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Attorneys for
Ducommun AeroStructures, Inc.

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In re:) No.
)
) **PETITION FOR REVIEW; REQUEST**
) **FOR CONSOLIDATION**
WATER CODE SECTION 13267 ORDER)
AND WATER CODE SECTION 13304)
CLEANUP AND ABATEMENT ORDER NO.)
R4-2003-0039 (File No. 1062010, Site ID No.)
2041N00))
)
)

Pursuant to Section 13320 of the California Water Code and Section 2050 of Title 23 of the California Code of Regulations, Petitioner Ducommun Aerostructures, Inc, (“DAS”) submits this Petition for Review of “Requirement for Complete Site Assessment and Technical Report Pursuant to California Water Code Section 13267 Order (“Order”) and “Requirement for a Remedial Action Plan pursuant to California Water Code Section 13304 Order” No. R4-2003-0039 (“CAO”) (collectively, the “July 2008 Order”) issued by the Regional Water Quality Control Board, Los Angeles Region, (“Regional Board”) on July 2, 2008.

In April 2003 Composite Structures, LLC (“CS”), the current property owner,

previously filed a Petition for Review with the State Water Resources Control Board concerning the CAO, Petition for Review: SWRCB/OCC File A-1560. DAS is the parent company of CS. DAS hereby requests the prior petition by CS concerning the CAO and this Petition for Review be consolidated pursuant to Section 2054 of Title 23 of the California Code of Regulations.

DAS provides the following information in support of its Petition as required by Section 2050 of Title 23 of the California Code of Regulations:

1. Petitioner is Ducommun Aerostructures, Inc. which operates at 801 Royal Oaks Drive, Monrovia, CA, 91016. DAS requests that all communications be directed through its counsel, as identified in the caption of this Petition.

2. DAS requests that the State Board review the July 2008 Order issued by the Regional Board. A copy of the July 2008 Order is attached as Exhibit A to this Petition. The July 2008 Order was issued by the Executive Officer of the Regional Board without a hearing by the Regional Board. DAS was not provided a draft of the July 2008 Order before it was issued by the Executive Officer and has had no opportunity to comment on the July 2008 Order.

3. The Regional Board acted on July 2, 2008.

4. DAS believes that the following provisions of the July 2008 Order are inappropriate or improper:

(a) DAS should not be named as a "discharger", as DAS did not at any time discharge the pollutants described in the July 2008 Order nor cause the conditions that the July 2008 Order seek to have investigated and remediated. No evidence exists in the Administrative Record before the Regional Board to support a finding that DAS caused or contributed to the environmental conditions that allegedly support the issuance of the July

2008 Order.

(b) DAS was not named as a party in the CAO when originally issued in 2003 and DAS has never been informed that the CAO was amended thereafter to include its name.

(c) Factual information alleged regarding DAS, its involvement with the Regional Board, site activities and chemical usage as described throughout the July 2008 Order including but not limited to paragraphs from Pages 1 and 2 of the July 2008 Order is inaccurate and not supported by any evidence. For example: (1) DAS did not meet with Regional Board staff on May 21, 2008 and was not aware of the staff's dissatisfaction with site assessments as stated in the July 2008 Order; (2) CS operated at the site from 1997 to June 2001 at which time DAS became the operator to the present, not 1987 to the present as stated in the July 2008 Order (CS has owned the property from 1997 to the present); (3) CS and DAS did not use TCE (the principal pollutant found at the site) in their operations as stated in the July 2008 Order. DAS will submit as an amendment to this Petition a full and complete statement of the manner in which CS is aggrieved.

6. DAS requests that the State Board: (1) remove DAS from the July 2008 Order; (2) set aside all provisions in the July 2008 Order regarding DAS for which there is no evidentiary support; and (3) take such other action as the State Board deems just and proper.

7. DAS will submit as an amendment to this Petition a complete statement of points and authorities in support of the legal issues raised in this Petition.

8. DAS has not yet obtained, but will obtain, a list from the Regional Board of persons known to the Regional Board to have an interest in the subject matter of the Petition.

