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Part C 4J-1

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of:	)	Docket No. _____
	)	
Alcoa Cast Plate Division Site	)	IMMINENT AND SUBSTANTIAL
3200 Fruitland Avenue	)	ENDANGERMENT
Vernon, California	)	DETERMINATION AND CONSENT ORDER
	)	
Respondent:	)	
Pechiney Cast Plate, Inc.	)	Health and Safety Code
3200 Fruitland Avenue	)	Sections 25355.5(a)(1)(B) and (C),
Vernon, California	)	25358.3(a), 58009 and 58010
	)	

I. INTRODUCTION

1.1 Parties. The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) and Pechiney Cast Plate, Inc. (Pechiney) at 3200 Fruitland Avenue, Vernon, County of Los Angeles, California, a subsidiary of Alcan, Inc., Chicago, Illinois, (Respondent) hereby enter into this Consent Order (Order) and agree to its terms and conditions. DTSC and Respondent are referred to collectively herein as the Parties.

1.2 Property/Site. This Order applies to the property located at 3200 Fruitland Avenue, Vernon, Los Angeles County, California. The property consists of 26.9 acres and is identified by Assessor's Parcel number(s) (APN) 6301-008-010, -011, -012, and -013 (Property, also referred to as the Site). A map showing the Property is attached as Exhibit A. As shown on the map in Exhibit A, APN 6301-008-010 and -011 are collectively referred to as "Parcel 6", APN 6301-008-012 is referred to as "Parcel 7", and APN 6301-008-013 is referred to as "Parcel 8." This Order applies to the Property and the areal extent of contamination that resulted from past activities on the Property.

1.3 Jurisdiction. On or about April 2007 the DTSC asserted jurisdiction over the implementation of remedial actions for the Site. Therefore, this Order is entered into by the parties pursuant to Health and Safety Code sections 25358.3(a), 25355.5(a)(1)(B) and (C), 58009 and 58010.

Health and Safety Code section 25358.3(a) authorizes DTSC to take various actions, including issuance of an Imminent or Substantial Endangerment Determination and Order, when DTSC determines that there may be an imminent or substantial endangerment to the public health or welfare or to the environment, because of a release or a threatened release of a hazardous substance.

Health and Safety Code section 25355.5(a)(1)(B) authorizes DTSC to issue an Order establishing a schedule for removing or remedying a release of a hazardous substance at a site, or for correcting the conditions that threaten the release of a hazardous substance. The Order may include, but is not limited to requiring specific dates by which the nature and extent of a release shall be determined and the Site adequately characterized, a remedial action plan prepared and submitted to DTSC for approval, and a removal or remedial action completed.

Health and Safety Code section 25355.5(a)(1)(C) authorizes DTSC to enter into an enforceable agreement with the Respondent for the Site which requires the Respondent to take necessary corrective action to remove the threat of the release, or to determine the nature and extent of the release and adequately characterize the Site, prepare a remedial action plan, and complete the necessary removal or remedial actions, as required in the approved remedial action plan.

Health and Safety Code section 58009 authorizes DTSC to commence and maintain all proper and necessary actions and proceedings to enforce its rules and regulations; to enjoin and abate nuisances related to matters within its jurisdiction which are dangerous to health; to compel the performance of any act specifically enjoined upon any person, officer, or board, by any law of this state relating to matters within its jurisdiction; and/or on matters within its jurisdiction, to protect and preserve the public health.

Health and Safety Code section 58010 authorizes DTSC to abate public nuisances related to matters within its jurisdiction.

Furthermore and pursuant to Code of Federal Regulations (CFR), Title 40, Subchapter R, Toxic Substances Control Act (TSCA), Part 761 (40 CFR 761) including applicable amendments (June 29, 1998, 40 CFR Parts 750 and 761), the United States Environmental Protection Agency (U.S. EPA) has approval authority for risk-based remediation of Polychlorinated biphenyls (PCBs) releases and disposal of PCB-remediation waste (soil and concrete) as described in this Order.

II. FINDINGS OF FACT

DTSC hereby finds:

2.1 Liability of Respondent. The Respondent is a responsible party as defined in Health and Safety Code section 25323.5. The Property was originally part of a larger aluminum manufacturing facility owned and operated by Aluminum Company of America (Alcoa); which began operations in about 1937. Hazardous materials were used and stored at the Property to support manufacturing. In December 1998, Alcoa sold the Property (located at 3200 Fruitland Avenue) to Century Aluminum Company. In 1999, Pechiney purchased the Property, and operated the aluminum manufacturing facility until January 2006. Pechiney is the Respondent listed in this Order.

2.2 Physical Description of Property. The Property is located at the southeasterly corner of the intersection of Boyle Avenue and Fruitland Avenue, in Vernon, California. Formerly occupying the Property was a 600,000 square foot manufacturing facility and associated buildings, parking lots, and storage area. Surrounding the Property are industrial and commercial properties. The City of Vernon is in the process of purchasing the Property from the Respondent. The intended future use of the Property will remain as industrial and/or commercial.

2.3 Property History. The Property was once part of a 56-acre aluminum manufacturing facility operated by Alcoa (the Alcoa facility). Alcoa's operations reportedly began in approximately 1937. Previous manufacturing operations included production of high-precision cast aluminum plates. As part of their manufacturing operations Alcoa used fuels and Stoddard solvent, both of which were stored in USTs. Alcoa also operated processes that required lubricating oils and hydraulic fluids, and generated hazardous waste that was stored at various locations throughout the Property and in the remainder of the Alcoa facility. In approximately 1997, Alcoa sold the eastern half of its facility, which subsequently was razed, subdivided, and redeveloped for industrial and commercial uses. In December 1998, Alcoa sold the western half of its facility (the Property) to Century Aluminum Company. In 1999, the Respondent purchased the Property. A list of previous owners is included as Exhibit B. The Respondent's operations ceased in January 2006, and the aboveground demolition work at the Property was completed in November 2006, with the removal of the above-ground features; which were demolished and the debris was transported off-site for disposal or recycling. The concrete floor slabs and surrounding asphalt areas remain in place. In March 2008, the California Regional Water Quality Control Board, Los Angeles Region (RWQCB), required Alcoa to further characterize the Stoddard solvent impacted soils associated with Building 112A and the associated former underground storage tanks (USTs) located within the boundaries of the Property. On December 18, 2008, the RWQCB determined that the contamination associated with chlorinated solvents in soil and groundwater at the Property, including the area of the former Stoddard solvent USTs, should be addressed under the oversight of the DTSC. Therefore, DTSC is requiring the Respondent to address the Stoddard solvent impacts under this Order.

2.4 Hazardous Substances Found at the Property. Previous investigations were conducted at the Property under directives/orders from the City of Vernon H&EC. These investigations were referred to as the Phase I, Phase II and Supplemental Phase II investigation work; and these reports constitute the Remedial Investigation (RI) documents for the Property, and are referred to collectively herein as the RI documents. Based on these findings of the investigations and historical investigations conducted at the Property, a number of chemicals of potential concern (COPCs) were identified as hazardous substances as defined in Health and Safety Code section 25316.

- Total petroleum hydrocarbons (TPH), including Stoddard solvent (in soil and soil vapor),
- Polychlorinated biphenyls (PCBs) (in soil and concrete),

- Volatile organic compounds (VOCs) (in soil, soil vapor and groundwater), and
- Metals; primarily arsenic (in soil).

A summary of the analytical results for soil, soil vapor, groundwater and concrete samples obtained during the investigations, which constitute the RI, are provided in the RI documents and a revised draft Feasibility Study (FS) . Based on the RI sampling data, COPC-impacted concrete, soil, soil vapor, and groundwater were identified on Parcels 7 and 8 at the Property.

Between 1990 and 1999, Alcoa conducted a number of investigations at the Property, and found soil containing petroleum hydrocarbons (including Stoddard solvent), metals, PCBs, and VOCs. Alcoa's investigations also identified PCBs in concrete (30 milligrams per kilogram [mg/kg]) and trichloroethene (TCE), 1,2-dichloroethane (DCA), and chloroform in groundwater beneath the southwestern portion of the Property (Parcel 7).

