



**Pacific Gas and
Electric Company®**

Yvonne J. Meeks
Site Remediation - Portfolio Manager
Environmental Affairs

6588 Ontario Road
San Luis Obispo, CA 93405

Mailing Address
4325 South Higuera Street
San Luis Obispo, CA 93401

805.546.5243
Internal: 664.5243
Fax: 805.546.5232
E-Mail: YJM1@pge.com

April 29, 2005

Norman Shopay
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710

Subject: Preliminary Results of Confirmation Sampling and Plan for Additional Response Activities, Spill Event on April 10, 2005 at IM No. 2 Batch Plant
PG&E Topock Compressor Station, Needles, California

Dear Mr. Shopay:

This letter transmits the *Preliminary Results of Confirmation Sampling and Plan for Additional Response Activities* to address the April 10, 2005 spill event at the Interim Measures No. 2 batch plant. This report presents the results of confirmation sampling following initial cleanup activities, and plan for additional soil removal and confirmation sampling. The information in this report was discussed via teleconference with Department of Toxic Substances Control representatives on April 27, 2005.

If you have any questions, please do not hesitate to call me.

Sincerely,

cc: Kate Burger/DTSC
Fred Zanoria/DTSC
Karen Baker/DTSC
Aaron Yue/DTSC
Cathy Wolff-White/BLM

Preliminary Results of Confirmation Sampling and Plan for Additional Response Activities

Spill Event on April 10, 2005 at IM No. 2 Batch Plant

PG&E Topock Compressor Station, Needles, California

On April 10, 2005, a spill of clarifier sludge occurred at the Interim Measure (IM) No. 2 batch treatment plant at the Pacific Gas and Electric Company (PG&E) Topock Compressor Station. Subsequently, a draft work plan was prepared that summarized the spill event, initial cleanup activities, and proposed confirmation sampling plan. The draft work plan was reviewed by the Department of Toxic Substances Control (DTSC) and their comments were incorporated into a final plan on April 22, 2005 (CH2M HILL 2005).

The preliminary confirmation sampling results were discussed via teleconference with DTSC on April 27, 2005. This memorandum summarizes the preliminary results of the confirmation sampling and proposed additional cleanup activities to restore the affected area to pre-existing conditions.

Preliminary Results and Plan for Additional Soil Removal and Confirmation Sampling

Confirmation sampling was completed on April 20 and 21, 2005. On April 20, a sludge sample was collected from the phase separator to characterize the waste. Confirmation samples were collected on April 21, 2005, after DTSC provided verbal comments on the draft confirmation sampling work plan. Mr. Fred Zanoria/DTSC was onsite during confirmation sampling to observe the site conditions and confirmation sample locations.

Table 1 summarizes the preliminary results. Figure 1 shows the approximate confirmation sample locations. The affected area has been divided into three areas for the purpose of determining which areas require additional soil removal: Valve Vault No. 1 Excavation, TW-2S Area, and the Phase Separator Containment Area.

Clarifier Sludge Characteristics

One sample of the sludge was collected from the phase separator container on April 20, 2005. The sample was analyzed for Title 22 Metals, hexavalent chromium, and total iron. The sludge had detectable concentrations of antimony, arsenic, barium, beryllium, copper, chromium (hexavalent and total), iron, lead, selenium, vanadium, and zinc.

Test Well TW-2S Area

Two confirmation samples (CS) were collected in the vicinity of test well TW-2S. Sample CS1 was collected in an area not affected by the spill, and sample CS2 was collected within the affected area adjacent to the concrete pad for the TW-2S. The background sample CS1 had a total chromium concentration of 23 milligrams per kilogram (mg/kg), which slightly

exceeded the calculated comparison value of 18.9 mg/kg. Analytical results at CS2 were below comparison values. Based on these results, the cleanup in the vicinity of TW-2S is considered complete.

Valve Vault No. 1 Excavation Area

Three samples were collected within the Valve Vault No. 1 Excavation. Sample CS3 was collected outside of the affected area along the south side of the excavation. Samples CS4 and CS13 were collected within the affected area along the east side of the excavation. The analytical data indicate that residual contamination may be present in the vicinity of CS4 (total chromium of 42 mg/kg) at the southeast corner of the excavation where the spill entered the vault.

Based on these results, additional soil excavation will be completed in the vicinity of CS4 and extend towards CS13. Two additional confirmation samples (CS4 and CS14) will be collected, as shown on Figure 1 (blue squares), and analyzed for a subset of Title 22 metals detected in the sludge sample (antimony, arsenic, barium, beryllium, copper, chromium (total), lead, selenium vanadium, and zinc) and hexavalent chromium.

Phase Separator Container Area

Eight samples were collected in the Phase Separator Container Area (CS5 through CS12). Sample CS9 was collected outside of the fence line to confirm that the spill did not spread beyond this area. The total chromium result at CS9 of 19 mg/kg was comparable to the calculated comparison value of 18.9 mg/kg. Total chromium concentrations at other locations ranged from 21 to 49 mg/kg, exceeding comparison values.