9. A copy of this Petition is being sent to the Regional Board and the other named dischargers in the July 2008 Order.

10. DAS has not requested, but will request, that the Regional Board prepare the record in this matter.

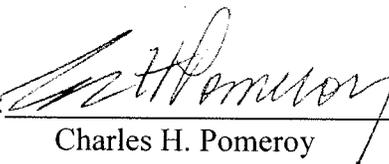
11. DAS requests that the State Board hold a hearing at which Petitioner can present additional evidence to the State Board. Additional evidence is available that was not presented to the Regional Board. This evidence was not presented to the Regional Board because the Regional Board did not conduct a hearing regarding the July 2008 Order. Petitioner will submit an amendment to this Petition containing evidence in support of the Petition.

For all the reasons stated herein, DAS requests that the State Board remove DAS from the Order or find it secondarily liable or direct the Regional Board to perform one of those actions.

DATED: August 1, 2008

Sincerely,

McKENNA LONG & ALDRIDGE LLP

By: 
Charles H. Pomeroy

Attorneys for
Ducommun Aerostructures, Inc.



California Regional Water Quality Control Board

Los Angeles Region



Linda S. Adams
Cal/EPA Secretary

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Arnold Schwarzenegger
Governor

July 2, 2008

Mr. Robert Cowan
Ducommun AeroStructures, Inc.
268 East Gardena Boulevard
Gardena, CA 90248

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
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Mr. Sanford W. Harvey, Jr., Esq.
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CERTIFIED MAIL
RETURN RECEIPT REQUESTED
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Mrs. Kathleen M. McFadden, Esq.
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CERTIFIED MAIL
RETURN RECEIPT REQUESTED
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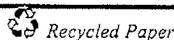
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**REQUIREMENT FOR COMPLETE SITE ASSESSMENT AND TECHNICAL REPORT
PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 ORDER AND
REQUIREMENT FOR A REMEDIAL ACTION PLAN PURSUANT TO CALIFORNIA
WATER CODE SECTION 13304 ORDER - FORMER COMPOSITE STRUCTURES, 801
ROYAL OAKS DRIVE, MONROVIA, CALIFORNIA (FILE NO. 106.2010, SITE ID NO.
2041N00, CLEANUP AND ABATEMENT ORDER NO. R4-2003-0039)**

Dear Messrs Cowan, Harvey, Lardiere and Mrs. McFadden:

On March 12, 2003, a Cleanup and Abatement Order (CAO) No. R4-2003-0039 was issued by the Executive Officer of the Los Angeles Regional Water Quality Control Board (Regional Board) to the previous and current operators of the former Composite Structures facility (Site), now Ducommun AeroStructures, (Composite Structures, LLC, ALCOA, Inc., Whittaker Corporation and United Technologies Corporation) located at 801 Royal Oaks Drive, Monrovia, California.

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The dischargers identified in the CAO were required to completely assess the soil and groundwater contaminated areas onsite and offsite, to fully delineate the contamination onsite and offsite and to clean up and abate the effects of contamination in the soil and groundwater emanating from their site.

On May 21, 2008, Regional Board staff met with representatives of the dischargers and discussed the status of the implementation of the CAO. Regional Board staff expressed its dissatisfaction with the inadequate site assessments, incomplete delineation of the contamination in the vadose zone and groundwater and limited cleanup efforts.

While Regional Board staff acknowledges that the dischargers conducted many site investigations and limited remediation activities at the site, a review of technical reports submitted to the Regional Board from 1985 to 2008, indicates that the requirements listed in the CAO (Item No. 1 through 13) are not yet fully met.

BACKGROUND

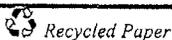
The real property and business at the site is owned by Ducommun AeroStructures, Inc., now the parent company of Composite Structures, which has been responsible for the operations over the last 21 years. Prior to about 1987, other companies, identified as dischargers in the CAO, were engaged in similar operations as owners and operators at the site.

