Malcolm Pirnie, Inc.
410 N. 44th Street, Suite 1000
Phoenix, AZ 85008
T: 602.438.0883 F: 602.438.0102
www.pirnie.com

January 25, 2013

Mr. Jim Sher, P.E.
Texas Commission on Environmental Quality
12100 Park 35 Circle, Building C, Mail Stop MC-177
Austin, Texas 78753

Re: **Texas Custodial Trust**
Former ASARCO Smelter Site, El Paso, Texas

Subject: **Additional PCB Sampling and Remediation Plan as an Addendum to the PCB Investigation Work Plan (April 2012)**

Dear Mr. Sher:

Malcolm Pirnie, Inc. (MP) is pleased to submit this letter detailing the delineation and interim remedial actions being added to the scope of work described in the Polychlorinated Biphenyl (PCB) Investigation Work Plan (April 2012). This letter briefly summarizes the results of the PCB sampling performed in June and October 2012, and the proposed additional PCB step-out sampling and initial excavation work to be performed. The purpose of these field activities is to characterize the PCB distribution and implement interim remedial actions as part of the self-implementing cleanup and disposal rules as defined by the EPA (40 C.F.R, Part 761).

INTRODUCTION

In June 2012, a total of 12 samples were collected in areas that had contained PCB containing equipment onsite. Eight additional locations proposed in the work plan, to be sampled during this event, could not be sampled due to site stockpiling activities or were located in buildings. Two locations (ERM-11 and AE2) are currently covered by the northwest category II stockpile. These will be sampled when access is available. The remaining six locations are in the powerhouse building. PCB sampling in the powerhouse is being conducted by others. Five of the 12 sample locations had concentrations greater than the Toxic Substance Control Act (TSCA) high-occupancy (residential) standard of 1 milligram per kilogram (mg/kg). In October 2012, 62 additional samples were collected and analyzed at 3 meter increment step-outs from the five locations with exceedances. Samples were proposed at ERM-14 but were not collected due to stockpiling activities in this area; these samples will be collected in the future. At AE8 five 0.5-1.0 foot interval samples were not analyzed since the 0-0.5 foot interval samples did not exceed 1.0 mg/kg. Details of the sampling methods are described in the Step-out Sampling Addendum letter (September 2012). Table 1 and Figures 1 and 2 show the locations and summarize the analytical results of the sampling events.

The self-implementation cleanup and disposal program provides prescribed remediation standards based on future site use and are described as either high occupancy or low occupancy sites. High occupancy sites are locations such as a residence, day care center or school, and require PCB-impacted material removal and disposal to below the TSCA standard of 1 mg/kg. Low Occupancy sites are commercial/industrial locations requiring removal and disposal to below the TSCA standard of 25 mg/kg. In addition to the TSCA standards, the proposed final site remedy will include the Texas Risk Reduction Rules (TRRP) standard for a commercial/industrial site of 7.1 mg/kg. Based on these standards, the PCB remediation activities described in this work plan will be carried out based on the low occupancy standards for TSCA, and the commercial/industrial land use standard for TRRP. These standards are summarized in Table 2 along with the proposed remedy actions.

Concentrations of PCBs above 7.1 and 25 mg/kg are present at step-out locations AE11, AE5, PCB-02 and PCB-03. Field observations and sampling results led to the following conclusions:

- Areas AE5 and PCB-02 contain a concrete slab, with approximately 6 inches of soil above the surface of the slab. Elevated concentrations of PCBs were reported for samples collected in the 0-0.5 foot interval samples (above the concrete slab) and the 0.5-1.0 foot interval samples (below the slab). Based on the concentrations above and below the slab, it is assumed that the concrete slab is also impacted by PCBs.
- Samples at AE11 were collected adjacent to a location known to have contained a transformer on a concrete slab. Sampling was limited to the west due to the presence of the powerhouse loading dock. Sampling in the powerhouse is being conducted by others. Concentrations of PCBs around the powerhouse will be excavated and disposed offsite.

Area PCB-03 consists of compacted soil with no concrete in the area. Additional delineation work will need to be conducted around PCB-03-W2. Concentrations above 25 mg/kg will be excavated.

Based on these additional conclusions, a path forward to continue the delineation and perform interim remedial actions is described below.