Between November and December 2005, a Phase II investigation was conducted by the Respondent as the initial remedial investigation at the Property. During the initial remedial investigation, soil containing PCBs, TCE, and metals and concrete containing PCBs were identified at the Property. These hazardous substances were found at higher concentrations than those previously detected in areas investigated by Alcoa and in areas not investigated by Alcoa. A summary of the detected hazardous substances are listed below and the boring locations are shown in Exhibit C.

- Building 104 – PCBs were detected in the concrete slab and soil to a depth of 3 feet below ground surface (bgs) adjacent to the location of a saw (borings 41, 73, and 74). PCBs were detected in concrete at concentrations up to 3,300 mg/kg. PCBs were also detected in soil at concentrations up to 960 mg/kg (at 2.6 feet bgs).

- Building 104 – PCBs were detected in soil to a depth of approximately 71.5 feet bgs in the vicinity of a vertical pit and a former vertical pit (boring 40). PCBs were detected in soil at concentrations up to 2,000 mg/kg (at 21.5 feet bgs).

- Building 106 and 108 – PCBs were detected in the concrete slab within these buildings at concentrations up to 32 mg/kg.

- Buildings 106 and 108 – TCE and other VOCs were detected in soil beneath the northern portion of these buildings to a depth of approximately 48 feet bgs (boring 14) and in soil vapor to a depth of 15 feet bgs. TCE was detected in soil at concentrations up to 3,700 micrograms per kilogram (µg/kg) and in soil vapor at concentrations up to 1,600 micrograms per liter (µg/L).

- Building 112 (former etch station) and storm water outfall #6 – At the former etch station, lead was detected in soil at 2.6 feet at 82 mg/kg (boring 22). At

storm water outfall #6, copper and lead were detected at 6.2 feet bgs at respective concentrations of 140 mg/kg and 60 mg/kg (boring 47).

- Former substation #8 – PCBs were detected in the soil/gravel drainage area of the former substation to a depth of 2.2 feet bgs (boring 39), but they were not detected in the soil boring adjacent to the soil/gravel drainage area. PCBs were detected in soil at a concentration of 6.7 mg/kg.

- Building 112A (Stoddard Solvent Area) – Stoddard solvent and associated VOCs were detected in soil in the former Stoddard solvent impacted soil area. At 11 feet bgs Stoddard solvent was detected at 890 mg/kg, naphthalene was detected at 5.4 mg/kg, and trimethylbenzene was detected at 37 mg/kg.

For each of these areas, the results of the initial RI indicated that additional investigation was necessary and the City of Vernon H&EC directed/ordered and approved the Supplemental Remedial Investigation on March 20, 2006. The Supplemental Remedial Investigation was conducted between March 28, 2006 and April 24, 2006 with a follow-up assessment conducted between May 11, 2006 and May 24, 2006. The Supplemental Remedial Investigation was conducted to 1) assess the extent of impacted soil exceeding established screening criteria, 2) assess potential TCE impacts to groundwater, and 3) further understand the subsurface conditions at the Property. The findings of the Supplemental Remedial Investigation are summarized below.

- Buildings 106, 108, 110, and 112 – TCE, PCE and other VOCs (including benzene) were detected in soil vapor beneath the northern portion of the buildings to a depth of approximately 15 feet bgs. TCE was detected in soil vapor at concentrations up to 1,900 µg/L and PCE was detected in soil vapor at concentrations up to 650 µg/L. In this same area, TCE and other VOCs were detected in soil to a depth of 105 feet bgs and in groundwater encountered at a depth of 150 feet bgs.

- Building 104 – PCBs were detected in soil to a depth of approximately 40 feet bgs in the vicinity of a vertical pit and a former vertical pit (boring 94, 95, 96, 98 and 1227b). PCBs were detected in soil at concentrations up to 2,000 mg/kg (at about 20 feet bgs).

- Building 104 – PCBs were detected in soil at a depth of 1.5 feet bgs adjacent to the location of a saw (boring 100) at a concentration of 74 mg/kg.

- Storm water outfall #6 – Arsenic was detected at 5.5 feet bgs at concentrations of 16 mg/kg (boring 113) near storm water outfall #6.

As directed by DTSC, and as a continuation of the remedial investigations at the Property, the Respondent conducted additional soil vapor testing in July 2009. DTSC required the additional work to be conducted to assess the extent of VOC concentrations in shallow soil vapor in the vicinity of former Buildings 106 and 108. In addition, a soil vapor survey was required to evaluate the human health risk related to

vapor intrusion from Stoddard solvent impacted soil. The findings of this work were presented in a revised draft FS dated September 24, 2009 by AMEC Geomatrix. Any additional data gaps that may be identified by DTSC subsequent to the issuance of this Order for any area of the Site, including Stoddard solvent-impacted soil and VOC-impacted soil vapor, will be addressed during implementation of the Remedial Action Plan (RAP) work.

2.5 Health Effects. Some of the hazardous wastes, substances, and/or constituents found at the Property are carcinogenic or toxic.

TPH compounds, including Stoddard solvent compounds, can affect the central nervous system, can cause effects on the blood, immune system, lungs, skin, and eyes, and can affect reproduction and the developing fetus in animals (Agency for Toxic Substances and Disease Registry [ATSDR]; Total Petroleum Hydrocarbons Fact Sheet, August 1999). Exposure to Stoddard solvent in the air can affect the nervous system and cause dizziness, headaches, or a prolonged reaction time. It can also cause eye, skin, or throat irritation (ATSDR Stoddard Solvent Fact Sheet, September 1996).

Benzene is considered a human carcinogen, as concluded by The Department of Health and Human Services (DHHS), The International Agency for Research on Cancer (IARC), and U.S. EPA. Inhalation exposure to high levels of benzene can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness, and at very high levels it can result in death. This compound has also been reported to cause harmful effects on the bone marrow (ATSDR Benzene Fact Sheet, August 2007).

PCBs may reasonably be considered a carcinogen, as concluded by DHHS. Exposure to PCBs may cause skin conditions (such as acne and rashes), liver damage, and birth defects. Few studies of workers indicate that PCBs were associated with certain kinds of cancer in humans, such as cancer of the liver and biliary tract. The EPA and IARC have determined that PCBs are probably carcinogenic to humans (ATSDR PCBs Fact Sheet, February 2001).

TCE was classified by National Toxicology Program (NTP) as "reasonably anticipated to be a human carcinogen." The IARC has determined that TCE is "probably carcinogenic to humans." Drinking or breathing high levels of TCE may cause nervous system effects, liver and lung damage, abnormal heartbeat, coma, and possibly death (ATSDR TCE Fact Sheet, July 2003).

PCE is classified as a probable carcinogen, and exposure to very high concentrations of PCE can cause dizziness, headaches, sleepiness, confusion, nausea, difficulty in speaking and walking, unconsciousness, and death (ATSDR PCE Fact Sheet, September 1997).

1,2-DCA can cause nervous system disorders, liver and kidney diseases, and lung effects in humans ingesting or inhaling large amounts of 1,2-DCA. The EPA has

determined that 1,2-DCA is a probable human carcinogen and the IARC considers it to be a possible human carcinogen (ATSDR Fact Sheet, September 2001).

Chloroform, if breathed at high concentrations can cause dizziness, fatigue, and headache. Breathing air, eating food, or drinking water containing high levels of chloroform for long periods of time may damage liver and kidneys. The DHHS has determined that chloroform may reasonably be anticipated to be a carcinogen (ATSDR Fact Sheet, September 1997).

Arsenic (As) is a known human carcinogen. Breathing inorganic arsenic can result in sore throat or irritated lungs. Ingesting very high levels of arsenic can result in death. Exposure to lower levels can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet. Skin contact with inorganic arsenic may cause redness and swelling (ATSDR Fact Sheet, August 2007).

Copper is toxic, and at high levels copper can cause irritation of the nose, mouth and eyes, vomiting, diarrhea, stomach cramps, nausea, and even death. Very high doses of copper can also cause damage to your liver and kidneys, and can even cause death (ATSDR Fact Sheet, September 2004).