Ducommun AeroStructures is engaged in the manufacture and assembly of aerospace components, including helicopter blades, jet spoilers and aircraft winglets. The manufacturing processes performed at this site include; machining, fabrication, painting, plating and etc. Chlorinated volatile organic compounds (VOCs) including trichloroethylene (TCE) and 1,1,1-trichloroethane (1,1,1-TCA) had been stored and used at the facility. Perchloroethylene (PCE) and heavy metals like chromium, nickel, cadmium, silver, copper, tin, manganese, zinc etc. and metal-containing paints and dyes were also used and stored onsite to support site operations. Acids, bases, stripping or degreasing agents, sodium hydroxide, sulfuric and hydrochloric acids and cyanide were also used throughout the process lines.

SITE INVESTIGATIONS

Site investigations have been conducted at the site since 1985, where there have been documented discharges of wastes to the soil, soil gas and groundwater. In 1985, Kleinfelder & Associates conducted an environmental monitoring study involving drilling of soil borings and installation of vapor monitoring wells at six locations in the former waste oil tank, former four compartment solvent tank, spill containment area and west clarifier tank/neutralizer areas. Soil samples were analyzed for metals, acids, and pH.

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In response to directives by Regional Board staff under its Well Investigation Program (WIP), a series of soil, soil vapor and groundwater investigations have been conducted at the site by different consultants since 1991, namely SEACOR (1991), AeroVironment Inc.(1992-1997), McCulley, Frick & Gilman (1997-1998), Golder Associates (1998) and PES (1998-2008). The site investigations have indicated that the 300 feet thick vadose zone, and the saturated zone have been contaminated with volatile organic compounds (VOCs), especially TCE, heavy metals, (primarily hexavalent chromium), and emergent chemicals like 1,4-dioxane, N-Nitrosodimethylamine (NDMA) and perchlorate.

Site investigations identified 10 areas of concern (AOCs) at the site, namely the Process Line and Concrete Vault in Building-1 (Area-1), Deionized Water Tank (Area-2), Former Products and Loading Area (Area-3), Chemical Storage Area (Area-4), Waste Storage Area and Storm Drain (Area-5), East Clarifier (Area-6), West Clarifier (Area-7), Paint Booths and Alodine Area in Building-D (Area-8), Former Alodine Area and Former Paint Booth in Building-2 (Area-9), and Former Spill Containment Sump in Building U (Area-10).

GROUNDWATER MONITORING

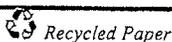
As part of the groundwater assessments, groundwater monitoring wells (CSD-1 through CSD-5) were installed onsite and offsite in 1997, 2000, 2001 and 2002. CSD-1, CSD-2 and CSD-4 are onsite wells where as CSD-3 and CSD-5 are offsite wells. CSD-4 is a dual phase soil vapor/groundwater monitoring well to allow collection of soil vapor and groundwater samples via a nested well completion. CSD-5 is a Westbay multi-port system well with five monitoring ports, inside a 4-inch diameter, steel well with five multilevel stainless steel well screens, with sampling ports at 276-, 406-, 526-, 627-, and 738-feet below ground surface (bgs).

Groundwater monitoring has been conducted at the site since 1997. From 1997 to 2008, CSD-1 and CSD-2 have not been monitored for approximately 40 per cent of the monitoring period due to: (i) dry conditions or low groundwater levels, (ii) shallower depths of the wells and (iii) relatively smaller screened intervals of the wells. In addition, no upgradient well has been installed onsite to monitor the background concentrations of contaminants found in the groundwater.

REMEDIATION

Some soil remediation activities have been performed at the site. In 1991, approximately 4 cubic yards of soil contaminated with heavy oils at concentrations exceeding 100 milligrams per kilogram (mg/kg) from Area-4 was excavated and disposed of offsite. And in the same year, approximately 35 cubic yards of soil with cutting oil concentrations exceeding 100 mg/kg was

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excavated from Area-5 and also disposed of offsite. We have no records in our file that your waste disposal manifests have been submitted to date for the excavated soil.

