UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

WASTE MANAGEMENT DIVISION
RCRA ENFORCEMENT OFFICE
RCRA COMPLIANCE EVALUATION INSPECTION AND ENFOCEMENT SAMPLING EVENT RESULTS REPORT

Purpose:	RCRA Compliance Evaluation Inspection and Enforcement Sampling
Facility:	Western Environmental Inc.
Location:	62-150 Gene Wilmas Drive Mecca, CA 92254
Mailing Address:	Same as above
EPA ID Number:	CAR000157206
Date of Inspection:	November 9, 2010
Date of Sampling Event:	February 9, 2011
EPA Representatives:	Cameron McDonald Environmental Scientist (415) 972-3308 (mcdonald.cameron@epa.gov) Dan Fernandez Environmental Scientist
Cabazon Band of Mission Indians Representative:	Darlene Coombs Environmental Coordinator 84-245 Indio Springs Parkway Indio, CA 92203-3499
Facility Representatives:	Matt Mullen Compliance Quality Control (760) 396-0222 William Carr (760) 396-0222 Brian Denning Safety Compliance (760) 396-0222
Report Date:	May 3, 2011

Report Prepared by: Cameron McDonald
Cameron McDonald

Introduction

Western Environmental Inc. ("WEI" or "the facility") is located within the Cabazon Resource Recovery Park, a 640-acre industrial park dedicated to environmental waste management solutions. The Cabazon Resource Recovery Park is a venture by the Cabazon Band of Mission Indians (CBMI). WEI is permitted by the CBMI to process up to 500,000 tons of soil per year. The CBMI permit allows WEI to handle and remediate solid waste such as petroleum-contaminated materials and approved non-hazardous wastes, including material containing pesticides and metals as long as the contamination does not reach Resource Conservation and Recovery Act (RCRA) levels stated in 40 Code of Federal regulations (CFR) Part 261. WEI is not permitted to handle RCRA hazardous waste, polychlorinated biphenyls (PCBs), or radioactive waste.

The U.S. Environmental Protection Agency (EPA) has received several complaints from members of the public claiming that WEI has been accepting, treating, and manifesting off-site hazardous waste in violation of federal law. In response to the complaints, EPA conducted a Compliance Evaluation Inspection on November 9, 2010 followed by a sampling event on February 9, 2011 to determine WEI's compliance with applicable federal environmental statutes and regulations, and in particular, the Resource Conservation and Recovery Act (RCRA), as amended, the regulations provided in the Code of Federal Regulations (C.F.R.), Title 40 Parts 261 through 265, 273 and 279.

EPA was assisted in this inspection and sampling event by representatives of the CBMI and the Bureau of Indian Affairs (BIA). The representatives were Ms. Darlene Coombs, the Environmental Coordinator for the CBMI and Mr. Blevins, for the BIA.

On November 9, 2010, the EPA inspectors conducted a physical inspection of the facility and reviewed records related to hazardous waste management practices at the facility. Facility representatives met with the inspectors, accompanied them during the physical inspection of the facility, and provided the records requested during the inspection. An exit briefing summarizing the inspection results was held with the facility representatives.

This report summarizes the observation made during the inspection and the results of the sampling event.

Background

The approximately 18.84 acre facility consists of an incoming soil pre-processing area, an outgoing soil post-treatment area, and four soil-processing areas called soil-composting cells. The facility also chemically fixates soil contaminated with lead and other heavy metals. The facility plans to thermally treat petroleum and pesticide contaminated soils. The facility also acts as a used oil transfer facility. They will take in used oil in bulk and transfer the used oil to one of their used oil tanks. Groundwater monitoring wells are located throughout the facility.

Preliminaries

On November 8, 2010, the inspectors entered the facility and introduced themselves to Ms. Darlene Coombs, Environmental Coordinator for the CBMI, Mr. Larry Blevins, BIA, Mr. Matt Mullen, in charge of Compliance Quality Control for WEI, Mr. Brian Denning in charge of Safety

Compliance for WEI, and Mr. William Carr of WEI. Also present were Mr. Ed Keenan and Mr. Chirumbolo of US Fuel Inc., a company in partnership with WEI.

The inspectors provided their credentials to all parties and explained that the visit that would consist of a physical inspection of the facility, a review of records, and an exit briefing for the facility representatives. The inspectors also informed all parties of WEI's right to claim the privilege of confidential business information during the inspection or after receipt of the inspection report.

The inspectors requested a tour of the facility with a facility representative. Everyone went on the facility tour. With the facility's consent, EPA inspector Daniel Fernandez, took photographs of items within the facility that were pertinent to the RCRA inspection.

In Brief

Prior to walking through the facility, EPA requested and received an informal briefing from the WEI representatives to obtain a more complete understanding of facility processes. Subjects covered included WEI's operation permit from the CBMI as a solid waste handling and remediation facility, bioremediation, thermal treatment, chemical fixation, used oil, pesticides, and sampling protocol.