ADDITONAL PROPOSED SAMPLING AND INTERIM REMEDIAL ACTIONS

Based on the results of the previous sampling, the following actions are proposed:

- At PCB-02 and AE5, based on the analytical results, it is assumed that the surface soil material (0 to 0.5 foot) and the underlying concrete slab in this area are impacted by PCBs, at concentrations above 25 mg/kg. Therefore the upper soil layer, the slab, and the soils (0.5 to 1 foot) below the slab will be removed for offsite disposal. Based on the estimated slab dimensions (100 feet by 100 feet) and assuming 6 inches of surface soil, the volume to be removed is approximately 200 cubic yards. After removal activities, confirmation samples will be collected to document that the area has been remediated to 25 mg/kg. Additional delineation samples beyond the extent of the slab will be collected

at 10 foot increments to determine the extent of the PCB impacts to the TSCA standard of 25 mg/kg. If necessary, additional sampling will be conducted after the removals to delineate the area to the TRRP value of 7.1 mg/kg.

- At AE11, additional step-out samples will be collected at the 3 meter (10 foot) intervals to delineate the extent of PCB impacts to 25 mg/kg. Samples will be primarily to the east and south and will stop at the outer walls of buildings. These delineation samples will direct removal activities. If necessary, additional sampling will be conducted after the removals to delineate the area to the TRRP value of 7.1 mg/kg.
- At PCB-03, additional step-out samples will be collected at 3 meter (10 foot) intervals extending out from PCB-03-W2 to delineate the extent of PCB impacts to 25 mg/kg. These will include near surface (0 - 0.5 foot) and deeper samples (0.5 – 1 foot) to delineate and direct soil removals. If the analytical results of these step-out samples are above the TSCA standard of 25 mg/kg, additional sampling will be conducted until the extent of the material to be removed is determined. Materials above 25 mg/kg will be excavated and confirmation sampling will be done to verify the area has been remediated. If necessary, additional sampling will be conducted after the removals to delineate the area to the TRRP value of 7.1 mg/kg.
- At AE8, no further action is required.
- Based on the results of the PCB step-out sampling, the Trust will collect one round of groundwater samples during the next semi-annual groundwater sampling event (Spring 2013) at monitoring wells EP-49 and EP-51 and analyze the samples for PCBs using the EPA analytical method 505.

The soil sampling will be carried out according to the methods that have been detailed in the previous work plans, including sample handling, decontamination and step-out orientation.

INTERIM ACTION SCHEDULE

Due to the pending stack demolition, interim actions for areas PCB-02, AE5 and PCB-03 will be performed in January 2013. At the area around PCB-02 and AE5, the upper soil material located above the concrete slab will be removed and temporarily stockpiled in an appropriate location onsite or container for future offsite disposal. The concrete slab will be left in place during the stack demolition activities. Excavation of the slab and impacted soil below the slab will be completed following stack demolition activities. Step-out samples will be collected around PCB-03-W2 to delineate the nature and extent of PCBs in this area. Concentrations above 25 mg/kg will be excavated and stockpiled prior to the stack demolition.

If you have any questions regarding the proposed scope of work please feel free contact me at (602) 797-4536 or Alicia Fogg at (512) 527-6101.

Very truly yours,

MALCOLM PIRNIE, INC.

Scott M. Brown, P.E.
Vice President

Attachments: Tables and Figures

Table 1

PCB Sampling Results Summary
Former ASARCO Smelter Site
El Paso, Texas

Sampling Location	Sample ID	Result mg/kg (0-0.5 ft)	Result mg/kg (0.5-1.0 ft)
AE4-2		0.0937	--
AE-5	AE-5	***74***	***25.5***
	AE-5-N1	***611***	***480***
	AE-5-N2	***190***	*17.4*
	AE-5-E1	***29.9***	2.32
	AE-5-E2	*20.4*	4.79
	AE-5-W1	***98.9***	***118***
	AE-5-W2	***33.1***	***108***
	AE-5-S1	***48.2***	0.175
	AE-5-S2	*20*	0.01
AE6-0-0.5		0.79	--
AE7-2		0.016 J	--
AE-8	AE-8	0.189	--
	AE-8-E1	0.474	--
	AE-8-E2	0.118	--
	AE-8-W1	0.398	--
	AE-8-W2	0.189	--
	AE-8-S1	1.53	0.306
AE-11	AE-11	***39.3***	--
	AE-N1	***3440***	***540***
	AE-N2	4.63	5.57
	AE-E1	***939***	***32.3***
	AE-E2	***775***	***976***
	AE-S1	***308***	***1140***
	AE-S2	*7.82*	***42.8***
AE12-2		0.036	--
ERM8-2		0.2	--
ERM14-0-0.5		*10.4*	--
PCB01-2		0.139	--
PCB-02	PCB-02	1.83	*9.91*
	PCB-02-N1	*24*	2.3
	PCB-02-N2	*17.6*	*22.4*
	PCB-02-E1	*13.6*	0.203
	PCB-02-E2	***30.6***	0.252
	PCB-02-W1	*17.8*	0.883
	PCB-02-W2	*11.1*	3.8
PCB-03	PCB-03	3	--
	PCB-03-N1	3.34	0.88
	PCB-03-N2	4.77	0.25
	PCB-03-E1	3.62	0.28
	PCB-03-E2	1.76	0.749
	PCB-03-W1	2.75	0.206
	PCB-03-W2	***49.5***	0.111
	PCB-03-S1	4.54	2.24
	PCB-03-S2	3.29	0.752
PCB04-2		0.0109 J	--