In 1999, a soil vapor extraction (SVE) system was installed and began operating, first on a pilot-scale and later at full-scale, to remove the VOCs detected at elevated concentrations in the soil gas and adsorbed to the soil matrix in Area-1, Area-7 and Area-9. The SVE system has removed a total of 7,648 pounds of VOCs from the vadose zone through the end of March 2008.

The theoretical radius of influence (ROI) of the system is estimated to be approximately 200 feet for the depth intervals monitored in the vadose zone (25 to 300 feet bgs) during the pilot-scale test. However, the farthest vapor monitoring well is located at approximately 225 feet from the tested extraction well (SVE-1) and no vapor monitoring well or probe was installed west of the plumes offsite (on the school property). Besides, the ROI estimation for the deeper intervals (200 feet to 300 feet bgs) was not properly computed. This fact calls into question the effective ROI computed for the SVE wells.

IMPACT ON DRINKING WATER SUPPLY WELLS

The Site is located in the San Gabriel Valley where over 1.7 million residents depend on groundwater for water supply. Many drinking water supply wells are located downgradient, within approximately 2 miles of the Site. Water quality data from the United States Environmental Protection Agency (USEPA) database indicates that most of those wells are impacted with contaminants also detected in the onsite and offsite groundwater monitoring wells installed for this Site.

The migrating plume from the Site could also threaten the USEPA's El Monte Operable Unit Superfund Remedy, located downgradient of the Site, where several water treatment plants are being installed to treat impacted groundwater in the El Monte area.

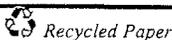
FINDINGS

Based on our review of site investigation, groundwater monitoring and remediation status reports and work plans submitted to the Regional Board for the site since 1985, the following determinations are made:

1. SOIL ASSESSMENT

- 1.1. The Regional Board uses Soil Screening Levels (SSLs) to determine the residual concentration of contaminants in the soil for the protection of groundwater quality. However, soil matrix analytical data for the entire site was screened

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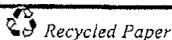
against USEPA Preliminary Remediation Goals (PRG) values. SSLs are generally more conservative than PRGs.

- 1.2 The sampling protocol followed during some of the site investigations was such that samples were composited from large sample intervals, which in our view misrepresents actual site conditions. No discreet samples were collected from these sampled events.
- 1.3 No soil assessment was performed for organic emergent chemicals in the vadose zone.
- 1.4 The lateral and vertical extent of the VOC plume in the soil gas is not fully delineated, onsite and offsite. Available plume maps indicate that the plume may have migrated offsite. Submitted cross-sections do not show the defined extent of the plume vertically. However, data from some deep monitoring wells (e.g. CSD-1) show the track of VOCs in the soil column from the surface to the water table.
- 1.5 The lateral and vertical extent of hexavalent chromium in the soil is not defined. Some samples were collected and analyzed for hexavalent chromium during the site investigations. However, no hexavalent chromium groundwater plume map and corresponding cross-section are presented showing the extent of the contamination laterally and vertically. Hexavalent chromium has been detected in the groundwater monitoring wells, showing the migration of the contaminant from the vadose zone to the saturated zone.
- 1.6 The work plan that was submitted to the Regional Board on June 20, 2003 focuses only on Area-10 where USEPA PRGs were used to screen soil matrix analytical results and justify the focused investigation of Area-10. The Regional Board uses SSLs for protection of groundwater quality. SSL values are more conservative than PRG values as earlier stated, thus necessitating a re-assessment of additional AOCs at the site.

2. GROUNDWATER ASSESSMENT AND MONITORING

- 2.1 No assessment was done for emergent chemicals and hexavalent chromium in the saturated zone. Yet, emergent chemicals including hexavalent chromium have been detected in the groundwater monitoring wells during the 11-year monitoring period.