Lead is listed pursuant to California's Safe Drinking Water and Toxic Enforcement Act of 1986 ("Proposition 65") as a chemical known to the State to cause cancer. Lead poisoning can occur from inhalation and ingestion of lead in soil and dust. Lead is a bioaccumulative substance, and increasing amounts can build up in the body to a point of primary concern with respect to delayed neurobehavioral development in children exposed to excessive levels of lead.

2.6 Routes of Exposure. Based on the environmental fate of the hazardous wastes, substances, and/or constituents found at the Property, routes of human exposure were evaluated during the RI and included direct ingestion of contaminated groundwater and soil, dermal exposure (direct skin contact), and on-Property inhalation of chemically contaminated particulates or volatile phase chemical contaminants that have been released and dispersed. Prior RIs identified TPH, PCBs, VOCs, and metals in soil; PCBs in concrete; VOCs and TPH in soil vapor, and VOCs in groundwater. The applicable exposure pathways associated with these COPCs were evaluated in a screening-level Human Health Risk Assessment (HHRA) for the Property by the Respondent. These exposure pathways included incidental ingestion of soil; dermal contact with soil; inhalation of VOCs and particulates in ambient air; inhalation of VOCs in indoor air; potential contact to VOCs in groundwater, and potential future impacts to groundwater. Groundwater found at a depth of 150 feet, the first water-bearing unit at the Property (interpreted to be the upper portion of the Exposition aquifer), is not currently used as a potable water supply.

The applicable exposure pathways for volatile COPCs in soil vapor were evaluated in the HHRA. These exposure pathways included inhalation of volatiles in ambient air and inhalation of volatiles in indoor air (for commercial/industrial workers only).

Concrete present in former building slab areas of the Property may be demolished on Site, crushed, and reused as fill soils in excavations and foundation removal areas. DTSC in coordination with U.S. EPA will determine the extent to which concrete containing PCBs will be reused at the Property. Future construction workers at the Property may be potentially exposed to PCBs in this crushed concrete fill using the same pathways identified above for exposure to COPCs in soil. Future commercial/industrial workers will not come into direct contact with crushed concrete containing PCBs above risk-based remediation goals.

Prior remedial investigations identified VOCs in groundwater beneath the Property, specifically at a depth of approximately 150 feet bgs. Potential vapor intrusion of VOCs migrating through the vadose zone from groundwater was evaluated. Furthermore, COPC's in soil were evaluated for potential impacts to groundwater.

2.7 Public Health and/or Environmental Risk. The Property is currently paved or covered with concrete building slabs. The reasonably anticipated future use of the Property is for industrial or commercial use. Exposure to COPCs in soil within the upper 15 feet of soil was evaluated for future power plant construction workers. The evaluation also considered that soils could be redistributed at the land surface during excavation and grading, creating potential future exposure for on-site commercial/industrial workers. Based on U.S. EPA's directive requiring the consideration of reasonably anticipated future land use (U.S. EPA, 1995), potential future human receptors at the Property include power plant facility workers or workers under an alternative commercial/industrial use (if the power plant is not approved) and construction workers involved in the future construction and grading activities. The construction worker receptor also addresses potential exposure to future short-term utility maintenance workers at the Property. No other land use (i.e., residential) is reasonably anticipated for the Property given the City of Vernon zoning requirements for industrial and commercial use and the likely future use.

III. CONCLUSIONS OF LAW

3.1 Respondent is a responsible party as defined by Health and Safety Code section 25323.5.

3.2 Each of the substances listed in Section 2.4 is a "hazardous substance" as defined in Health and Safety Code section 25316.

3.3 There has been a "release" and/or there is a "threatened release" of hazardous substances listed in Section 2.4 at the Property, as defined in Health and Safety Code section 25320.

3.4 The actual and threatened release of hazardous substances at the Property may present an imminent and substantial endangerment to the public health or welfare or to the environment.

3.5 Response action is necessary to abate a public nuisance and/or to protect and preserve the public health.

IV. DETERMINATION

4.1 Based on the foregoing findings of fact and conclusions of law, DTSC hereby determines that a response action is necessary at the Property because there has been a release and/or there is a threatened release of a hazardous substance.

4.2 Based on the foregoing findings of fact and conclusions of law, DTSC hereby determines that there may be an imminent and/or substantial endangerment to the public health or welfare or to the environment because of the release and/or the threatened release of the hazardous substances at the Property.

V. CONSENT ORDER

Based on the foregoing FINDINGS AND CONCLUSIONS, IT IS HEREBY ORDERED THAT Respondent conduct the following response actions in the manner specified herein, and in accordance with a schedule specified by DTSC as follows:

5.1 All response actions taken pursuant to this Order shall be consistent with the requirements of Chapter 6.8 (commencing with Section 25300), Division 20 of the Health and Safety Code and any other applicable state or federal statutes and regulations.

5.1.1 Site Remediation Strategy. The RI was completed for the Site. The purpose of this Order is to require for the Site: completion of the FS based on the RI documents, completion of the RAP, preparation of California Environmental Quality Act (CEQA) documents, and implementation of remedial actions approved in the RAP. An overall Site remediation strategy that reflects programs goals, objectives, and requirements has been developed based on the remedial investigation work conducted by the Respondent. Current knowledge of the Site contamination sources, exposure pathways, and receptors were used in developing this strategy.

Respondent and DTSC may modify Site priorities as necessary throughout the course of implementing the RAP. If necessary, for the protection of public health and the environment, DTSC may require additional response actions not specified in this Order or the RAP.

5.1.2 Remedial Action Objectives. The Property was used for industrial purposes, and the future use of the Property will be for industrial/commercial operations. Based on available information, DTSC has preliminarily determined that the remedial action objectives (RAOs) for the Property will include:

- Remediation of shallow soil vapor impacted with chemicals of concern (COCs) above site-specific remediation goals established for future Site use

for the protection of commercial/industrial workers occupying buildings that may be affected by vapor intrusion.

- Remediation of shallow soil impacted with COCs above the site-specific remediation goals established for future Site use of soils to a depth of 15 feet for the protection of construction workers or other future commercial/industrial workers.

- Remediation of PCB-impacted concrete for the protection of human health.

- Remediation of deeper (depths greater than 15 feet) soils impacted with COCs above the site-specific remediation goals established for the protection of groundwater.

- Implementation of institutional controls (i.e., Covenant to Restrict Use of Property (Covenant)) may be required for protection of human health. The Covenant, among other things, will restrict future residential property use and possibly other sensitive uses, and use of and access to groundwater as necessary to protect human health and the environment.

To meet the RAOs for the Site, site-specific remediation goals were established, and COC-impacted areas were identified during the RI and preparation of the FS and RAP documents.

5.1.3 Removal Actions. Although removal actions were not necessary during the preparation of the RI or draft FS, the Respondent shall undertake removal actions if, during review of the draft FS, DTSC determines that they are necessary to mitigate the release of hazardous substances at or emanating from the Site. If necessary, DTSC may require Respondent to submit a removal action workplan (RAW) that includes a schedule for implementing the workplan for DTSC's approval. Either DTSC or Respondent may identify the need for removal actions. Although no immediate response action was identified during the development of the FS, the Respondent has implemented the following activities.

(a) Fence and Post:
   1) The entire Site is currently fenced and locked.
   2) Contact sign is posted at the locked gated entrance to the Site.

(b) Drainage Control: Storm water controls are in place and will be maintained during demolition and remediation activities at the Site.

(c) Interim capping: The remaining concrete and asphalt surfaces will remain in place until the demolition and remediation activities begin at the Site.

5.1.4 Groundwater Monitoring. Between 1990 and 1997, groundwater monitoring was conducted at the Site by Alcoa, and since that time, only three groundwater monitoring wells (AOW-6, AOW-8, and AOW-9) remain in the

southwestern portion of the Site. Because groundwater at these wells exhibit chlorinated VOCs and because the wells were located in an area associated with the former Stoddard solvent USTs, the RWQCB required Alcoa to conduct additional monitoring of groundwater. Alcoa conducted additional monitoring of the remaining three groundwater wells in 2005 and 2006 and has submitted the monitoring results to the RWQCB. At the present time, the RWQCB has not granted Alcoa permission to close the wells.