Bioremediation

WEI representatives stated that any waste material accepted by the facility must be accompanied by a laboratory analysis of the waste material. WEI accepts for bioremediation petroleum-contaminated soil that is less than 3,000 parts per million (ppm) in total hydrocarbons. To verify that accepted soil is below this limit, the facility takes samples of the soil to ascertain the contamination level when the soil is delivered to the facility and through the remediation process to measure the rate of bioremediation. Before the cleaned soil leaves the site, WEI has the cleaned soil tested by a certified laboratory and declared as certified clean soil. According to the facility representatives, it takes from four to six weeks to completely bio-remediate the petroleum-contaminated soil.

Thermal Treatment

WEI is in the process of building a thermal treatment unit. When completed, the thermal treatment unit will remediate petroleum-contaminated soil from 10,000 to 15,000 ppm in total hydrocarbons. The contaminated soil will be cleaned to 100 ppm in total hydrocarbons or less. According to the facility representatives, any volatile organic compounds (VOCs) will be at non-detection levels. On the day of the sampling event, February 9, 2011, the thermal treatment unit was not yet operational.

For the thermal treatment, WEI will need a baghouse unit. WEI has met with EPA's Region 9 Air Division to discuss the need of a federal air permit.

Chemical Fixation

The chemical fixation unit is used to remediate soils contaminated with heavy metals. The facility representative stated that WEI only accepts metal contaminated soil that is below the federal limit for a hazardous waste. Cement kiln dust is the media that is used for the chemical fixation process. The facility samples the metal-contaminated soil prior to and after the fixation process. On the day of the sampling event, February 9, 2011, the chemical fixation unit was operational and samples were taken of both pre-treated soil and post-treated soil.

Used Oil

In 2010, WEI negotiated with CBMI and another company, US Fuel Oil Company to act as a transfer facility for used oil. The solid waste handling and remediation facility permit was modified by CBMI to allow for the facility to accept non-RCRA liquid wastes. In order to operate as a transfer facility, WEI obtained an EPA identification number, CAR000157206.

As a transfer facility, WEI accepts bulk loads of used oil from a registered hauler, usually from 2,000 gallons or more. According to the facility representative, used oil will be held on site for at least 24 hours or up to 35 calendar days. The used oil is transferred to an Arizona facility for use as a burner fuel. On the day of the sampling event, only one tank contained used oil. The EPA inspector took samples from this one tank.

The EPA inspectors reviewed several documents relating to used oil management including:

- WEI's used oils management protocols,
- a Spill Prevention, Control or Countermeasure Plan (SPCC),
- a fire evacuation plan,
- an emergency prevention plan and
- SPCC forms for monthly, quarterly and annual inspections.

Pesticides

According to the facility representatives, WEI accepts soil contaminated at low levels with pesticides. The facility representatives did not clarify how the facility determines a "low level" concentration or specifically which pesticides are accepted. The inspectors received the impression that WEI accepts most pesticides used in California. WEI plans to treat or bio-remediate pesticide-contaminated soil biologically with a mold or use thermal treatment.

WEI Sampling Protocol

WEI sampling protocols attempt to follow both federal and California regulations. For used oil, WEI will take one sample from a tank truck and test for PCBs. The used oil in the truck is rejected if the analysis shows PCBs over 2 ppm or halogens over 1,000 ppm.

For petroleum-contaminated soils, WEI representatives stated that the facility follows the Department of Toxic Substances Control's (DTSC) protocol of taking four samples for every 1,000 cubic yards, or ten samples for 5,000 cubic yards. The petroleum-contaminated soil is arranged in windrows of 1,000 cubic yards and WEI takes from 13 to 15 samples during the bioremediation process. WEI also randomly screens for metals and PCBs in accepted petroleum-contaminated soils for every 1,000 cubic yards.

Facility Walkthrough

For the walkthrough, the inspectors asked to be taken along the route that a load of petroleum-contaminated soil would be processed to remove the petroleum. The first place visited was the truck or scale house. At this building, an incoming load of petroleum-contaminated soil is logged into the facility. The facility employee in charge at this area conducts a visual inspection of the load of petroleum-contaminated soil, and checks the trucker's paperwork to affirm that the load contains the expected waste material. The driver of the truck is then directed by the facility employee where to unload the petroleum-contaminated soil.

Next, the inspectors were shown where the untreated or newly arrived petroleum-contaminated soil is laid down. In this area, there was a strong odor of gasoline. The facility representatives described how the petroleum-contaminated soil is staged for bioremediation. The soil is divided into windrows of about 1,000 tons each, five to eight feet deep and about 500 feet in length. Water and microbes are added to the soil by spraying and the soil is tilled periodically to increase the rate of bioremediation.

