

**Table 1.0**  
**Summary of Environmental Assessment Activities for the Pemaco Property**  
**5050 East Slauson Avenue, Maywood, California**  
*(Table only includes reports involving actual site activities)*

| Company                             | Report Date | Scope and Summary of Investigation   |
|-------------------------------------|-------------|--|
| Active Leak Testing, Inc. (ALT)     | 12/26/90    | <p><i>Subject Site Assessment Investigation Report</i></p> <ul style="list-style-type: none"> <li>• 16 soil borings (B-1 through B-16) drilled from 30' to 40' below ground surface (bgs), sampled every 5'.</li> <li>• Locations of the borings were determined from a previous soil vapor survey performed by ALT.</li> <li>• Each soil sample analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and non-halogenated volatiles, 2 samples from each boring analyzed for volatile organic compounds (VOCs) as determined by photo ionization detector (PID) readings.</li> <li>• Contaminants detected in every boring, toluene and paraldehyde were the most prevalent, but benzene, tetrachloroethene (PCE), 1,1-Dichloroethene (1,1-DCE) and trichloroethene (TCE) were the only chemicals exceeding regulatory levels.</li> <li>• Each boring converted to shallow monitoring well (B-1 through B-16).</li> <li>• No indication in report of any water sampling performed.</li> </ul> |
| Ecology and Environment, Inc. (E&E) | 2/25/94     | <p><i>Final Site Assessment Report</i></p> <ul style="list-style-type: none"> <li>• Describes visual site characterization activities performed by E&amp;E (contracted by the USEPA) to assess whether federal involvement was warranted. The site had been abandoned and the warehouse burnt down in December 1993, 31 underground storage tanks (USTs), 4 aboveground storage tanks (ASTs), 6 drums and one 15'-diameter open borehole remained onsite.</li> <li>• The borehole was grouted and a fence was placed around the site as an initial security measure.</li> <li>• The six remaining drums were sampled and removed and all the UST standpipes were locked.</li> </ul>  |
| Ecology and Environmental, Inc.     | 03/10/98    | <p><i>Pemaco Maywood Expanded Site Inspection</i></p> <ul style="list-style-type: none"> <li>• Details Expanded Site Assessment activities performed by the E&amp;E's Emergency Response team over the time period between February – May 1997.</li> <li>• 118 shallow soil samples (5' bgs), 102 collected beneath concrete pad (former drum storage) and 19 others collected in UST and AST areas. All samples analyzed for VOCs. Majority of detects were BTEX, 1,1,1-Trichloroethane (1,1,1-TCA), PCE and acetone mainly found in northern portion of former drum storage pad.</li> </ul>  |

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| Ecology and Environment, Inc. (continued) |             | <ul style="list-style-type: none"> <li>• 6 soil borings (SSB-1 through SSB-4, SMW-1 and SMW-2) completed to 90' bgs, samples collected approx. every 10' and analyzed for VOCs.</li> <li>• Acetone, 1,1- DCE, 1,1-Dichloroethane (1,1-DCA) and TCE were main detects. SSB-3 and SSB-4 had majority of hits [(TCE up to 1,200,000 parts per billion (ppb) at 15' (SSB-3)] and 990 ppb at 80' (SSB-4).</li> <li>• Two of these borings converted to deep monitoring wells and 2 more deep (80') monitoring wells (MW-3 and MW-4) installed downgradient with no soil sampling.</li> <li>• Groundwater samples collected from all perched wells (B-1 through B-16) and analyzed for VOCs, product found in 3 of the wells (B-2, B-6 and B-9).</li> <li>• Product wells sampled and analyzed and found to be 20% - 30% gasoline range hydrocarbons.</li> <li>• Chlorinated VOCs found in all perched wells sampled from &lt;10 to 180 ppb.</li> <li>• TCE found in groundwater samples from MW-2 through MW-4 from 430 (MW-2) to 11,000 ppb (MW-4), MW-1 was non detect (ND).</li> </ul>   |
| Ecology and Environmental, Inc.           | 03/98       | <p><i>Subsurface Investigation</i></p> <ul style="list-style-type: none"> <li>• All USTs were removed in August through September 1997 except for one UST that was abandoned in place and all above ground structures were demolished and removed by the Emergency Response group. Horizontal screened piping was laid down in tank pits before backfilling to be hooked up to a future soil vapor extraction (SVE) system.</li> <li>• 44 surface (0.5') and near surface samples (2.5') were collected from 22 locations spread throughout the site in the UST, AST and warehouse areas in October 1997.</li> <li>• Also, 6 samples from 3 locations in former sump area (south of existing SVE manifold).</li> <li>• All soil samples were analyzed for VOCs.</li> <li>• PCE and 1,1,1-TCA were most prevalent (up to 927 ppb).</li> <li>• 22 soil vapor locations (10' – 15' bgs) and 14 locations (18' – 25' bgs) were field screened using a flame ionization detector/photoionization detector (FID/PID), flame-out occurred due to lack of oxygen at 18 locations and 15 of the locations had reading &gt;10,000 parts per million in volume (ppmv).</li> </ul> |