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- 2.2 The VOC plume in the groundwater is not laterally delineated onsite and offsite. The plume has evidently migrated offsite and VOCs have been detected in the offsite monitoring wells during groundwater monitoring. Some constituents detected in onsite wells have also been detected in drinking water wells located downgradient approximately within 2 miles of the site, along the principal flow direction.
- 2.3 No upgradient monitoring well is installed onsite to monitor the background concentrations of contaminants beneath the site.
- 2.4 Historical records indicate that the depth to groundwater in the general vicinity of the site fluctuated by up to 100 feet. As observed in the 11-year monitoring period, the water levels in the groundwater monitoring wells onsite fluctuated by approximately up to 77 feet. As a result, monitoring wells CSD-1 and CSD-2 were not monitored for approximately 40% of the historical monitoring period due to low water levels, the relatively shallower depth of the wells and comparatively smaller screened intervals.

3. REMEDIATION

- 3.1 Although remediation activities have been performed at Area-4 and Area-5, involving the excavation of soil and the collection of confirmation samples, the analytical method used to analyze the samples does not meet the requirements of the Regional Board's *Interim Site Assessment and Cleanup Guidebook* (May 1996) in classifying the carbon ranges of total petroleum hydrocarbons (TPH) detected in the samples and in using the required SSLs to screen the analytical results. USEPA Method 418.1 that is used for analysis of the samples does not determine the carbon ranges of the TPH.
- 3.2 Although a SVE system has been installed and has been in operation since 1999, the Regional Board considers the SVE remediation activity as only an interim remedial measure, in light of the fact that:
 - a. The VOC plume in the soil gas was not fully defined onsite and offsite when the system was installed. The defined edge of the plume has a concentration of 100 µg/L, which indicates the incomplete delineation of the plume;
 - b. No extraction well was installed in the center of one of the plumes found beneath Area-1;

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- c. The farthest vapor monitoring well (NNSG-2) is located approximately 225 feet from the extraction well (SVE-1). There are no other vapor monitoring wells installed at more distant locations from the extraction well to ascertain the actual ROI of the SVE system;
- d. No vapor monitoring wells were installed offsite west of the plumes (on the school property) to monitor the vacuum pressure during the test;
- e. The Regional Board does not concur with the minimum vacuum pressure used to define the ROI (0.1 inches of water), given the existence of sensitive receptors adjoining the site (a school west of the site). The Regional Board requires a much more conservative vacuum response to be used for ROI estimation;
- f. The ROI estimation for the deeper zones (200 feet to 300 feet) was not properly computed, following the proper theoretical approach. The Regional Board thus does not accept the claim that the ROI extends below 200 feet.

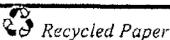
REQUIREMENTS

Pursuant to Section 13267 of the California Water Code (CWC) and the requirements set forth in the CAO, you are hereby directed to complete the site investigations to address: (a) soil vapor, (b) soil matrix, and (c) groundwater pollution delineation onsite and offsite. We require you to document your efforts in technical reports, which must be submitted to this Regional Board in accordance with the schedule specified below:

1. SOIL ASSESSMENT

- 1.1 Screen all soil matrix analytical results obtained during the various site investigations against the USEPA SSLs, which are acceptable to Regional Board staff. If the SSLs indicate that the concentration of individual contaminants pose a threat to groundwater quality, additional investigations are required. Screening results shall be presented in tables and exceedences shall be indicated in bold face. Parts of the site where these exceedences occur need to be identified and presented in a technical report.
- 1.2 Additional borings need to be advanced in parts of the site where composite soil samples were previously collected. Only discrete soil samples need to be collected from these borings.