In the area where the newly arrived petroleum-contaminated soil is placed, the inspectors also observed equipment that separates plastics, wood and metal debris from the contaminated soil. The plastic debris is segregated at other areas of the facility and compacted or bound to sell. The wood debris, if not treated, is processed into wood chips or compost, also to sell. The metal debris is collected for scrap.

The inspectors next walked to the location of the future thermal treatment unit and chemical fixation unit. On the day of the inspection, WEI representatives stated they planned to have the thermal treatment unit and chemical fixation unit in operation by December 1, 2010.

The next work area was the used oil farm. The inspectors observed three tanks in a bermed area. One tank has a 22,000 gallon capacity, the second tank has a 30,000 gallon capacity and the third tank has a 6,800 gallon capacity. According to the facility representatives, the bermed area is designed to hold 110% of the largest tank or 33,000 gallons.

The facility representative noted that when they send used oil samples off for PCB analysis, WEI asks for 24 hour turnaround.

The inspectors observed signs of an oil release inside of the berm that according to the facility representative occurred during the filling of one of the tanks (see Photo PB090001, Attachment 1). The inspectors also observed a design flaw in the berm as there was an intentional groove in the concrete at the floor of the berm. EPA advised the facility representatives to remove the spilled oil and fill in the groove. On November 15, 2010, EPA received, via electronic mail, documentation including photographs showing that WEI had filled in the groove at the floor of the berm and had cleaned up the released oil.

The last area observed by the inspectors was a pond holding wastewater to be treated. The facility representative stated that all liquids generated by the facility, such as oily water, mop water, fire hydrant water, and so forth, are placed in this pond.

The facility representative outlined how WEI manages the water and sediments in the pond. These processes are:

1. Use a skimmer to remove oil floating on water,
2. Pump wastewater into treatment tanks and add flocculants, the precipitated solids are removed and analyzed,
3. Remove and analyze solids that are accumulated in the wastewater pond. If the analysis shows significant hydrocarbons, these solids are blended with that is undergoing petroleum bioremediation.

The water in the tanks is filtered through three carbon filter units and the cleaned water is used for hydration and applied to the windrows for the first week of the bioremediation process. When the carbon filters are spent, the facility plans to put the spent carbon filter through the

thermal treatment unit to remove volatile organic compounds. The cleaned carbon would then be mixed with soil undergoing treatment.

Conclusion of November 9, 2010 Inspection

After the inspectors had concluded the inspection, they met again with the facility representatives and the representative of the Cabazon Band of Mission Indians. The inspectors discussed the findings of the inspection.

Preparation for the February 9, 2011 Sampling Event

WEI is permitted to accept only non-RCRA hazardous material for bioremediation. The purpose of the EPA Region 9 RCRA Enforcement Office sampling event was to investigate whether WEI is accepting RCRA hazardous waste such as:

- Soils contaminated with metals above the EPA regulatory level (i.e., 40 CFR 261.24; characteristic or listed hazardous waste),
- Used oil that falls out of used oil specifications (i.e. Table 1 40 CFR 279.11); or
- Soil contaminated with pesticides above toxicity characteristic levels.

Sampling for polychlorinated biphenyls (PCBs) was also conducted to verify compliance with Toxic Substances Control Act (TSCA) regulations.

The EPA RCRA inspector, Cameron McDonald, devised the sampling plan according to EPA protocol. The sampling plan (Attachment 3) outlined the areas selected for sampling and the number and type of samples per area. In summary, grab soil samples were to be taken in the following sections of the facility:

- Incoming soil pre-treatment area,
- Out-going soil post treatment area,
- Incoming soil chemical fixation area,
- Area that stores the soil after chemical fixation,
- Incoming soil thermal desorption area,
- Area that stores the soil after thermal desorption treatment,
- Wastewater holding pond, and
- Three used oil tanks.

Sampling Event

The inspectors arrived on-site at the WEI facility in Mecca, CA on February 9, 2011 at 0700 hours and met with Ms. Darlene Coombs and facility representatives. Sampling began at the out-going soil post treatment area in order to reduce opportunities of cross contamination.

When the EPA inspectors arrived at the WEI facility, they were informed by facility personnel that the thermal desorption unit was not yet in operation and that only one used oil tank currently held used oil. Also, the wastewater pond had been emptied into five Baker tanks with neutralization and sedimentation being conducted in each tank. On that day, three of the five Baker tanks held wastewater.

The changes in the expected operations at the facility mandated on-site changes in the sampling plan. No samples were taken from the thermal desorption area as there was not any soil to be treated at that time. The EPA inspectors took five grab samples from each wastewater tank and five grab samples of the one used oil tank that contained used oil.

The EPA inspectors sampled six areas on the facility which included the outgoing soil post treatment area, the incoming soil pre-treatment area, soil destined for the chemical fixation unit, soil treated by the chemical fixation unit, one tank holding used oil and three baker tanks holding wastewater being treated at the facility. The table below outlines the sampling protocol.