On March 28, 2008, the RWQCB required Alcoa to provide a workplan to characterize residual soil contamination in the former Stoddard solvent UST area and submit a site-specific health and safety plan by April 25, 2008; sample the groundwater wells in the former UST area (AOW-7, AOW-8 and AOW-9) or install and sample replacement groundwater wells if AOW-7, AOW-8 and AOW-9 can not be used or located; submit additional historical reports and data related to the Stoddard solvent releases; analyze soil and groundwater for a specific suite of petroleum hydrocarbon compounds and VOCs; log and sample soil at 5-foot intervals, at lithologic changes, or observed impacted soil; and initiate electronic submittals through the State database.

5.1.5 Site Remediation Strategy Meeting. A draft FS and RAP have been prepared for the Site and submitted to the City of Vernon H&EC, the DTSC and U.S. EPA. The Respondent, including the Project Coordinator (Section 6.1) and Project Engineer/Geologist (Section 6.2), shall meet with DTSC within 15 days from the effective date of this Order to discuss the proposed Site remediation strategy described in the draft RAP.

5.2 Remedial Investigation/Feasibility Study (RI/FS). The previous assessment work conducted at the Site constitutes the completion of the RI. A draft FS has been prepared for the Site. The RI/FS was prepared consistent with the U.S. Environmental Protection Agency's "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," October 1988. The purpose of the RI/FS is to assess Site conditions and to evaluate alternatives to the extent necessary to select a remedy appropriate for the Site. If determined necessary by the DTSC, additional data requirements and analyses may be required. Respondent shall fulfill additional data and analysis needs identified by DTSC; these additional data and analysis requests will be consistent with the general scope and objectives of this Order.

The RI and a draft FS have been completed for the Site. The following elements of the RI/FS process as described in this Order have been completed and may be modified as additional information is gathered throughout the RI/FS approval process.

(a) Conceptual Site Model identified contamination sources, exposure pathways, and receptors;

(b) Federal, State and local remedial action objectives including applicable legal requirements or relevant and appropriate standards were used;

(c) Project phasing was determined for demolition and proposed remediation;

(d) General response actions and associated remedial technology types were evaluated; and

(e) The need for treatability studies was deemed not necessary.

5.2.1 RI/FS Objectives. The RI and draft FS documents were completed to meet the RI/FS objectives to:

(a) Determine the nature and full extent of hazardous substance contamination of air, soil, surface water and groundwater at the Site;

(b) Identify all actual and potential exposure pathways and routes through environmental media;

(c) Determine the magnitude and probability of actual or potential harm to public health, safety or welfare or to the environment posed by the threatened or actual release of hazardous substances at or from the Site;

(d) Identify and evaluate appropriate response actions to prevent or minimize future releases and mitigate any releases which have already occurred; and

(e) Collect and evaluate the information necessary to prepare a RAP.

5.2.2 RI/FS Workplan. The previous investigations at the Property were implemented through workplans approved by the City of Vernon H&EC. These workplans constitute the RI/FS Workplan. RI/FS Workplan included a detailed description of the tasks to be performed, information or data needed for each task, and the deliverables to be submitted to the City of Vernon and/or DTSC. Based on the review of the draft FS and the findings of the remedial investigations, the DTSC may identify the need for additional work. If additional work is required by DTSC, the Respondent may conduct this work during implementation of the RAP using the procedures outlined in the RI/FS Workplan or as directed by DTSC.

The RI/FS Workplan addressed each component listed below.

(a) Project Management Plan. The Project Management Plan (PMP) defined relationships and responsibilities for major tasks and project management items by Respondent, its contractors, subcontractors, and consultants. The plan included an organization chart with the names and titles of key personnel and a description of their individual responsibilities. The PMP was made part of the Quality Assurance Project Plan (QAPP).

(b) Scoping Document. The Scoping Document, as included in the RI documents and the draft FS prepared for the Site, incorporated program goals,

program management principles, and expectations contained in the National Contingency Plan (NCP) (40 Code of Federal Regulations [CFR] Part 300), as amended. It includes:

(1) An analysis and summary of the Site background and the physical setting, which included the following required information:

(A) A map of the Site, and available aerial photographs showing buildings and structures;

(B) A description of past disposal practices;

(C) A list of all hazardous substances which were disposed, discharged, spilled, treated, stored, transferred, transported, handled or used at the Site, and a description of their estimated volumes, concentrations, and characteristics, as applicable;

(D) A description of the characteristics of the hazardous substances at the Site; and

(E) A description of all current and past manufacturing processes which were related to each hazardous substance.

(2) An analysis and summary of previous response actions including a summary of all existing data including soil, soil vapor, concrete, and groundwater data and the Quality Assurance/Quality Control (QA/QC) procedures which were followed;

(3) Presentation of the Conceptual Site Model;

(4) The scope and objectives of RI/FS activities;

(5) Preliminary identification of possible response actions and the data needed for the evaluation of alternatives. Removal actions were not necessary based on the initial evaluation of threats to public health and the environment.

(c) Field Sampling Plan. The Field Sampling Plan, as presented in the RI documents, includes:

(1) Sampling objectives, including a brief description of data gaps and how the field sampling plan would address these gaps;

(2) Sample locations, including a map showing these locations;

(3) Sample designation or numbering system;

(4) Description of sampling equipment and procedures;

(5) Sample handling and analysis including preservation methods, and shipping requirements; and

(6) Management plan for wastes generated.

(d) Quality Assurance Project Plan. A QAPP has been prepared for the Site which includes the following:

(1) Project organization and responsibilities with respect to sampling and analysis;

(2) Quality assurance objectives for measurement including accuracy, precision, and detection limits. In selecting analytical methods, Respondent obtained detection limits at or below potentially applicable legal requirements or relevant and appropriate standards, such as Preliminary Remediation Goals (PRGs) and/or Maximum Contaminant Levels (MCLs);

(3) Sampling procedures;

(4) Sample custody procedures and documentation;

(5) Field and laboratory calibration procedures;

(6) Analytical procedures;

(7) Laboratory certified pursuant to Health and Safety Code section 25198;

(8) Specific routine procedures used to assess data (precision, accuracy and completeness) and response actions;

(9) Reporting procedure for measurement of system performance and data quality;

(10) Data management, data reduction, validation and reporting. Information shall be accessible for downloading into DTSC's system; and

(11) Internal quality control.

(e) Health and Safety Plan. A site-specific Health and Safety Plan (HASP) has been prepared in accordance with federal (29 CFR 1910.120) and state (Title 8 CCR §5192) regulations. This plan includes, at a minimum, the following elements:

(1) Site Background/History/Workplan;
(2) Key Personnel and Responsibilities;

(3) Job Hazard Analysis/Summary;
(4) Employee Training;
(5) Personal Protection;
(6) Medical Surveillance;
(7) Air Surveillance/Monitoring;
(8) Site Control;
(9) Decontamination;
(10) Contingency Planning;
(11) Confined Space Operations;
(12) Spill Containment;
(13) Sanitation;
(14) Illumination; and
(15) Other applicable requirements based on the work to be performed.

All contractors and all subcontractors shall be given a copy of the HASP prior to entering the Site. Any supplemental HASPs prepared by any subcontractor shall also be prepared in accordance with the regulations and guidance identified above. The prime contractor will be responsible for ensuring that all subcontractor supplemental HASPs will follow these regulations and guidelines.

(f) Other Activities. A description of any other significant activities which are appropriate to implement the RAP were included.

(g) Schedule. A schedule which provides specific time frames and dates for completion of each activity and report conducted or submitted under the draft FS and RAP will be prepared. A final schedule will be prepared by the Respondent and submitted to the DTSC within 30 days of signing of this Order.

5.2.3 RI/FS Workplan Implementation. Respondent has implemented the work as described in section 5.2.

5.2.4 RI/FS Workplan Revisions. If the Respondent proposes to modify any methods or initiates new activities for which no Field Sampling Plan, HASP, QAPP or other necessary procedures/plans have been established, the Respondent shall prepare an addendum to the approved plan(s) for DTSC review and approval prior to modifying the method or initiating new activities.

5.3 Interim Screening and Evaluation of Remedial Technologies. A draft FS has been prepared for the Site, and treatability studies were not deemed necessary. The draft FS document identifies and evaluates potentially suitable remedial technologies.