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| Ecology and Environment, Inc. (continued) |             | <ul style="list-style-type: none"> <li>• 15 soil vapor samples were collected from selected locations mentioned above and analyzed for VOCs. Toluene, 1,1,1-TCA, PCE, methylene chloride and xylenes were the most prevalent (up to 1,280 ppmv).</li> <li>• 44 sub-surface soil samples from the 22 locations were collected (co-located with the soil vapor and near surface locations) from 12' and 22' bgs.</li> <li>• All 44 samples were analyzed for VOCs and a selected 10 samples were analyzed for semivolatile organic compounds (SVOCs).</li> <li>• 1,1-DCE, TCE, BTEX, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 4-Methyl-2-pentanone were the prevalent VOCs (up to 237 ppm).</li> <li>• Phenol and naphthalene were most prevalent SVOCs (up to 11 ppm).</li> <li>• Deep wells MW-1 through MW-4 were re-sampled and analyzed for VOCs in November 1997.</li> <li>• MW-2 through MW-4 had hits of TCE from 1,090 ppb (MW-2) to 8,590 ppb (MW-3), MW-1 was ND results lower than the May 1997 sampling.</li> <li>• Report concludes that in general the VOCs detected in all media consisted of: acetone, 4-methyl-2-pentanone, BTEX, methylene chloride, 2-butanone, TCE, PCE, 1,1-DCE, 1,1-DCA and 1,1,1-TCA. Some levels were above USEPA Region IX Residential Preliminary Remediation Goals (PRGs) and Soil Screening Levels (SSLs) (threat to groundwater); no SVOCs exceeded PRGs or SSLs.</li> <li>• Groundwater gradients calculated for the perched zone and Exposition groundwater zone(s) from data collected during the water sampling.</li> <li>• Perched zone characterized as discontinuous and sporadic with overall flow north towards the LA River with many localized mounds and sinks causing varying flow directions.</li> <li>• Exposition groundwater zone(s) flow calculated to be towards the south.</li> </ul> |
| CET Environmental Services, Inc.          | 03/98       | <p><i>Design Report</i></p> <ul style="list-style-type: none"> <li>• Document is a design report for the SVE system with several schematics and discussion of design parameters for the SVE system.</li> </ul>   |

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| CET Environmental Services, Inc. | 2/4/99<br>1/4/99<br>11/12/98<br>10/29/98<br>9/2/98<br>8/5/98<br>7/8/98<br>6/8/98<br>5/11/98<br>4/4/98 | <p><i>Vapor Extraction Reports</i></p> <ul style="list-style-type: none"> <li>• Each of these documents is a monthly SVE system report with field PID measurements of influent and effluent concentrations, system parameter measurements and mass removal calculations.</li> <li>• Documents also give details of system adjustments and carbon usage</li> <li>• The February 1999 document (last report before system shut-down) reported that a total of 144,412 pounds (lbs) of hydrocarbons were removed from the site through vapor extraction and natural degrading.</li> </ul>   |
| CET Environmental Services, Inc. | 5/6/98  | <p><i>Pemaco Stack Test</i></p> <ul style="list-style-type: none"> <li>• Stack test results for thermal oxidation unit.</li> </ul>   |
| Ecology and Environmental, Inc.  | 05/99   | <p><i>Pemaco Removal Site Final Report</i></p> <ul style="list-style-type: none"> <li>• Report summarizes work listed above by CET and also summarizes pilot testing (SVE, in-situ respiration and bio-slurping) of remedial techniques.</li> <li>• A soil vapor well (SV-1) was installed in the former UST area along with three vapor monitoring points (VMP-1 – VMP-3) to monitor the SVE system.</li> <li>• A 2-day in-situ respiration test concluded that a mass destruction of 300 lbs per month of VOCs was possible.</li> <li>• A 2-day bio-slurping test was conducted, it was concluded that this was not effective in removing free product in the perched zone.</li> <li>• The soil vapor extraction pilot test concluded that 33,000 lbs per month of VOCs could be removed from the site.</li> </ul> |