Table 1 – Sampling Protocol for WEI

Sampling Location	Analytical Parameters
Incoming soil pre-processing area	TCLP Metals, PCBs, Volatile organic compounds, Semi-Volatile organic compounds
Outgoing soil post treatment area	TCLP Metals, PCBs, Volatile organic compounds, Semi-Volatile organic compounds
Chemical Fixation Unit Before	TCLP Metals, PCBs, Pesticides
Chemical Fixation Unit After	TCLP Metals, PCBs, Pesticides
Water Treatment Area (Pond)	TCLP Metals, Volatile organic compounds, Semi-Volatiles organic compounds
Used oil transfer area	PCBs

Out-Going Post Treatment Area

Surface soil samples for the TCLP for metals, PCBs, VOC and SVOC analyses were collected as grab samples from a depth of 0 to 6 inches below soil surface. The surface soil samples taken for PCBs, VOC, and SVOC analyses were collected using a stainless steel hand trowel. The soil was placed in a sample dedicated disposable pail and homogenized with the trowel. The homogenized soil in the pail was transferred with a trowel from the pail to a 16-ounce glass sample container. The sample containers were filled to the top, and no soil was allowed to remain in the lid threads prior to being closed to prevent potential contaminant migration to or from the sample.

The surface soil samples taken for TCLP metal analyses were collected using a plastic hand trowel. The soil was placed in a sample dedicated disposable pail and homogenized with the trowel. The homogenized soil in the pail was transferred with a trowel from the pail to a 16-ounce glass sample container. The sample containers were filled to the top, and no soil was allowed to remain in the lid threads prior to being closed to prevent potential contaminant migration to or from the sample.

A total of five separate grab samples and one co-located duplicate sample were taken. The analytical results from TCLP metal, PCBs and semi-volatile analysis are presented in Tables 2 through 4 below. The tables are a simplified presentation of all of the laboratory analyses. If an analyte resulted in non-detect (ND) for all five or six samples, the analyte is not listed in the relevant table presented in the report. Attachment 4 contains the entire Region 9 Laboratory TCLP metal analysis report.

Table 2 - TCLP Metal Analytical Results for Out going soil post treatment area in mg/kg

Analyte for TCLP Extraction	OSPTA-1	OSPTA-2	OSPTA-3	OSPTA-4	OSPTA-5	OSPTA-6
Lead	ND	0.19	ND	1.2	ND	ND
Barium	ND	0.51	ND	0.54	ND	ND

The analytical results for the out-going soil post treatment area did not reveal metals, semi-volatile organic compounds or volatile organic compounds at levels that would meet the regularatory levels for RCRA hazardous. The analytical results for the SVOCs were non-detect for most of the SVOCs analyzed. The SVOCs that did have analytical results above non-detect were below the non-wastewater Universal Treatment Standards for the specific compound listed in 40 CFR § 268.48. Table 3 below shows the SVOC results. Attachment 5 contains the entire Region 9 Laboratory SVOCs analysis report.

Table 3 – SVOC Analytical Results for Out going soil post treatment area in mg/kg

Semi –Volatile Analyte	EPA Waste Code	OSPTA -1	OSPTA-2	OSPTA-3	OSPTA-4	OSPTA-5	OSPTA-6	UTS (mg/kg)
Phenanthrene		ND	ND	ND	0.17	ND	ND	
Fluoranthene	U120	ND	ND	ND	0.35	ND	ND	3.4
Pyrene		ND	ND	ND	0.29	ND	ND	
Benzo(a)anthracene		ND	ND	ND	0.17	ND	ND	
Chrysene	U050	ND	ND	ND	0.18	ND	ND	3.4
Bis(2-ethylhexyl) phthalate	U028	0.66	0.18	1.80	ND	2.20	1.60	28
Benzo(b)fluoranthene		ND	ND	ND	0.19	ND	ND	
Benzo(a)pyrene	U022	ND	ND	ND	0.14	ND	ND	3.4
Benzo(g,h,i)perylene		ND	ND	ND	0.92	ND	ND	
Pentadecane, tetramethyl		ND	8.30	ND	1.10	ND	ND	
Cholestanol		ND	ND	7.0	ND	8.30	6.20	
Cholestenol		ND	ND	6.0	ND	12.00	5.50	
Ethanone, cyclohexyl-		ND	ND	4.50	ND	ND	ND	
Pentadecane		ND	ND	5.40	ND	ND	3.90	
Tetradecane		ND	ND	6.90	ND	7.60	5.50	
Tridecane		ND	ND	9.20	ND	7.60	5.00	
Tritetracontane		ND	ND	8.60	ND	ND	ND	
Undecane, dimethyl		ND	ND	6.30	ND	7.20	ND	
Dodecane, trimethyl		ND	ND	ND	ND	5.90	4.00	
Nonadecane		ND	ND	ND	ND	11.00	8.10	
Octane, dimethyl		ND	ND	ND	ND	ND	4.90	

The PCB analytical results for all out-going soil post treatment samples showed less than 1 parts per million (ppm) of total PCBs. Attachment 6 contains the entire Region 9 Laboratory analysis report for PCBs.