5.4 Remedial Investigation (RI) Report. The RI Reports have been completed for the Property, and these Reports have been prepared and submitted by Respondent to DTSC for review and approval. The purpose of the RI was to collect data necessary to adequately characterize the Site for the purposes of defining risks to public health

and the environment and developing and evaluating effective remedial alternatives. Site characterization was conducted in one or more phases to focus sampling efforts and increase the efficiency of the investigation. Respondent identified the sources of contamination and defined the nature, extent, and volume of the contamination. Using this information, the contaminant fate and transport was evaluated. The RI Report contained:

(a) Site Physical Characteristics. Data on the physical characteristics of the Site and surrounding area have been collected to the extent necessary to define potential transport pathways and receptor populations and to provide sufficient engineering data for development and screening of remedial action alternatives.

(b) Sources of Contamination. Contamination sources (including heavily contaminated media) have been defined. The data includes the source locations, type of contaminant, waste characteristics, and Site features related to contaminant migration and human exposure.

(c) Nature and Extent of Contamination. Contaminants have been identified and the horizontal and vertical extent of contamination has been defined in concrete and soil. Spatial and temporal trends and the fate and transport of contamination were evaluated.

5.5 Baseline Health Risk Assessment. The Respondent has performed a HHRA for the Site that meets the requirements of Health and Safety Code section 25356.1.5(b) and is included in the draft FS report for the Site. The FS report has been prepared consistent with U.S. EPA and DTSC guidance and regulations, including as a minimum: Risk Assessment Guidance for Superfund, Volume 1; Human Health Evaluation Manual (Part A), December 1989; Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities (DTSC, 1996); and all other related or relevant policies, practices and guidelines of the California Environmental Protection Agency and policies, practices and guidelines developed by U.S.EPA pursuant to 40 CFR 300.400 et seq. The HHRA included the following components:

(a) Contaminant Identification. Characterization data identified contaminants of potential concern (COPCs) for the risk assessment process.

(b) Environmental Evaluation. An ecological assessment was deemed not necessary for the Site because of the absence of sensitive environments and rare, threatened, or endangered species and their habitats.

(c) Exposure Assessment. The exposure assessment identified actual or potential exposure pathways, characterized potentially exposed populations, and determined the extent of the exposure. Potentially exposed populations included commercial/industrial/ power plant workers and power plant construction workers.

(d) Toxicity Assessment. Respondent evaluated the types of adverse health or environmental effects associated with individual and multiple chemical exposures; the relationship between magnitude of exposures and adverse effects; and related uncertainties such as the weight of evidence for a chemical's potential carcinogenicity in humans.

(e) Risk Characterization. Risk characterization included the potential risks of adverse health or environmental effects for each of the exposure scenarios derived in the exposure assessment.

5.6 Feasibility Study (FS) Report. The draft FS Report was prepared and has been submitted by Respondent to DTSC for review and approval. The draft FS Report summarizes the results of the FS including the following:

(1) Development of medium specific RAOs, including legal requirements and other relevant promulgated standards.

(2) Identification and screening of general response actions, remedial technologies, and process options on a medium specific basis.

(3) Evaluation of alternatives based on the criteria contained in the NCP including:

Threshold Criteria:

(1) Overall protection of human health and the environment.

(2) Compliance with legal requirements and other relevant promulgated standards.

Primary Balancing Criteria:

(1) Long-term effectiveness and permanence.

(2) Reduction of toxicity, mobility, or volume through treatment.

(3) Short-term effectiveness.

(4) Implement ability based on technical and administrative feasibility.

(5) Cost.

Modifying Criteria:

(1) State and local agency acceptance.

(2) Community acceptance.

(e) Proposed remedial actions, if required.

5.7 Public Participation Plan (Community Relations). Respondent has prepared a draft Community Involvement Plan (CIP) for the Site and shall work cooperatively with DTSC in providing an opportunity for meaningful public participation in response actions. Any such public participation activities shall be conducted in accordance with Health and Safety Code sections 25356.1 and 25358.7 and DTSC's most current Public Participation Policy and Guidance Manual, and shall be subject to DTSC's review and approval.

Respondent, in coordination with DTSC, shall conduct a baseline community survey and modify the CIP or develop a Public Participation Plan (PPP) which describes how, under this Order, the public and adjoining community will be kept informed of activities conducted at the Site and how Respondent will be responding to inquiries from concerned citizens. Major steps in developing a PPP are as follows:

(a) Develop proposed list of interviewees;
(b) Schedule and conduct community interviews; and
(c) Analyze interview notes, and develop objectives.

Respondent shall conduct the baseline community survey and submit a revised CIP for DTSC's review within 40 days of the effective date of this Order.

Respondent shall implement any of the public participation support activities identified in the CIP or PPP, at the request of DTSC. DTSC retains the right to implement any of these activities independently. These activities include, but are not limited to, development and distribution of fact sheets; public meeting preparations; and development and placement of public notices.

5.8 California Environmental Quality Act (CEQA). DTSC must comply with CEQA insofar as activities required by this Order are projects requiring CEQA compliance. Upon DTSC request, Respondent shall submit any information deemed necessary by DTSC to facilitate compliance with CEQA. The costs incurred by DTSC in complying with CEQA are response costs and Respondent shall reimburse DTSC for such costs pursuant to Section 6.18.

5.9 Removal Action Workplan (RAW). A draft FS and RAP have been prepared for the Site, and it has been determined that an interim removal action is not necessary. If deemed necessary by the DTSC, a RAW would be prepared and implemented in accordance with Health and Safety Code sections 25323.1 and 25356.1. The RAW shall include:

(a) a description of the on-Site contamination;
(b) the goals to be achieved by the removal action;

(c) an analysis of the alternative options considered and rejected and the basis for that rejection. This should include a discussion for each alternative which covers its effectiveness, implement ability and cost;
(d) administrative record list;
(e) a description of the techniques and methods to be used in the removal action, including any excavating, storing, handling, transporting, treating, and disposing of material on or off the Site;
(f) Sampling and Analysis Plan with corresponding QAPP to confirm the effectiveness of the RAW, if applicable;
(g) a brief overall description of methods that will be employed during the removal action to ensure the health and safety of workers and the public during the removal action. A detailed community air monitoring plan shall be included if requested by DTSC.

In conjunction with DTSC, Respondent shall implement the public review process specified in DTSC's Public Participation Policy and Guidance Manual. DTSC will prepare a response to the public comments received. If required, the Respondent shall submit within two (2) weeks of the request the information necessary for DTSC to prepare this document.

Following DTSC's finalization of the Responsiveness Summary, DTSC may specify any changes to be made in the RAW. Respondent shall modify the document in accordance with DTSC's specifications and submit a final RAW within 15 days of receipt of DTSC's comments.

5.10 Remedial Action Plan (RAP). The Respondent has prepared a draft RAP that is consistent with the NCP and Health and Safety Code section 25356.1. The draft RAP has been submitted to the DTSC and U.S. EPA. The draft RAP public review process may be combined with that of any other documents required by CEQA. The draft RAP is based on and summarizes the approved RI and draft FS Reports. The draft FS report clearly set forth:

(a) Health and safety risks posed by the conditions at the Site.

(b) The effect of contamination or pollution levels upon present, future, and probable beneficial uses of contaminated, polluted, or threatened resources.

(c) The effect of alternative remedial action measures on the reasonable availability of groundwater resources for present, future, and probable beneficial uses.

(d) Site specific characteristics, including the potential for off-site migration of hazardous substances, the surface or subsurface soil, and the hydrogeologic conditions, as well as preexisting background contamination levels.

(e) Cost-effectiveness of alternative remedial action measures. Land disposal shall not be deemed the most cost-effective measure merely on the basis of lower short-term cost.

(f) The potential environmental impacts of alternative remedial action measures, including, but not limited to, land disposal of the untreated hazardous substances as opposed to treatment of the hazardous substances to remove or reduce their volume, toxicity, or mobility prior to disposal.

(g) A statement of reasons setting forth the basis for the removal and remedial actions selected. The statement includes an evaluation of each proposed alternative submitted and an evaluation for consistency of the removal and remedial actions proposed by the plan with the NCP.