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- 1.3 The work plan which was submitted to the Regional Board on June 20, 2003 for assessment of heavy metals and emergent chemicals in the vadose zone in Area-10 needs to be revised and resubmitted for the following reasons:
- a. The soil screening criteria used to exclude other AOCs and to focus the investigation on Area-10 were based on PRG values. The Regional Board uses SSLs for the protection of groundwater quality. Exceedences from hexavalent chromium SSL value, for example, are noted in other AOCs, like Area-1, necessitating inclusion of these areas in the assessment;
 - b. Samples were composited from large sample intervals during the previous site investigations, like in Area-1 and Area-7, causing dilution of sample concentrations and misrepresenting actual site conditions;
 - c. There were an inadequate number of samples collected to characterize some of the AOCs. For example, in Area-2, Area-5 and Area-6, only one sample was collected from each location and analyzed for heavy metals;
 - d. Samples were collected only from shallower depths in some of the AOCs. For example, in Area-8, samples were collected from only 5 feet where hexavalent chromium was detected (in these samples). Samples were not collected from deeper sample intervals to assess the concentration trend.

Therefore, a revised work plan must be prepared and submitted to:

- a. Conduct a site-wide assessment for heavy metals (hexavalent chromium) and emergent chemicals (1,4-dioxane, NDMA and perchlorate) in the vadose zone;
- b. Collect discrete soil samples from areas where composite samples were previously collected and to collect samples from deeper sample intervals where samples were previously collected from only shallower depths;
- c. Propose additional soil boring locations in those areas where an inadequate number of samples were previously collected;
- d. Fully delineate the heavy metal impacted areas in the vadose zone onsite. All analytical results shall be screened against SSLs acceptable to the Regional Board.

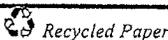
The work plan shall be prepared in accordance with the Regional Board's *General Requirements for Subsurface Investigations* and shall be submitted by **August 4, 2008**.

- 1.4 Additional step-out soil vapor probes need to be advanced for the collection and analyses of soil gas samples in Area-1, Area-4, Area-7, Area-9, and near CSD-2. Offsite vapor probes are needed west of Area-7 and near CSD-2. Past investigations focused only on the south-western and central parts of the site near the west clarifier, former degreaser and process line. However, limited data exists for other parts of the site that could indicate the existence of isolated plumes in those areas.
- 1.5 Deeper soil vapor probes need to be installed in areas where elevated concentrations of VOCs were detected in shallow probes for better characterization of the entire vadose zone. Past investigations focused only on the south-western and central parts of the site near the west clarifier, former degreaser and process line areas. However, limited data for other parts of the site indicate that the vertical extent of the plume is not adequately defined in the vadose zone.
- 1.6 The lateral extent of the VOC plume in the vadose zone needs to be delineated onsite and offsite. Contaminant-specific iso-concentration plume maps for major constituents, like TCE, showing the furthest lateral extent of the plume onsite and offsite need to be prepared and presented, since the release occurred about 60 years ago.
- 1.7 The vertical extent of the VOC plume in the vadose zone needs to be delineated onsite and offsite. Geologic cross-sections having iso-concentration contours of contaminants for major constituents like TCE and showing the vertical extent of the plume onsite and offsite need to be prepared and presented. Several cross-section profiles crossing the site north-south and west to east are needed
- 1.8 A work plan shall therefore be prepared and submitted to meet the requirements enumerated in Item Nos. 1.1, 1.2, 1.4, 1.5, 1.6 and 1.7 above. The work plan shall be prepared in accordance with the Regional Board's *General Requirements for Subsurface Investigations* and shall be submitted by **August 4, 2008**.

2. GROUNDWATER ASSESSMENT AND MONITORING

- 2.1 A work plan must be prepared and submitted for assessment of emergent chemicals (1,4-dioxane, NDMA and perchlorate) and hexavalent chromium in the groundwater. The purpose of the work plan shall be to define the lateral extent of

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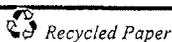
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emergent chemicals (1,4-dioxane, NDMA and perchlorate) and hexavalent chromium in the saturated zone onsite and offsite. The work plan shall be prepared in accordance with the Regional Board's *General Requirements for Subsurface Investigations* and shall be submitted by **August 4, 2008**.