Table 4 – PCB Analytical Results for Out-going soil post treatement area in ppm

PCB Analytes	OSPTA-1	OSPTA-2	OSPTA-3	OSPTA-4	OSPTA-5	OSPTA-6
Aroclor 1248	0.16	0.069	ND	ND	ND	ND
Aroclor 1254	0.25	0.065	ND	ND	0.018	0.025
Aroclor 1260	0.06	0.043	ND	ND	0.012	0.013
Aroclor 1262	ND	ND	ND	0.062	ND	ND
Total ppms	0.47	0.18	0.00	0.0062	0.03	0.04

Samples to be analyzed for VOCs were collected last in order to be delivered to the Region 9 laboratory within the maximum holding time of 48 hours. The surface soil samples for VOC analyses were collected as independent discrete grab samples from a depth of 0 to 2 inches below ground surface using EnCore® samplers. A total of five separate grab samples and one co-located duplicate sample were taken. The analytical results for the VOCs were non-detect (ND) for all of the VOCs analyzed except acetone. The acetone analytical result was determined to be the result of laboratory contamination. Attachment 7 contains the entire Region 9 Laboratory VOC analysis report.

Chemical Fixation Unit – After Treatment

Surface soil samples for the Toxicity Characteristic Leaching Procedure (TCLP) for metals, PCBs, and pesticides analyses were collected as grab samples from a depth of 0 to 6

inches below soil surface. The surface soil samples taken for PCBs and pesticides analyses were collected using a stainless steel hand trowel. The soil was placed in a sample-dedicated disposable pail and homogenized with the trowel. The homogenized soil in the pail was transferred with a trowel from the pail to a 16-ounce glass sample container. The sample containers were filled to the top, no soil was allowed to remain in the lid threads prior to being closed to prevent potential contaminant migration to or from the sample.

The surface soil samples taken for TCLP metal analyses were collected using a plastic hand trowel. The soil was placed in a sample-dedicated disposable pail and homogenized with the trowel. The homogenized soil in the pail was transferred with a trowel from the pail to a 16-ounce glass sample container. The sample containers were filled to the top, taking care to prevent soil from remaining in the lid threads prior to being closed to prevent potential contaminant migration to or from the sample.

A total of five separate grab samples and one co-located duplicate sample were taken. The analytical results from pesticides and PCBs are presented in Table 5. The TCLP metal analytical results did show the presence of mercury, lead, barium and cadmium. All of the numbers were below TCLP limits. Attachment 4 contains the entire Region 9 Laboratory TCLP metal analysis report.

Table 5 --TCLP Metal Analytical Results for Chemical Fixation Unit After Treatment mg/kg

ANALYTE	CFUA-1	CFUA-2	CFUA-3	CFUA-4	CFUA-5	CFUA-6
Mercury	ND	ND	ND	ND	ND	0.00018
Chromium	ND	0.051	ND	ND	ND	ND
Lead	ND	0.30	0.17	1.2	ND	ND
Barium	0.76	0.64	0.67	0.63	0.58	0.62
Cadmium	0.050	0.034	0.035	0.040	0.037	0.030

The PCB analytical results for the chemical fixation unit after treatment presented in Table 6 showed a low presence of PCBs which lead to the assumption of a higher level PCBs in the soil before treatment. Attachment 6 contains the entire Region 9 Laboratory PCB analysis report.

Table 6 – PCB Analytical Results for the Chemical Fixation Unit After Treatment in ppm.

ANALYTES	CFUA-1	CFUA-2	CFUA-3	CFUA-4	CFUA-5	CFUA-6
Aroclor 1248	0.79	0.54	0.4	0.23	0.15	1.3
Aroclor 1254	0.86	0.46	0.35	0.19	0.13	1.7
Aroclor 1260	ND	0.098	0.083	0.047	0.034	0.2
Aroclor 1262	0.25	ND	ND	ND	ND	ND
Total ppms	1.9	1.1	0.83	0.47	0.31	3.2

The pesticide analytical results for the chemical fixation unit after treatment, presented in Table 7, showed a minute presence of pesticides significantly below even California's Total Threshold Limit Concentration (TTLC). Attachment 8 contains the entire Region 9 Laboratory organochlorine pesticides analysis report.