(h) A schedule for implementation of all proposed removal and remedial actions.

In conjunction with DTSC, Respondent shall implement the public review process specified in DTSC's Public Participation Policy and Guidance Manual. DTSC will prepare a response to the public comments received. If required, the Respondent shall submit within two (2) weeks of the request the information necessary for DTSC to prepare this document.

Following DTSC's finalization of the Responsiveness Summary, DTSC will specify any changes to be made in the RAP. Respondent shall modify the document in accordance with DTSC's specifications and submit a final RAP within 30 days of receipt of DTSC's comments.

5.11 Remedial Design (RD). The proposed remedies are presumptive and a remedial design is included in the draft RAP for the Site. The draft RAP describes the technical and operational plans for implementation of the final RAP which includes the following elements, as applicable:

(a) Design criteria, process unit, process diagrams, and specifications for proposed treatment systems.

(b) Description of equipment used to excavate, handle, and transport contaminated material.

(c) A field sampling and laboratory analysis plan addressing sampling during implementation and to confirm achievement of the performance objectives of the RAP.

(d) An updated health and safety plan addressing the implementation activities.

(e) Identification of any necessary permits and agreements.

(f) An operation and maintenance plan including any required monitoring.

(g) A detailed schedule for implementation of the remedial action consistent with the schedule contained in the approved RAP including procurement, mobilization, construction phasing, sampling, facility startup, and testing.

(h) A site-specific air monitoring plan.

5.12 Land Use Covenant. If the approved remedy in the final RAP includes deed restrictions or land use restrictions, pursuant to California Code of Regulations, Title 22, section 67391.1, the current owner(s) of the Site shall sign and record the deed restrictions or land use restrictions approved by DTSC within 90 days of DTSC's approval of the final RAP.

5.13 Implementation of Final RAP. Upon DTSC approval of the RAP, Respondent shall implement the final RAP in accordance with the approved schedule. Within 60 days of completion of field activities, Respondent shall submit an Implementation Report documenting the implementation of the final RAP.

5.14 Operation and Maintenance (O&M). Respondent shall comply with all O&M requirements in accordance with the final RAP. Within 30 days of the date of DTSC's request, Respondent shall enter into an O&M Agreement, including financial assurance pursuant to California Health and Safety Code section 25355.2, with DTSC within 30 days of the date of DTSC's request. The O&M agreement will list responsibilities for O&M activities, and will address, among others, items such as, future site access requirements, implementation and monitoring of the environmental remedy, protection and maintenance of groundwater wells, and cap maintenance, if applicable.

5.15 Five-Year Review. Respondent shall review and reevaluate the remedial action after a period of 5 years from the completion of construction and startup, and every 5 years thereafter. The review and reevaluation shall be conducted to determine if human health and the environment are being protected by the remedial action. Within thirty 30 calendar days before the end of the time period approved by DTSC to review and reevaluate the remedial action, Respondent shall submit a remedial action review workplan to DTSC for review and approval. Within sixty 60 days of DTSC's approval of the workplan, Respondent shall implement the workplan and shall submit a comprehensive report of the results of the remedial action review. The report shall describe the results of all sample analyses, tests and other data generated or received by Respondent and evaluate the adequacy of the implemented remedy in protecting public health, safety and the environment. As a result of any review performed under this Section, Respondent may be required to perform additional Work or to modify Work previously performed.

5.16 Changes During Implementation of the Final RAP. During the implementation of the final RAP, DTSC may specify such additions, modifications, and

revisions to the final RAP as DTSC deems necessary to protect public health and safety or the environment.

5.17 Stop Work Order. In the event that DTSC determines that any activity (whether or not pursued in compliance with this Order) may pose an imminent or substantial endangerment to the health or safety of people on the Site or in the surrounding area or to the environment, DTSC may order Respondent to stop further implementation of this Order for such period of time needed to abate the endangerment. In the event that DTSC determines that any Site activities (whether or not pursued in compliance with this Order) are proceeding without DTSC authorization, DTSC may order Respondent to stop further implementation of this Order or activity for such period of time needed to obtain DTSC authorization, if such authorization is appropriate. Any deadline in this Order directly affected by a Stop Work order, under this Section, shall be extended for the term of the Stop Work order.

5.18 Emergency Response Action/Notification. In the event of any action or occurrence (such as a fire, earthquake, explosion, or human exposure to hazardous substances caused by the release or threatened release of a hazardous substance) during the course of this Order, Respondent shall immediately take all appropriate action to prevent, abate, or minimize such emergency, release, or immediate threat of release and shall immediately notify the Project Manager. Respondent shall take such action in consultation with the Project Manager and in accordance with all applicable provisions of this Order. Within seven days of the onset of such an event, Respondent shall furnish a report to DTSC, signed by Respondent's Project Coordinator, setting forth the events which occurred and the measures taken in the response thereto. In the event that Respondent fails to take appropriate response and DTSC takes the action instead, Respondent shall be liable to DTSC for all costs of the response action. Nothing in this Section shall be deemed to limit any other notification requirement to which Respondent may be subject.

5.19 Discontinuation of Remedial Technology. Any remedial technology employed in implementation of the final RAP shall be left in place and operated by Respondent until and except to the extent that DTSC authorizes Respondent in writing to discontinue, move or modify some or all of the remedial technology because Respondent has met the criteria specified in the final RAP for its discontinuance, or because the modifications would better achieve the goals of the final RAP.

5.20 Financial Assurance. Respondent shall demonstrate to DTSC and maintain financial assurance for operation and maintenance and monitoring. Respondent shall demonstrate financial assurance prior to the time that operation and maintenance activities are initiated and shall maintain it throughout the period of time necessary to complete all required operation and maintenance activities. The financial assurance mechanisms shall meet the requirements of Health and Safety Code section 25355.2. All financial assurance mechanisms are subject to the review and approval of DTSC.

VI. GENERAL PROVISIONS

6.1 Project Coordinator. Within 10 days from the date this Order is signed by DTSC, Respondent shall submit to DTSC in writing the name, address, and telephone number of a Project Coordinator whose responsibilities will be to receive all notices, comments, approvals, and other communications from DTSC. Respondent shall promptly notify DTSC of any change in the identity of the Project Coordinator. Respondent shall obtain approval from DTSC before the new Project Coordinator performs any work under this Order.

6.2 Project Engineer/Geologist. The work performed pursuant to this Order shall be under the direction and supervision of a qualified professional engineer or geologist in the State of California, with expertise in hazardous substance site cleanups. Within 10 calendar days from the date this Order is signed by DTSC, Respondent must submit: a) The name and address of the project engineer or geologist chosen by Respondent; and b) in order to demonstrate expertise in hazardous substance cleanup, the resume of the engineer or geologist, and the statement of qualifications of the consulting firm responsible for the work. Respondent shall promptly notify DTSC of any change in the identity of the Project Engineer/Geologist. Respondent shall obtain approval from DTSC before the new Project Engineer/Geologist performs any work under this Order.

6.3 Quarterly Summary Reports. Within 30 days from the date this Order is signed by DTSC, and on a quarterly basis thereafter, Respondent shall submit a Quarterly Summary Report of its activities under the provisions of this Order. The report shall be received by DTSC by the 15th day of the first month after the quarterly reporting period and shall describe:

(a) Specific actions taken by or on behalf of Respondent during the previous calendar quarter;
(b) Actions expected to be undertaken during the current calendar quarter;
(c) All planned activities for the next quarter;
(d) Any requirements under this Order that were not completed;
(e) Any problems or anticipated problems in complying with this Order; and
(f) All results of sample analyses, tests, and other data generated under this Order during the previous calendar quarter, and any significant findings from these data.

6.4 Quality Assurance/Quality Control (QA/QC). All sampling and analysis conducted by Respondent under this Order shall be performed in accordance with QA/QC procedures submitted by Respondent and approved by DTSC pursuant to this Order.