- 2.2 The lateral extent of the VOC plume in the groundwater needs to be delineated onsite and offsite. Contaminant-specific iso-concentration plume maps for major constituents, like TCE, showing the furthest lateral extent of the plume onsite and offsite need to be prepared and presented.
- 2.3 In order to fully accomplish the task stated in Item Nos. 2.1 and 2.2 above, the Regional Board requires the installation of at least four additional groundwater monitoring wells offsite. At least one upgradient, one cross-gradient and two downgradient wells are required to be installed offsite to monitor the background concentration of contaminants and to define the lateral extent of the VOC plume(s) in the groundwater. The historical fluctuation of groundwater level needs to be taken into consideration in determining the depth of the wells and addition to the screened intervals. Monitoring wells could be dual-phase wells for vapor and groundwater monitoring to aid in delineating the VOC plume(s) in the vadose zone.
- 2.4 Contaminant-specific concentration trend graphs (concentration versus time) for major constituents, like TCE, crossing the site from upgradient wells to downgradient offsite wells must be prepared and submitted.
- 2.5 A hydrogeologic cross-section for a profile running from an upgradient groundwater well, 01N11W24R located offsite (and identified by the Regional Board), through the subject site to the downgradient drinking water wells (south of Interstate 210 freeway) and terminating at 01S11W03G07S (in El Monte Operable Unit), must be constructed. The cross-section shall show the geologic and hydrogeologic setting of the area, perforated/completed zones, and iso-contours for major constituents, like TCE, and shall reflect the base of the aquifer to the extent possible.
- 2.6 A work plan shall therefore be prepared and submitted to meet the requirements enumerated in Item Nos. 2.2, 2.3, 2.4 and 2.5 above. The work plan shall be prepared in accordance with the Regional Board's *General Requirements for Subsurface Investigations* and shall be submitted by **August 4, 2008**.

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3. REMEDIATION

- 3.1 Confirmation samples need to be collected again from the bottom of the excavation in Area-4 and Area-5 where soil remediation activities were performed. Discrete soil samples shall be collected and analyzed for VOCs by EPA Method 8260B and for TPH by EPA Method 8015 (Modified) to determine the TPH carbon ranges. The analytical results shall be screened against the SSLs.
- 3.2 Copies of the waste manifests must be submitted for the excavated soil from Area-4 and Area-5, which was reported to have been disposed of offsite. The waste manifests are due to the Regional Board by **August 4, 2008**.
- 3.3 While the Regional Board considers the installation and operation of the SVE system as an interim remedial measure to remediate the vadose zone, it does not believe that it is a full remediation effort to clean up the site. Therefore:
 - a. Step out soil vapor monitoring probes must be installed outside of Area-1, Area-7 and Area-9 onsite and offsite to estimate the ROI again and to assess the effectiveness of the SVE system in remediating the entire vadose zone beneath the site;
 - b. A soil gas survey must be conducted to update the soil gas results for the vadose zone onsite and offsite;
 - c. Results from the installation of the soil vapor monitoring probes and the soil gas survey could be used for complete delineation of the VOC plumes in the vadose zone onsite and offsite;
 - d. An extraction well must be installed in the center of one of the plumes beneath Area-1;
 - e. The ROI must be estimated for the SVE system again, using an expected vacuum response at the monitoring point, which is at least one percent of the applied vacuum pressure at the extraction well. The ROI for the deeper zones (200 feet to 300 feet bgs) shall also be estimated using at least three monitoring points;
- 3.4 A work plan shall therefore be prepared and submitted to meet the requirements enumerated in Item Nos. 3.1, and 3.3 above. The work plan shall be prepared in

Mr. Robert Cowan
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accordance with the Regional Board's *General Requirements for Subsurface Investigations* (see attached) shall be submitted by **August 4, 2008**.

Pursuant to Section 13304 of the CWC and the requirements set forth in the CAO, you shall comply with cleanup and abatement requirements for soil, soil gas and groundwater pollution and threatened pollution caused by the release of VOCs, heavy metals and emergent chemicals by implementing the following actions:

- 3.5 Prepare and submit a comprehensive *Remedial Action Plan (RAP)* for the remediation of contaminated soil, soil vapor and groundwater onsite and offsite. The RAP shall be designed to address site-wide and the offsite contamination in both the vadose zone and the groundwater. The submitted *Vadose Zone Remedial Action Plan*, dated April 15, 2002, and its addendum, *Vadose Zone Remedial Action Plan Addendum*, dated June 12, 2002, which were designed for limited cleanup of the site are not acceptable.

