUA							TBD	TBD	TBD										
WA-MW-04B	MON	LUA							TBD	TBD	TBD										
WA-RC-01	MUW	UA							TBD	TBD	TBD										
X-01	MUW	UUA							TBD	TBD	TBD										

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project Pacific Gas and Electric Company Compressor Station, Hinkley, California

	Monitorino	a Program	ATU WD	R Complia	ance Monitoring	IRZ	Z Monitoring		mance toring			Sumn	narv A	nalvte	e Sam	pling I	Fregu	encie	s ^e		
		ytical Suite		, Nitrate,	Cr6, CrT, Nitrate, TDS, and U ^g	Cr6, CrT, TDS, and/or TOC	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	Cr6, C	rT and products	Cr6)			ia.y r								
Location ID	Location Type	Aquifer	Domestic Well Protection ^a	Characterization ^a	ATU Irrigation Water Monitoring ^b	2009 SCRIA/NWFI NOA Monitoring Program	2010 IRZ NOA and Performance Monitoring Program ^c	Extraction Wells ^d	Chromium Monitoring	Hexavalent Chromium (Cr6)	Total Dissolved Chromium (CrT)	Total Dissolved Solids (TDS)	Nitrate (as N)	Dissolved Arsenic (As)	Dissolved Iron (Fe)	Dissolved Manganese (Mn)	Total Organic Carbon (TOC)	Sulfate	Orthophosphate	Chloride (CI)	Uranium (U)
X-02	MUW	UUA							TBD	TBD	TBD										
X-04	MON	UUA							TBD	TBD	TBD										
X-05	MON	UUA							TBD	TBD	TBD										
X-06	MON	UUA							TBD	TBD	TBD										
X-07	MUW	LUA							TBD	TBD	TBD										
X-08	MUW	LUA							TBD	TBD	TBD										
X-09	MON	UUA							TBD	TBD	TBD										
X-10	MUW	UUA					Α		TBD	Α	Α			Α	Α	Α	Α				
X-11	MUW	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
X-12	MUW	LUA					Α		TBD	Α	Α			Α	Α	Α	Α				
X-13	MUW	LUA							TBD	TBD	TBD										
X-14	MUW	LUA							TBD	TBD	TBD										
X-15	MUW	LUA							TBD	TBD	TBD										
X-16	MUW	LUA					A		TBD	Α	Α			Α	Α	Α	Α				
X-17	MUW	LUA							TBD	TBD	TBD										
Y-01	MON	UNK						AN	TBD	AN	AN										
Y-02	MON	UNK						AN	TBD	AN	AN										
Y-03	MON	UNK						AN	TBD	AN	AN										
Yang	PVT	NA			Q				TBD	Q	Q	Q	Q								Q

Notes:

Letter/acronym in monitoring program columns indicates the sampling frequency proposed per well under that program.

- a. Proposed as revision to Revised Draft Monitoring and Reporting Program (MRP) Table E-2 Quarterly Groundwater Monitoring for Existing ATUs.
- b. Addresses MRP Table E-3 ATU Irrigation Water Monitoring requirements.
- c. Revision of the July 7, 2010 NOA under the General WDRs (R6V-2008-0014), manganese mitigation orders (R6V-2011-0053 and R6V-2011-0084) and the manganese investigation orders (R6V-2012-0060 and R6V-2013-0062) that was proposed in the Manganese Investigation Technical Report (ARCADIS, 2013).
- d. Data collection for optimization of extraction and IRZ systems. Will be sampled as needed.
- e. The highest sampling frequency is presented for wells and analytes sampled under more than one program.
- f. Uranium and radionuclides may be required pending results of investigation required under WTR-MM-5
- g. Arsenic, iron, manganese, total organic carbon are also required if extraction from within the footprint of IRZ byproducts

Monitoring Frequency:

A Annual

Table 2. DRAFT Preliminary Master Monitoring Well, Extraction Well and Irrigation Water Sampling Table for the Hinkley Groundwater Remediation Project

Pacific Gas and Electric Company Compressor Station, Hinkley, California

on ID		
ocation Type	Anal	Monitorin
Aquifer	ytical Suite	g Program
Domestic Well Protection ^a		ATU WD
Characterization ^a	, Nitrate,	R Complia
ATU Irrigation Water Monitoring ^b	Cr6, CrT, Nitrate, TDS, and U ^g	nce Monitoring
2009 SCRIA/NWFI NOA Monitoring Program	Cr6, CrT, TDS, and/or TOC	IRZ
2010 IRZ NOA and Performance Monitoring Program [©]	Cr6, CrT, TOC, Fe, Mn, As, ions for well rehab, if used	Z Monitoring
Extraction Wells ^d	Cr6, C IRZ byp as ne	Perfori Monit
Chromium Monitoring	roducts	
Hexavalent Chromium (C	(Cr6)	
Fotal Dissolved Chromium	n (CrT)	
Total Dissolved Solids (TDS)	(S)	Sumn
Nitrate (as N)		nary A
Dissolved Arsenic (As)		nalyte
Dissolved Iron (Fe)		e Sam
Dissolved Manganese (Mn)	n)	pling F
Total Organic Carbon (TOC)	()	- reque
Sulfate		encies
Orthophosphate		s ^e
Chloride (CI)		
Uranium (U)		

AN As needed

BA Bi-annual

M Monthly

Q Quarterly

SA Semi-annual

TBD To be determined

Acronyms:

ATU Agricultural Treatment Unit

EXT Extraction Well

IRZ In Situ Reactive Zone

LUA Lower Upper Aquifier

MON Monitoring Well

MRP Revised Draft Monitoring and Reporting Program (MRP). R6V-2014-TENTATIVE for the Pacific Gas and Electric Groundwater Remediation Project: Agricultural Treatment Units dated December 13, 2013. Online at http://www.waterboards.ca.gov/lahontan/water_issues/projects/pge/index.shtml.

MUW Municipal Water Supply

NOA Notice of Applicabilty

PVT Pivot

TBD sampling frequency is to be determined.

UUA Upper Upper Aquifier

WDR Waste Discharge Requirement

References

ARCADIS, 2013. Manganese Investigation Technical Report, Response to Board Orders No. R6V-2012-0060 and R6V-2013-0026, Pacific Gas and Electric, Hinkley Compressor Station. November 19.