mg/kg = milligrams per kilogram

J = Equal to or less than the method quantitation limit (MQL)

-- = sample not analyzed

Bold = Exceeds TSCA Low Occupancy Standard (25 mg/kg)

Italics = Exceeds TRRP Total Soil Combined (C/I), 30-acre site (7.1 mg/kg)

=Step Out Sampling Locations

Table 2

Summary of Standards and Anticipated Actions
Former ASARCO Smelter Site
El Paso, Texas

Concentration (mg/kg)	Standard	Proposed Action
< 1	TSCA high occupancy (residential) clean closure value	No action required
1 - 7.1	TRRP total soil combined for commercial/industrial site	Deed recorded under TRRP
7.1 - 25	TSCA low occupancy (commercial/industrial) clean closure value	Deed recorded and capped under TSCA; deed restricts land to low occupancy use under 40 CFR Section761.3 and specifically identifies low occupancy areas
> 25	TSCA low occupancy (commercial/industrial) clean closure value	Removed for offsite disposal

mg/kg = milligrams per kilogram
TRRP = Texas Risk Reduction Program
TSCA = Toxic Substance Control Act

AE12
0.036
AE11
39.3
74.0
AE5
PCB-03
3.00
PCB-01
0.139
1.83
PCB-02
AE4
0.0937
PCB-04
0.0109 J
ERM-8
0.20
ERM-14
10.4
AE7
0.016 J
AE6
0.790
85

Legend

Phase I Soil Sampling Locations

- PCB Concentrations below 1.0 mg/kg
- PCB Concentrations exceeding 1.0 mg/kg

Notes:
All samples were collected at the 0-0.5' interval.
J = Result equal to or below MQL

N

0 180 360

Feet

MALCOLM PIRNIE
211 N. Florence St.
Suite 202
El Paso, TX 79901

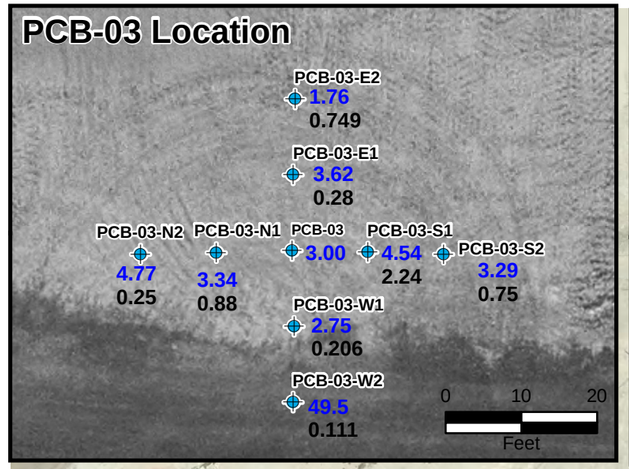
Texas Custodial Trust
El Paso Smelter Site
PCB Investigations