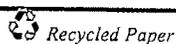
In addition, the RAP must be prepared after the site has been adequately characterized and complete delineation of the contamination in the vadose zone and groundwater, onsite and offsite, has been accomplished. A RAP submitted without adequate characterization of the site and complete delineation of the contamination will not be approved.

All final reports should be developed following the Regional Board's *Guidelines for Report Submittals (March 1991, Revised June 1993)* and shall be submitted as a hardcopy and electronic Adobe® "pdf" format. A total of two (2) hardcopies and one (1) electronic copy of each final report shall be submitted. Additionally, laboratory Quality Assurance/Quality Control (QA/QC) data must be included with each final report.

The California Business and Professions Code Sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of registered professionals. Therefore, all future work must be performed by or under the direction of a registered geologist or registered civil engineer. A statement is required in the report that the registered professional in responsible charge actually supervised or personally conducted all the work associated with the project.

Failure to comply with the terms or conditions of this Order may result in the imposition of civil liabilities either administratively by the Regional Board or judicially by the Superior Court in accordance with Section 13350 of the CWC, and/or referral to the Attorney General of the State of California for such action as he may deem appropriate.

California Environmental Protection Agency



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

Mr. Robert Cowan
Mr. Sanford W. Harvey
Mrs. Kathleen M. McFadden
Mr. Eric G. Lardiere

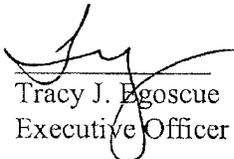
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Pursuant to CWC, section 13320, you may seek review of this Order by filing a petition with the State Water Resources Control Board (State Board). Such a petition must be received by the State Board, located at P.O. Box 100, 1001 I Street, Sacramento, California, 95814, within 30 days of the receipt of this Order.

If you have any questions regarding this letter, please call Mr. Dixon Oriola at (213) 576-6803 or Mr. Bizuayehu Ayele at (213) 576-6747 of my staff.

Sincerely,

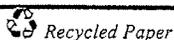

Tracy J. Egoscue
Executive Officer

Attachments:

- 1) *General Requirements for Subsurface Investigations*
- 2) *Guidelines for Report Submittals (March 1991, Revised June 1993).*

cc: Ms. Jennifer Fordyce, State Water Resources Control Board, Office of Chief Counsel
Dr. Jackie Spizman, California Department of Toxic Substances Control (Cypress Office)
Mr. Kurt Souza, California Department of Public Health (DPH)
Ms. Bella Dizon, Superfund Division, USEPA, Region XI, San Francisco
Mr. Richard Hiatt, Superfund Division, USEPA, Region XI, San Francisco
Ms. Kathleen Salyer, Superfund Division, USEPA, Region XI, San Francisco
Ms. Elizabeth Adams, Superfund Division, USEPA, Region XI, San Francisco
Mr. Jon L. Benjamin, Esq., Farella Braun & Martel LLP
Mr. James R. Campbell, Engineering Management, Inc.
Mr. Robert Melvin, Esq., Robinson & Cole LLP
Mr. Patrick J. Cafferty, Esq., Munger, Tolles & Olson, LLP
Mr. Scott Parsons, Geo Trans, Inc.
Mr. Ronald Morosky, Alcoa, Inc.
Mr. Keith M. O'Brien, PES Environmental, Inc.
Mr. Nicholas Pogoncheff, PES Environmental, Inc.
Mr. William Penn, United Technologies Corporation
Ms. Carol Williams, Main San Gabriel Basin Watermaster
Ms. Grace Burgess, San Gabriel Basin Water Quality Authority
Mr. Steve Johnson, Stetson Engineers, Inc.

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