6.5 Submittals. All submittals and notifications from Respondent required by this Order shall be sent simultaneously to:

Allan Plaza
Unit Chief
Attention: Michel Iskarous, Project Manager
Brownfields and Environmental Restoration Program – Chatsworth Office
California Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, CA 91311-6505

6.6 Communications. All approvals and decisions of DTSC made regarding submittals and notifications will be communicated to Respondent in writing by the DTSC Brownfields and Environmental Restoration Program Performance Manager or his/her designee. No informal advice, guidance, suggestions or comments by DTSC regarding reports, plans, specifications, schedules or any other writings by Respondent shall be construed to relieve Respondent of the obligation to obtain such formal approvals as may be required.

6.7 DTSC Review and Approval. (a) All response actions taken pursuant to this Order shall be subject to the approval of DTSC. Respondent shall submit all deliverables required by this Order to DTSC. Once the deliverables are approved by DTSC, they shall be deemed incorporated into, and where applicable, enforceable under this Order.

(b) If DTSC determines that any report, plan, schedule or other document submitted for approval pursuant to this Order fails to comply with this Order or fails to protect public health or safety or the environment, DTSC may:

(1) Modify the document as deemed necessary and approve the document as modified; or

(2) Return comments to Respondent with recommended changes and a date by which Respondent must submit to DTSC a revised document incorporating the recommended changes.

(c) Any modifications, comments or other directives issued pursuant to (b) above, are incorporated into this Order. Subject to assertion of the dispute resolution provisions in Section 6.27 by Respondent, any noncompliance with these modifications or directives shall be deemed a failure or refusal to comply with this Order.

6.8 Compliance with Applicable Laws. Nothing in this Order shall relieve Respondent from complying with all other applicable laws and regulations, including but not limited to compliance with all applicable waste discharge requirements issued by the State Water Resources Control Board or a California Regional Water Quality Control

Board. Respondent shall conform all actions required by this Order to all applicable federal, state and local laws and regulations.

6.9 Respondent Liabilities. Nothing in this Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current or future operations of Respondent. Nothing in this Order is intended or shall be construed to limit the rights of any of the parties with respect to claims arising out of or relating to the deposit or disposal at any other location of substances removed from the Site. Nothing in this Order is intended or shall be construed to limit or preclude DTSC from taking any action authorized by law to protect public health or safety or the environment and recovering the cost thereof. Notwithstanding compliance with the terms of this Order, Respondent may be required to take further actions as are necessary to protect public health and the environment.

6.10 Site Access. Access to the Site and laboratories used for analyses of samples under this Order shall be provided at all reasonable times to employees, contractors, and consultants of DTSC. Nothing in this Section is intended or shall be construed to limit in any way the right of entry or inspection that DTSC or any other agency may otherwise have by operation of any law. DTSC and its authorized representatives shall have the authority to enter and move freely about all property at the Site at all reasonable times for purposes including, but not limited to: inspecting records, operating logs, sampling and analytic data, and contracts relating to this Site; reviewing the progress of Respondent in carrying out the terms of this Order; conducting such tests as DTSC may deem necessary; and verifying the data submitted to DTSC by Respondent. Information protected by the attorney-client privilege or the attorney work product doctrine is not subject to this paragraph.

If access is required for the implementation of this Order to properties not owned or controlled by Respondent, Respondent shall use best efforts to secure from such persons access for Respondent, as well as DTSC, its representatives, and contractors, as necessary to effectuate this Order. For purposes of this Section, "best efforts" includes the payment of reasonable sums of money in consideration of access. If any access required to complete the Work is not obtained within 45 days of the effective date of this Order, or within forty-five (45) days of the date DTSC notifies Respondent in writing that additional access beyond that previously secured is necessary, Respondent shall promptly notify DTSC, and shall include in that notification a summary of the steps Respondent has taken to attempt to obtain access. DTSC may, as it deems appropriate, assist Respondent in obtaining access. Respondent shall reimburse DTSC response costs incurred in obtaining access, including, but not limited to, attorneys fees and the amount of just compensation as long as those costs are recoverable by DTSC under any federal or state law.

6.11 Sampling, Data and Document Availability. Respondent shall permit DTSC and its authorized representatives to inspect and copy all sampling, testing, monitoring or other data generated by Respondent or on Respondent behalf in any way pertaining to work undertaken pursuant to this Order. Respondent shall submit all such

data upon the request of DTSC. Copies shall be provided within 15 days of receipt of DTSC's written request. Respondent shall inform DTSC at least 5 days in advance of all field sampling under this Order, and shall allow DTSC and its authorized representatives to take duplicates of any samples collected by Respondent pursuant to this Order. Respondent shall maintain a central depository of the data, reports, and other documents prepared pursuant to this Order.

6.12 Record Retention. All such data, reports and other documents shall be preserved by Respondent for a minimum of 10 years after the conclusion of all activities under this Order. If DTSC requests that some or all of these documents be preserved for a longer period of time, Respondent shall either comply with that request or deliver the documents to DTSC, or permit DTSC to copy the documents prior to destruction. Respondent shall notify DTSC in writing, at least six months prior to destroying any documents prepared pursuant to this Order.

6.13 Government Liabilities. The State of California shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by Respondent, or related parties specified in Section 6.25, Parties Bound, in carrying out activities pursuant to this Order, nor shall the State of California be held as party to any contract entered into by Respondent or its agents in carrying out activities pursuant to this Order.

6.14 Additional Actions. By issuance of this Order, DTSC does not waive the right to take any further actions authorized by law.

6.15 Extension Requests. If Respondent is unable to perform any activity or submit any document within the time required under this Order, Respondent may, prior to expiration of the time, request an extension of the time in writing. The extension request shall include a justification for the delay. All such requests shall be in advance of the date on which the activity or document is due.

6.16 Extension Approvals. If DTSC determines that good cause exists for an extension, it will grant the request and specify a new schedule in writing. Respondent shall comply with the new schedule incorporated in this Order.

6.17 Liability for Costs. Respondent is liable for all of DTSC's costs that have been incurred in taking response actions at the Site (including costs of overseeing response actions performed by Respondent) and costs to be incurred in the future.

6.18 Payment of Costs. DTSC may bill Respondent for costs incurred in taking response actions at the Site prior to the effective date of this Order. DTSC will bill Respondent quarterly for its response costs incurred after the effective date of this Order. Respondent shall pay DTSC within 60 days of receipt of any DTSC billing. Any billing not paid within 60 days is subject to interest calculated from the date of the billing pursuant to Health and Safety Code section 25360.1. All payments made by Respondent pursuant to this Order shall be by cashier's or certified check made payable

to "DTSC," and shall bear on the face the project code of the Site (Site 301396) and the Docket number of this Order. Payments shall be sent to:

Department of Toxic Substances Control
Accounting/Cashier
1001 I Street, 21st Floor
P.O. Box 806
Sacramento, California 95812-0806

A photocopy of all payment checks shall also be sent to the person designated by DTSC to receive submittals under this Order.

6.19 Severability. The requirements of this Order are severable, and Respondent shall comply with each and every provision hereof, notwithstanding the effectiveness of any other provision.

6.20 Incorporation of Plans, Schedules and Reports. All plans, schedules, reports, specifications and other documents that are submitted by Respondent pursuant to this Order are incorporated in this Order upon DTSC's approval or as modified pursuant to Section 6.7, DTSC Review and Approval, and shall be implemented by Respondent. Any noncompliance with the documents incorporated in this Order shall be deemed a failure or refusal to comply with this Order.

6.21 Modifications. DTSC reserves the right to unilaterally modify this Order. Subject to assertion of the dispute resolution provisions in Section 6.27 by Respondent, any modification to this Order shall be effective upon the date the modification is signed by DTSC and shall be deemed incorporated in this Order.

6.22 Time Periods. Unless otherwise specified, time periods begin from the effective date of this Order and "days" means calendar days.

6.23 Termination and Satisfaction. Except for Respondent obligations under Sections 5.14 Operation and Maintenance (O&M), 5.15 Five-Year Review, 5.20 Financial Assurance, 6.12 Record Retention, 6.17 Liability for Costs, and 6.18 Payment of Costs, Respondent obligations under this Order shall terminate and be deemed satisfied upon Respondent receipt of written notice from DTSC that Respondent has complied with all the terms of this Order.

6.24 Calendar of Tasks and Schedules. This Section is merely for the convenience of listing in one location the submittals required by this Order. If there is a conflict between the date for a scheduled submittal within this Section and the date within the Section describing the specific requirement, the latter shall govern.