Table 7 – Pesticide Analytical Results for the Chemical Fixation Unit After Treatment in mg/kg

Analyte	CFUA-1	CFUA-2	CFUA-3	CFUA-4	CFUA-5	CFUA-6	TTLC
beta-BHC	0.011	ND	ND	ND	ND	0.011	NA
Dieldrin	0.028	0.013	0.033	0.04	0.049	0.057	8
DDE, DDD, DDT	0.103	0.087	0.064	0.085	0.181	0.091	1
gamma-Chlordane	0.0068	0.0065	ND	0.0066	0.0084	0.0052	2.5

In-coming Soil Pre-processing Area

Surface soil samples for the Toxicity Characteristic Leaching Procedure (TCLP) for metals, PCBs, VOCs and SVOC analyses were collected as described in the out-going post treatment area. A total of five separate grab samples were taken. The analytical results from PCBs and SVOCs analysis are presented in the Tables 8 and 9, below. Analytical results for TCLP metals and VOCs are not presented in tabular form as all of the results were non-detect (ND), except for ISPPA-4 and ISPPA-5 TCLP metals which were 0.50 and 0.55 mg/L, respectively, for barium.

Table 8 shows that the analytical results for the SVOCs for the in-coming soils were non-detect for most of the SVOCs tested. The SVOCs that did have analytical results above non-detect were below the non-wastewater Universal Treatment Standards for the specific compound listed in 40 CFR § 268.48. Attachment 5 contains the entire Region 9 Laboratory SVOCs analysis report for in-coming soils.

Table 8 – SVOC Analytical Results for In-coming Soil Pre-processing Area in mg/kg

ANALYTE	ISPPA-1	ISPPA-2	ISPPA-3	ISPPA-4	ISPPA-5	UTS (mg/kg)
Phenanthrene	ND	0.19	0.16	ND	ND	
Di-n-butyl phthalate	0.15	ND	ND	ND	ND	28
Fluoranthene	0.17	0.32	0.24	ND	ND	3.4
Pyrene	0.23	0.41	0.31	ND	ND	8.2
Butyl benzyl phthalate	ND	0.12	0.26	ND	ND	28
Benzo(a)anthracene	ND	0.19	0.14	ND	ND	3.4
Chrysene	0.14	0.24	0.19	ND	ND	3.4
Bis(2-ethylhexyl) phthalate	0.62	0.58	0.67	ND	ND	
Benzo(b)fluoranthene	0.16	0.26	0.21	ND	ND	6.8
Benzo(a)pyrene	0.12	0.18	0.15	ND	ND	3.4
Indeno(1,2,3-cd)pyrene	ND	0.13	0.1	ND	ND	3.4
Benzo(g,h,i)perylene	0.12	0.16	0.13	ND	ND	1.8
Cholestenol	1.6	1.5	1.0	ND	ND	
Dodecane, trimethyl (01)	0.83	ND	ND	ND	ND	
Dodecane, trimethyl (02)	1.3	ND	ND	ND	ND	
Octacosane	ND	1.2	ND	ND	ND	
Methoxyacetic acid, tetrade.	ND	ND	1.0	ND	ND	

Table 9 shows that the PCB analytical results for the chemical fixation unit after treatment showed the presence of PCBs up to 4.25 ppm. Attachment 6 contains the entire Region 9 Laboratory polychlorinated biphenols analysis report.

Table 9 – PCB Analytical Results for In-coming Soil Pre-processing Area in µg/kg

	Results in ug/kg				
ANALYTE	ISPPA-1	ISPPA-2	ISPPA-3	ISPPA-4	ISPPA-5
Aroclor 1260	1.2	1.9	1.3	ND	ND
Aroclor 1262	1.4	2.1	1.4	ND	ND
Aroclor 1248	0.22	0.25	0.24	ND	ND
Aroclor 1254	ND	ND	ND	0.003	0.005
Total ppms	2.82	4.25	2.94	0.003	0.005

Chemical Fixation Unit – Before Treatment

Surface soil samples for the Toxicity Characteristic Leaching Procedure (TCLP) for metals, PCBs, and pesticide analyses were collected as described in the out-going post treatment area. A total of five separate grab were taken. The analytical results from pesticides and PCBs are presented in Tables 10 and 11 below. TCLP metal results are not presented in tabular form as all of the results were non-detect (ND), except for CFUB-3, which was 0.52 mg/L for barium.

The PCB analytical results for the chemical fixation unit before treatment shows PCBs of up to 0.68 ppm. Attachment 6 contains the entire Region 9 Laboratory PCB analysis report.

Table 10 – PCB Analytical Results for the Chemical Fixation Unit Before Treatment in ppm

ANALYTE	CFUB-1	CFUB-2	CFUB-3	CFUB-4	CFUB-5
Aroclor 1248	0.072	0.17	0.18	0.21	0.24
Aroclor 1254	0.072	0.23	0.18	0.21	0.38
Aroclor 1260	0.026	0.058	0.046	0.055	0.063
Total ppms	0.17	0.458	0.406	0.475	0.683

The pesticide analytical results in Table 11, for the chemical fixation unit prior to treatment showed a minute presence of pesticides significantly below California's Total Threshold Limit Concentration (TTLC). Attachment 8 contains the entire Region 9 Laboratory pesticides analysis report.