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| Ecology and Environmental, Inc. (continued) |             | <ul style="list-style-type: none"> <li>• Ultimately the SVE system with 5 "SV" wells (SV-1 – SV-5), all the existing ALT wells, (B-1, B-3 – B-16) and the horizontal wells placed in the tank pit backfills were plumbed into a system with carbon canisters and a thermox unit, which were operated by CET as documented above.</li> <li>• SVE system operates from March 1998 to March 1999 when it was shut down due to community concerns.</li> <li>• From the weekly monitoring readings and measurements, it was calculated that the SVE system removed 67,610 lbs of contaminants.</li> <li>• An additional 82,294 lbs of hydrocarbons were destroyed by natural degradation during the 1 year SVE operation according to calculations.</li> </ul>  |
| T N & Associates, Inc.                      | 12/00       | <p><i>Preliminary Summary of Groundwater and SVE System Sampling Events</i></p> <ul style="list-style-type: none"> <li>• <b>This is an internal draft document that was not formally submitted outlining sampling activities performed to assess current site conditions (current in 2000).</b></li> <li>• Scope included testing of lo-flo sampling equipment, sampling of perched wells and Exposition groundwater zone(s) wells, and sampling of the dormant vapor extraction system by connecting a mobile blower to it, applying vacuum and collecting samples out of the sampling ports located on the manifold.</li> <li>• Perched wells B-1, B-3, B-4, B-5, B-10, B-13, SV-1 and SV-5 were lo-flo sampled (other wells were dry or obstructed) and analyzed for total petroleum hydrocarbons-gasoline range (TPH-g), VOCs, SVOCs and non-halogenated VOCs (NHVOCs).</li> <li>• Well B-15 was found to contain 6' of floating free product; the product was sampled and was characterized as kerosene range organics by the USEPA Region IX lab.</li> <li>• Every perched well sampled had detectable concentrations of TPH-g at 60 ppb (B-10) to 2,600 ppb (B-13).</li> <li>• VOCs in the perched wells were predominately acetone (up to 6,200 ppb) and BTEX (up to 100 ppb). The chlorinated compounds 1,1,1-TCA, 1,1-DCA, 1,1-DCE, PCE, TCE and vinyl chloride were semi-prevalent and ranged from 0.3 ppb to 750 ppb.</li> </ul> |

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| TN & Associates, Inc. (continued) |             | <ul style="list-style-type: none"> <li>• SVOCs were detected in the perched wells from 19 ppb (naphthalene) to 150 ppb (4-methyl phenol) and were not as prevalent as the VOCs.</li> <li>• NHVOCs were detected in the perched wells from 0.16 ppm to 7.53 ppm (acetone, 1,4-dioxane, MEK and isopropanol).</li> <li>• The 4 Exposition groundwater zone(s) wells (MW-1 – MW-4) were lo-flo sampled and also analyzed for TPH-g, VOCs, SVOCs and non-halogenated volatile organic compounds (NHVOCs).</li> <li>• TPH-g ranged from 2,200 ppb (MW-2) to 10,000 ppb (MW-3) in MW-2 through MW-4, MW-1 was ND.</li> <li>• VOCs detected in the wells MW-1 through MW-4 were TCE, cis-1,2-DCE, TCE, methylene chloride and cyclohexane ranging from 0.2 ppb to 13,000 ppb. The predominant VOC in the Exposition wells is TCE. Well MW-1 had only trace hits of VOCs, none more than 2.1 ppb.</li> <li>• SVOCs above detection limits in the Exposition wells were 4-Methylphenol (12 ppb to 190 ppb) and naphthalene (19 ppb).</li> <li>• The only NHVOC detected in the Exposition wells was acetone on MW-2 at 200 ppb.</li> <li>• The gradient of the perched groundwater zone measured during this event indicated that no prevalent gradient direction existed and the potentiometric surface was highly irregular.</li> <li>• Based on the three data points (MW-2, MW-3 and MW-4), the groundwater gradient direction in the upper Exposition groundwater zones was toward the west.</li> <li>• It was concluded that the vertical and lateral extent of groundwater contamination in the perched zone, Exposition groundwater zones and deeper aquifers is not defined.</li> <li>• Summa sampling of the dormant vapor system indicated trace to low concentrations of BTEX, 1,1-DCE, cis-1,2-DCE, vinyl chloride, methylene chloride, 1,1-DCA, 1,1,1-TCA TCE; PCE; acetone; chloroethane; propylene; hexane; and cyclohexane ranged from &lt;0.5 ppbv to 4,400 ppbv (cis-1,2-DCE in well B-3).</li> </ul> |