Calendar of Tasks and Schedules

	TASK	SCHEDULE
1.	Identify Project Coordinator; Section 6.1	Completed
2	Identify Project Engineer/Geologist; Section 6.2	Completed
3	Submit Quarterly Summary Reports; Section 6.3	Within 30 days from the date this Order is signed by DTSC
4	Attend Site Remediation Strategy Meeting; Section 5.1.5	Within 15 days from the date this Order is signed by DTSC
5	Submit Final Schedule; Section 5.2.2 (g)	Within 30 days from the date this Order is signed by DTSC
6	Submit Final RI Reports; Section 5.4	Completed
7	Submit Baseline Risk Assessment; Section 5.5	Completed
8	Submit draft FS Report; Section 5.6;	Completed
9	Submit draft Community Involvement Plan/Public Participation Plan; Section 5.7;	Completed
	Submit and distribute Fact Sheets;	For projected or completed key milestones, as specified in Public Participation Plan or when requested by DTSC
10	Submit Initial Study and Checklist; Section 5.8;	Within 30 days after approval of FS Report
11	Submit Draft RAP: Section 5.10;	Completed
	Submit information needed to prepare the Responsiveness Summary;	Within 10 days of DTSC request
	Submit Final RAP;	Within 30 days of receipt of DTSC's comments
12	Land Use Covenant; Section 5.12;	Within 90 days of completion of Implementation Report
13	Submit Implementation Report; Section 5.13;	Within 60 days of completion of short-term actions that may include concrete and soil removal field activities for the RAP, and Within 60 days of completion of the long-term actions that may include soil vapor extraction and/or bioventing field activities for the RAP

14	Submit Operation and Maintenance (O&M) Section 5.14;	Within 30 days of DTSC's request
	Sign O&M Agreement (including financial assurance)	Within 30 days of DTSC's request
15	Submit Emergency Response Action Report; Section 5.18;	Within 7 days of an emergency response action
16	Provide copies of sampling, data, and documentation; Section 6.11;	Within 15 days of receipt of DTSC's request
	Provide prior notice before conducting field sampling;	Inform DTSC 5 days in advance of sampling
17	Maintain central depository of data, reports, documentation; Section 6.11	Maintain central depository for a minimum of ten years after conclusion of all activities conducted pursuant to this Order. Repository will be located at the City of Vernon H&EC office.
18	Provide prior written notice to DTSC before destroying any documentation prepared pursuant to this Order; Section 6.12	At least six months prior to destroying any documents

6.25 Parties Bound. This Order applies to and is binding upon Respondent, and its officers, directors, agents, employees, contractors, consultants, receivers, trustees, successors and assignees, including but not limited to, individuals, partners, and subsidiary and parent corporations. Respondent shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants which are retained to conduct any work performed under this Order, within 15 days after the effective date of this Order or the date of retaining their services, whichever is later. Respondent shall condition any such contracts upon satisfactory compliance with this Order. Notwithstanding the terms of any contract, Respondent is responsible for compliance with this Order and for ensuring that its subsidiaries, employees, contractors, consultants, subcontractors, agents and attorneys comply with this Order.

6.26 Change in Ownership. No change in ownership or corporate or partnership status relating to the Site shall in any way alter Respondent's responsibility under this Order. No conveyance of title, easement, or other interest in the Site, or a portion of the Site, shall affect Respondent's obligations under this Order. Unless DTSC agrees that such obligations may be transferred to a third party, Respondent shall be responsible for and liable for any failure to carry out all activities required of Respondent by the terms and conditions of this Order, regardless of Respondent's use of employees, agents, contractors, or consultants to perform any such tasks. Respondent shall provide a copy of this Order to any subsequent owners or successors before ownership rights or stock or assets in a corporate acquisition are transferred.

6.27 Dispute Resolution. The parties agree to use their best efforts to resolve all disputes informally. The parties agree that the procedures contained in this Section are the required administrative procedures for resolving disputes arising under this Order. If Respondent fails to follow the procedures contained in this Section, it shall have waived its right to further contest the disputed issue. Respondent reserves its legal rights to contest or defend against any final decision including but not limited to any final decisions regarding the payment of costs (billings) under Section 6.18 rendered by DTSC. Disputes regarding DTSC billings shall follow the procedures set forth in Section 6.27.3.

6.27.1 Respondent shall first seek resolution with DTSC's assigned project manager and unit chief. If the issue is not resolved after review by the unit chief, Respondent shall seek resolution with the DTSC Performance Manager by presenting in a letter the issues in dispute, the legal or other basis for Respondent position, and the remedy sought. The Performance Manager shall issue a written decision with an explanation for the decision within thirty (30) business days after receipt of the letter from Respondent.

6.27.2 If Respondent disagrees with the Performance Manager's decision, Respondent may appeal to the Brownfields and Environmental Restoration Program Deputy Director. To appeal to the Deputy Director, Respondent must prepare a letter stating the reasons why the Performance Manager's decision is not acceptable. Attached to the letter shall be (a) Respondent's original statement of dispute, (2) supporting documents, and (3) copies of any responses prepared by the project manager, unit chief, and Performance Manager. This letter and attachments shall be sent to the division chief within ten (10) business days from the date of Respondent receipt of the Performance Manager's response. The Deputy Director or designee shall review Respondent's letter and supporting documents, consider the issues raised and render a written decision to Respondent within thirty (30) business days of receipt of Respondent's letter. The decision of the Deputy Director, or designee, shall constitute DTSC's administrative decision on the issues in dispute.

6.27.3 If Respondent disputes a DTSC billing, or any part thereof, Respondent shall notify DTSC's assigned project manager and attempt to informally resolve the dispute with DTSC's project manager and branch chief. If Respondent desires to formally request dispute resolution with regard to the billing, Respondent shall file a request for dispute resolution in writing within 45 days of the date of the billing in dispute. The written request shall describe all issues in dispute and shall set forth the reasons for the dispute, both factual and legal. If the dispute pertains only to a portion of the costs included in the invoice, Respondent shall pay all costs which are undisputed in accordance with Section 6.18. The filing of a notice of dispute pursuant to this Section shall not stay the accrual of interest on any unpaid costs pending resolution of the dispute. The written request shall be sent to:

Special Assistant for Cost Recovery and Reimbursement Policy
Department of Toxic Substances Control

P.O. Box 806
Sacramento, CA 95812-0806

A copy of the written request for dispute resolution shall also be sent to the person designated by DTSC to receive submittals under this Order. A decision on the billing dispute will be rendered by the Special Assistant for Cost Recovery and Reimbursement Policy or other DTSC designee. The decision of the Special Assistant shall constitute DTSC's administrative decision on the issues in dispute.

6.27.4. The existence of a dispute shall not excuse, stay, or suspend any other compliance obligation or deadline required pursuant to this Order.

VII. EFFECTIVE DATE

7. The effective date of this Order shall be the date on which this Order is signed by the Parties.

VIII. PENALTIES FOR NONCOMPLIANCE

8. Respondent may be liable for penalties of up to $25,000 for each day out of compliance with any term or condition set forth in this Order and for punitive damages up to three times the amount of any costs incurred by DTSC as a result of Respondent's failure to comply, pursuant to Health and Safety Code sections 25359, 25359.2, 25359.4, and 25367(c). Health and Safety Code section 25359.4.5 provides that a responsible party who complies with this Order, or with another order or agreement concerning the same response actions required by this Order, may seek treble damages from Respondent who fails or refuses to comply with this Order without sufficient cause.

IX. SIGNATORIES

9. Each undersigned representative of the parties to this Order certifies that he or she is fully authorized to enter into the terms and conditions of this Order and to execute and legally bind the Parties to this Order.

9.1 This Order may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one and the same document.

IT IS HEREBY AGREED AND ORDERED.

DATE:_____ _____

Donald Thomson, President
Pechiney Cast Plate

DATE:_____ _____

Allan Plaza, Unit Chief
Brownfields and Environmental Restoration Program
Chatsworth Office
California Department of Toxic Substances Control

cc: Site Mitigation Program
Headquarters, Planning & Policy
Office of Legal Counsel