Table 11 – Pesticide Analytical Results for **the Chemical Fixation Unit Before Treatment in mg/kg**

Analyte	CFUB-1	CFUB-2	CFUB-3	CFUB-4	CFUB-5	TTLC
beta-BHC	ND	0.0068	ND	0.0054	ND	NA
DDE, DDD, DDT	0.03	0.118	0.176	0.076	0.042	1.0
gamma-Chlordane	0.01	0.0067	ND	0.0064	ND	2.5

Wastewater Treatment Area

Wastewater samples were taken by grab samples from three Baker tanks. The Wastewater tank samples were analyzed for TCLP metals, VOCs and SVOCs. The samples from Wastewater Tank #1 were taken by using a hose connected to the tank. The samples from Wastewater Tanks #3 and #5 were taken from an open access at the top of the Baker tank. According to the facility representatives, Wastewater Tank #5 had finished the treatment process.

The metal analysis by inductively coupled plasma (ICP) for the samples from the three wastewater treatment tanks resulted in numbers significantly below the TCLP limits as shown in

Table 12. The mercury analysis was conducted using cold vapor atomic absorption. Attachment 9 contains the entire Region 9 Laboratory inductively coupled plasma analysis report.

Table 12 – Metals by ICP Analytical Results for Wastewater treatment tanks in mg/L

ANALYTE	WTA-1	WTA-3	WTA-4	WTA-5
Lead	0.63	0.025	0.018	0.6
Selenium	0.21	0.049	0.045	0.21
Silver	0.037	ND	ND	0.037
Arsenic	0.093	0.024	0.02	0.093
Barium	0.74	0.026	0.024	1.2
Cadmium	0.33	0.0052	0.0046	0.35
Mercury	0.0007	ND	ND	0.0013
Chromium	0.77	0.043	0.039	0.6

The analytical results for the SVOCs were non-detect for most of the SVOCs analytes tested. Table 13 lists SVOC analytes that did have analytical results above non-detect. These analytes were at levels below the non-wastewater Universal Treatment Standards for the specific compound listed in 40 CFR §266.48. Attachment 10 contains the entire Region 9 Laboratory SVOC analysis report for wastewater.

Table 13 – SVOC Analytical Results for wastewater in mg/L

ANALYTE	WTA-1	WTA-3	WTA-4	WTA-5	UTS (mg/L)
1,4-Dioxane	1.3	0.77	0.79	1.1	12.0
2-Methylnaphthalene	0.46	ND	0.85	4.6	
3&4-Methylphenol	5.1	4	4.4	1.9	
4-Chloro-3-methylphenol	ND	0.66	0.26	ND	
Benzyl alcohol	78	65	64	45	
Bis(2-ethylhexyl) phthalate	1.3	0.32	0.27	1.8	
Butanoic acid, methyl	ND	ND	7.7	ND	
Butanol, methyl	ND	ND	ND	33	
Diethyl phthalate	0.62	0.39	0.41	0.36	0.2
Ethanol, butoxy	29	28	41	26	
Ethanol, butoxyethoxy	23	ND	21	ND	
Ethanol, butoxyethoxy etho (01)	32	8.5	ND	46	
Ethanol, butoxyethoxy etho (02)	120	47	ND	ND	
Ethanol, ethoxyethoxy ethoxy	ND	98	ND	29	
Ethanol, -methoxyethoxy	27	ND	28	ND	
Ethanol, methoxyethoxy eth (01)	11	8.4	8.5	11	
Ethanol, methoxyethoxy eth (02)	44	25	ND	ND	
Hexadecanoic acid	ND	ND	ND	28	
Pentaethylene glycol	ND	ND	8.9	ND	
Pentanoic acid	41	ND	ND	42	
Pentanol, ethyl-methyl	ND	ND	7.5	ND	
Pentaoxanonadecan-ol	35	26	8	21	
Pentaoxapentadecane	ND	10	ND	ND	
Phenol	24	24	23	13	0.039
Propanol, oxybis	ND	ND	ND	26	
Tetraoxadodecane	ND	8.3	ND	ND	

Table 13 – SVOC Analytical Results for wastewater in mg/L					
ANALYTE	WTA-1	WTA-3	WTA-4	WTA-5	UTS (mg/L)
Tetraoxahexadecan-ol	ND	27	38	ND	

The analytical results for the VOCs were non-detect (ND) for 62 out of the 72 of the volatile organic compounds tested. Table 14 lists the VOC analytes that did have analytical results above non-detect. The acetone analytical result was determined to be the result of laboratory contamination. Attachment 11 contains the entire Region 9 Laboratory VOC analysis report for wastewater.