Based on these results, additional soil excavation around the Phase Separator Container Area is needed. Sample locations within the affected area (CS5 through C12, excluding CS9) will be re-sampled at their staked locations. In addition, two confirmation samples (CS15 and CS16) will also be collected underneath the footprint of the phase separator container (Figure 1). Samples will be analyzed for a subset of Title 22 metals detected in the sludge sample (antimony, arsenic, barium, beryllium, copper, chromium (total), lead, selenium vanadium, and zinc) and hexavalent chromium.

Schedule

Additional soil excavation and confirmation sampling in the Valve Vault No. 1 Excavation are anticipated to be completed on Thursday, April 28. Confirmation samples will be sent to the laboratory and tested on an expedited turnaround time (24 to 48 hours). Laboratory results will be tabulated and sent to the DTSC upon receipt to make a determination if the excavation can be backfilled to reduce further delay in IM No. 3 construction activities.

Additional soil excavation and confirmation sampling around the Phase Separator Container Area is anticipated to begin on Friday, April 28. Additional coordination is required to temporarily move the phase separator containers and roll-off bins. Confirmation samples will be sent to the laboratory and tested on a longer turnaround time (4 days). Upon receipt, laboratory results will be tabulated and sent to the DTSC to make a determination if the cleanup is complete in this area.

As described in the work plan, a report will be prepared once the cleanup activities are complete and data are validated to document the spill event and cleanup efforts.

References

CH2M HILL. 2005. *Confirmation Sampling Work Plan, Spill Event on April 10, 2005 at IM No. 2 Batch Plant, PG&E Topock Compressor Station, Needles, California*. April 22.

TABLE 1
PACIFIC GAS and ELECTRIC
TOPOCK
BATCH TREATMENT
CONFIRMATION SAMPLES
Sampled 4/21/2005

Location	Antimony	Arsenic (cancer)	Arsenic (non-cancer)	Barium	Beryllium	Cadmium	Cobalt	Copper	Hexavalent chromium ^a	Total chromium	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Iron
Comparison Values																				
Site Background ^b	ND	4.81	4.81	425	3.26	ND	9.38	19.2	NA	32.4	8.4	ND	0.542	21.6	0.927	NA	ND	38.7	55.2	23,900
MW-20 bench Background ^c										18.9										
Samples Collected in Vicinity of TW-2S																				
IM2-CS1-042105									ND	23					0.82					13000
IM2-CS2-042105									ND	14					0.96					12000
Samples Collected in Valve Vault No. 1 Excavation																				
IM2-CS3-042105									ND	17					0.67					13000
IM2-CS4-042105									0.47	42					0.78					10000
IM2-CS13-042105									ND	11					0.78					7200
Samples Collected Around Phase Separator																				
IM2-CS5-042105	ND	7.1	7.1	140	ND	ND	ND	9	ND	21	8.6	ND	ND	7.7	0.9	ND	ND	33	26	11000
IM2-CS6-042105	ND	6.9	6.9	990	ND	ND	5.3	10	ND	46	8.4	ND	ND	10	1.7	ND	ND	28	79	14000
IM2-CS7-042105									ND	30					1.1					13000
IM2-CS8-042105									ND	28					0.67					12000
IM2-CS9-042105									ND	19					0.79					12000
IM2-CS10-042105									ND	49					1.1					11000
IM2-CS11-042105	ND	5.5	5.5	120	ND	ND	ND	11	0.45	34	20		ND	10	1.2	ND	ND	25	32	12000
IM2-CS90-042105 (blind duplicate of CS11)	ND	4.4	4.4	130	ND	ND	ND	8.4	ND	29	16	ND	ND	8.1	0.97	ND	ND	22	27	9900
IM2-CS12-042105									ND	29					ND					12000
Equipment Blank																				
IM2-CSRINSATE-042105	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sludge Sample																				
042005-IM2-SLG TTLC	11.6	10.7	10.7	6.47	7.97	ND	ND	3.88	230	3810	2.33	ND	ND	ND	50.4	ND	ND	8.53	24.4	27600
042005-IM2-SLG TCLP (mg/L)		ND	ND	0.139	ND					0.174	ND	ND			ND	ND				
042005-IM2-SLG STLC (mg/L)										277										

Results are raw laboratory results. The data have not been validated and qualified.

Bold and highlighted values indicate exceedances of comparison values.

All sample results are in mg/Kg unless otherwise noted.

ND- Not detected at the RL

^aReporting Limit (RL) for hexavalent chromium by Method 7199 is approximately 0.4 mg/kg. Final reporting limit may vary after data are validated.

^bSite background concentrations from 0 to 10 feet below ground surface from draft RFI report, Table 10-1 (CH2M HILL 2005b)

^cCalculated site specific background concentrations based on the parametric best estimate of 95th percentile using RFI dataset from MW-20 bench (CH2M HILL 2005b).

Figure 1
Sampling Location Map

Not to scale

Samples collected April 20, 2005

Samples collected April 28 & 29 2005