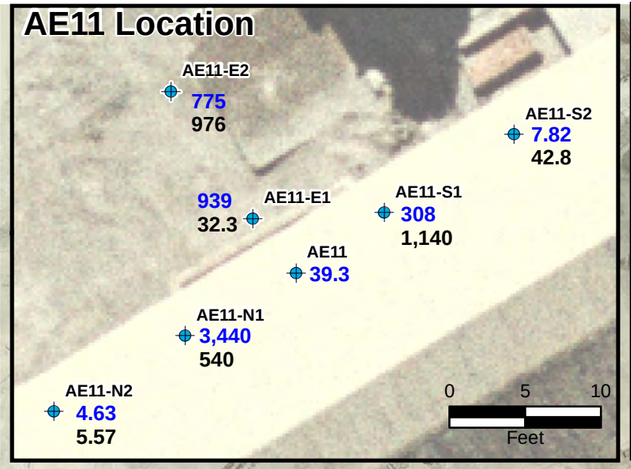
Phase I PCB Sampling Results

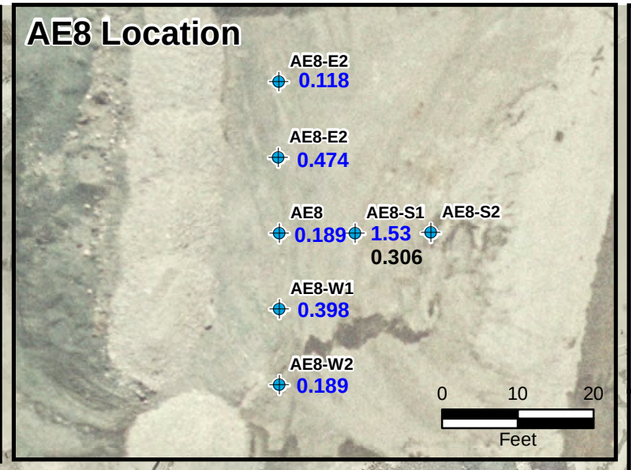
December 2012

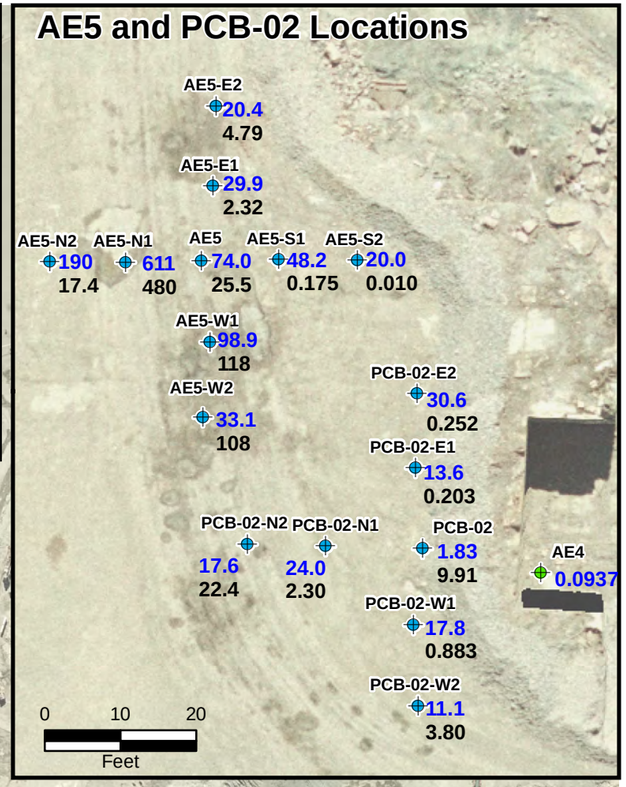
FIGURE 1

Map Document: (S:\GIS_Resources\Standards_Guidelines\MapTemplates\GIS_TEMPLATES_2005\11x17_Landscape.mxt)
7/19/2005 -- 5:27:24 PM









Legend

- Sample Locations

Notes:
1. PCB-03 sample locations are projected in front of the stack.
2. Two samples were collected at each location. One sample was collected at the 0'-0.5' interval and one sample was collected at the 0.5'-1.0' interval. If concentrations were less than 1.0 mg/kg then the next step out sample was not analyzed.
3. **Blue** = shallow sample (0'-0.5' interval)
   Black = deep sample (0.5'-1.0' interval)

N

0 100 200
Feet

MALCOLM PIRNIE
211 N. Florence St.
Suite 202
El Paso, TX 79901

Texas Custodial Trust
El Paso Smelter Site
PCB Investigations

PCB Step-Out Sampling Results

December 2012

FIGURE 2

Map Document: (S:\GIS_Resources\Standards_Guidelines\MapTemplates\GIS_TEMPLATES_2005\11x17_Landscape.mxt)
7/19/2005 -- 5:27:24 PM