Table 14 – VOC Analytical Results for wastewater in mg/L

ANALYTE	WTA-1	WTA-3	WTA-4	WTA-5
1,2,4-Trimethylbenzene	ND	ND	ND	54
2-Butanone (MEK)	8.7	5.8	7.6	6.9
Acetaldehyde	3.9	2.5	3.6	2.5
Acetone	12	7.5	9.6	8.9
Carbon disulfide	0.052	ND	0.026	ND
Dichloromethane	ND	ND	ND	0.031
m&p-Xylene	0.081	ND	ND	ND
Naphthalene	0.061	0.048	0.044	0.03
o-Xylene	0.036	ND	ND	ND
Toluene	0.091	0.038	0.037	0.055

Used Oil Tank Area

The used oil was only analyzed for PCBs and both samples showed non-detect for all aroclors of PCB. Attachment 12 contains the entire Region 9 Laboratory PCB analysis report.

Conclusions

RCRA Hazardous Waste

The analytical results for TCLP metals, VOCs and SVOCs did not reveal RCRA hazardous waste in any of the soil, water, or oil samples taken at the WEI facility.

Pesticides

In general, pesticides are not regulated under RCRA but under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). However, some pesticides are considered RCRA hazardous waste if handled or disposed improperly. The soil samples taken at WEI were analyzed for those pesticides that could be classified as RCRA hazardous waste. The pesticide analytical results showed a minute presence of pesticides significantly below the Total Characteristic Leaching Program (TLCP).

PCBs

PCBs were found in samples taken at the incoming soil pre-processing area, the outgoing soil post treatment area, and the chemical fixation unit, both before and after treatment. PCBs are not regulated under RCRA but under the Toxic Substances Control Act (TSCA). TSCA does not regulate PCBs at concentrations less than 1 ppm. Above 1 ppm PCBs, TSCA stipulates a

range of self-implementing cleanup levels based upon future high and low occupancy scenarios that are identified in 40 CFR 761.61(a)(4).

EPA's Site Remediation Program has established residential and non-residential direct contact Soil Remediation Standards (SRS) for PCBs. The residential SRS (RSRS) is 0.2 ppm and the non-residential SRS (NRSRS) is 1 ppm.

Subsequent to the Sampling Event

On April 5, 2011, EPA sent a "Transmittal of Information and Request for Information Pursuant to 3007(a) of the Resource Conservation and Recovery Act" letter to Western Environmental Inc. (WEI). WEI received the letter on April 13, 2011, and responded within the requested 14-day time period.

The letter transmitted the laboratory analysis results from the EPA sampling, and noted that polychlorinated biphenyls (PCBs) were detected in some of the samples. Among other information requested, we asked if WEI could identify the source or potential source of the low levels of PCBs.

WEI identified the source as soil excavated from a former scrap iron and steel recycling yard. WEI's response included correspondence from the metals recycler stating they had no historical information on the PCB levels of the oil from the time the oil was spilled or released at the former storage yard.

Recommendation

WEI should review and improve their procedures for in-coming soil to reduce or eliminate the likelihood of accepting PCB-contaminated soil.

LIST OF ATTACHMENTS

Attachment 1:	Photo Log for the November 9, 2010 Inspection
Attachment 2:	Photo Log for the February 9, 2011 Enforcement Sampling Event
Attachment 3:	EPA Sampling Plan for WEI
Attachment 4:	TCLP Metals for Solids by ICP, Region 9 Laboratory Analytical Report
Attachment 5:	Semi-Volatile Organic Compounds for Solids by GS/MS, Region 9 Laboratory Analytical Report
Attachment 6:	PCB Aroclors by GC/ECD for Solids, Region 9 Laboratory Analytical Report
Attachment 7:	Volatile Organic Compounds for Solids by GS/MS, Region 9 Laboratory Analytical Report
Attachment 8:	Organochlorine Pesticides for Solids by GC/ECD, Region 9 Laboratory Analytical Report
Attachment 9:	TCLP Metals in Water by ICP, Region 9 Laboratory Analytical Report
Attachment 10:	Semi-Volatile Organic Compounds in Water by GS/MS, Region 9 Laboratory Analytical Report
Attachment 11:	Volatile Organic Compounds in Water by GS/MS, Region 9 Laboratory Analytical Report
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ATTACHMENT 1

PHOTO LOG FOR THE NOVEMBER 9, 2010 INSPECTION

Western Environmental Inc. Photo Log - Mecca, CA November 9, 2010

Camera No.	Description
PB090001	Photo of spilled oil in Used oil tanks berm
2	Photo of design flaw in the berm as there was an intentional groove in the concrete at the floor of the berm
3	55-gallon container labeled used oil and fuel filters
4	6 55-gallon containers holding used oil inside a bermed area
5	Close-up of smaller containers used for the transfer of used oil
6	6 55-gallon containers holding used oil inside a bermed area
7	6 55-gallon containers holding used oil inside a bermed area
8	WEI facility showing the Scale house and a pile of petroleum contaminated soil.

PB090001.JPG
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