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| T N & Associates, Inc. | October 2002 | <p><i>Draft Remedial Investigation Report, Pemaco Superfund Site</i></p> <ul style="list-style-type: none"> <li>• <b>The following is a summary of Remedial Investigation (RI) Activities that were performed at the Pemaco site and adjacent areas from January 2001 through April 2002.</b></li> <li>• 66 soil gas samples from 66 different locations were collected from 5' bgs and analyzed for VOCs.</li> <li>• Completion of soil borings including the following: <ul style="list-style-type: none"> <li>- 14 borings to 90' bgs via Cone Penetrometer Test (CPT);</li> <li>- 46 borings to 25'-35' bgs via Geoprobe;</li> <li>- 9 borings to 90'-100' bgs and 1 boring to 130' bgs via hollow stem auger; and</li> <li>- 4 borings to 110'-175' bgs via mud-rotary rig.</li> </ul> </li> <li>• Collection of soil samples from soil borings, including the following: <ul style="list-style-type: none"> <li>- 152 upper vadose zone samples for VOCs, SVOCS, solvents, and metals;</li> <li>- 19 samples for total organic carbon (TOC) analysis;</li> <li>- 150 surface and near-surface samples via Geoprobe rig for SVOCs and metals;</li> <li>- 71 lower vadose zone samples for VOCs, SVOCs, solvents, and metals;</li> <li>- 25 lower vadose zone samples for TOC analysis;</li> <li>- 38 lower vadose zone samples for geotechnical parameters; and</li> <li>- 5 lower vadose zone samples for TOC and geotechnical parameters.</li> </ul> </li> <li>• Conversion of 14 soil borings to 18 monitoring wells (4 were double-nested). Soil borings ranged in depth from approximately 68 feet to 174 feet bgs.</li> <li>• Installation of 16 perched zone monitoring wells via a Geoprobe rig.</li> <li>• Groundwater monitoring:</li> </ul> |

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| TN & Associates, Inc. (continued) |             | <ul style="list-style-type: none"> <li>- May 2001 (34 new wells, 23 existing wells)               <ul style="list-style-type: none"> <li>- Samples collected from 51 wells for VOCs, solvents, SVOCs, metals, cyanide, CrVI, CO<sub>2</sub>, TOC, methane, ethane, and ethene;</li> <li>- 3 wells (B-7, B-14, and B-16) were dry;</li> <li>- 3 wells (B-15, B-28, and B-29) had free product.</li> </ul> </li> <li>- September 2001 (54 existing wells)               <ul style="list-style-type: none"> <li>- Samples collected from 37 wells for VOCs;</li> <li>- 8 additional samples collected for ferrous iron, sulfate, chloride, sulfide, and alkalinity;</li> <li>- 5 wells (B-7, B-11, B-12, B-14, and B-16) were dry;</li> <li>- 4 wells (B-08, B-15, B-28, and B-29) had free product.</li> </ul> </li> <li>- January 2002 (21 new wells, 54 existing wells)               <ul style="list-style-type: none"> <li>- Samples collected from 43 wells for VOCs and NHVOCs;</li> <li>- 6 wells (B-07, B-08, B-11, B-14, B-16, and B-34) were dry;</li> <li>- 3 wells (B-15, B-28, and B-29) had free product.</li> </ul> </li> <li>- April 2002 (75 existing wells)               <ul style="list-style-type: none"> <li>- Samples from 57 wells for VOCs and NHVOCs;</li> <li>- 7 wells (B-07, B-08, B-11, B-14, B-16, B-30, and B-34) were dry;</li> <li>- 3 wells (B-15, B-28, and B-29) had free product.</li> </ul> </li> <li>• Collection of groundwater level measurements:               <ul style="list-style-type: none"> <li>- 35 perched zone wells in October 2000, June 2001, September 2001, January 2002 and April 2002 (quarterly gauging on-going since April 2002);</li> <li>- 22 Exposition groundwater zone(s) wells weekly for the month of May 2001, and monthly from June 2001 to present (measurements were used to evaluate the effects of the active Maywood</li> </ul> </li> </ul> |



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|                        |             | <p style="text-align: center;">production wells on the Exposition groundwater zones.</p> <ul style="list-style-type: none"> <li>• Quarterly monitoring has been on-going since April 2002.</li> <li>• Groundwater aquifer testing: <ul style="list-style-type: none"> <li>- Conducted in December 2001 on Exposition 'A' and 'B' groundwater zones (slug, step-drawdown and 72-hour continuous test).</li> </ul> </li> <li>• Soil vapor and Summa canister samples of indoor/outdoor air were collected from private residences adjacent to Pemaco in July 2001 and March 2002.</li> </ul> |
| T N & Associates, Inc. |             | <ul style="list-style-type: none"> <li>• <b>Analytical results of the above activities were not summarized due to the large amount of data produced, however, the RI activities have completely delineated the vertical and horizontal extent of soil and groundwater contamination sourced from the Pemaco property.</b></li> <li>• <b>Results of the RI activities may be referenced in the <i>Final Remediation Investigation Report, Pemaco Superfund Site, Maywood, California</i> (TN&amp;A, March 2004).</b></li> </ul>   |