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LSI CORPORATION



**BEFORE THE STATE OF CALIFORNIA**

**STATE WATER RESOURCES CONTROL BOARD**

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| In the Matter of the Petition of<br><br>LSI CORPORATION<br><br>For Review of Order No. R4-2013-0099 and Request for Stay<br><br>California Regional Water Quality Control Board, Los Angeles Region | No.<br><br>**LSI CORPORATION'S PETITION FOR STATE WATER RESOURCES CONTROL BOARD REVIEW AND REQUEST FOR HEARING AND STAY** |

LSI Corporation, on behalf of itself and its subsidiaries and corporate predecessors, (collectively hereafter "LSI" or Petitioner")[1] hereby petitions the State Water Resources Control Board ("State Board") pursuant to Water Code Section 13320 and California Code of Regulations, Title 23, Section 2050, for review of Regional Water Quality Control Board, Los Angeles Region ("Regional Board") Cleanup and Abatement Order No. R4-2013-0099 (the "CAO") issued by the Executive Officer on July 30, 2013 for the property located at 2015 West Chestnut Street, Alhambra, California (the "Site"). A copy of the CAO is attached as Exhibit 1.

As discussed below, the Regional Board acted improperly and inappropriately in naming Petitioner as a "Responsible Party" and "Discharger" in the CAO. As the State Board has recognized, when the Regional Board designates responsible parties for an environmental cleanup,

[1] LSI is the successor to Agere Systems, Inc. ("Agere"). Because of its merger with Agere, LSI is addressing any potential historical environmental liabilities of Ortel Corporation ("Ortel") that predate Agere's January 2003 sale of the Ortel assets to EMCORE Corporation ("Emcore").

"there must be a reasonable basis on which to name each party." *In re Exxon Company, U.S.A., et al.*, Order No. WQ 85-7 at 17 (SWRCB 1985). Specifically, "[t]here must be substantial evidence to support a finding of responsibility for each party named. This means credible and reasonable evidence which indicates the named party has responsibility." *Id.* Here, Petitioner is not a current owner, operator, or lessee[2] at the Site, and as detailed in numerous comments and communications with the Regional Board, including comments by Petitioner on three draft Cleanup and Abatement Orders,[3] no evidence has been identified showing that Petitioner discharged wastes to the soil or groundwater at the Site. In particular, the Regional Board has not identified any evidence that Petitioner discharged to the soil or groundwater any of the volatile organic compounds ("VOCs") to which the CAO is directed. Based on the available evidence,[4] Petitioner is simply a former lessee,[5] and a former parent corporation of a former lessee.[6] Because the Regional Board lacked substantial evidence to support a finding that Petitioner is a responsible party or discharger under California Water Code Sections 13304 and 13267 with respect to the Site, Petitioner respectfully requests that the State Board issue an order that the CAO be amended to remove Petitioner from the CAO and that the CAO be rescinded as to Petitioner. In addition, there are elements of the Required Actions in the

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[2] The current lessee is Emcore, which is operating the Ortel assets that it purchased in January 2003.

[3] The Regional Board issued draft Cleanup and Abatement Order No. R4-2009-016 on April 30, 2009, and Petitioner provided written comments on September 29, 2009 ("2009 Comments") (attached as Exhibit 2). The Regional Board issued draft Cleanup and Abatement Order No. R4-2010-0008R on July 26, 2010 and Petitioner provided written comments on October 25, 2010 ("2010 Comments") (attached as Exhibit 3 with excerpted attachments). The Regional Board issued draft Cleanup and Abatement Order No. R4-2012-0020 on July 25, 2012 and Petitioner provided written comments on September 25, 2012 ("2012 Comments") (attached as Exhibit 4). Moreover, Agere provided a detailed response to U.S. EPA's February 2003 CERCLA Section 104(e) Information Request on May, 23 2003 ("2003 Section 104(e) Response"), a copy of which was submitted to the Regional Board (attached as Exhibit 5). The 2009 Comments, 2010 Comments, 2012 Comments, and 2003 Section 104(e) Response, all of which should be in the Regional Board's administrative record for the Site, are incorporated into this petition by reference.

[4] Although requested by Petitioner, the Regional Board has not been able to provide an index to the administrative record since issuance of the CAO. Thus, Petitioner reserves the right to raise additional points regarding any material that has been added to the administrative record since 2012 that was not mentioned in the Regional Board's Response to Comments.

[5] Lucent/Agere leased the property from the property owner from June 2000 to October 2005.

CAO that are inappropriate and improper and not supported by substantial evidence that should be modified with respect to the parties that are legitimately included in the CAO; Petitioner is noting these elements solely to preserve all of its defenses to this inappropriate CAO.

Petitioner requests a hearing on this matter and a stay of the Order pursuant to California Code of Regulations, Title 23, Section 2053. The request for stay is discussed in Section 9 of this petition, below.

**1) Petitioner**

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**2) Specific Action for Which Review is Sought**

Petitioner seeks review of the Regional Board's issuance of Cleanup and Abatement Order No. R4-2013-0099 to Petitioner. The CAO was issued to Petitioner even though the Regional Board does not have substantial evidence that Petitioner has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance at the Site. As indicated in the CAO, the substances in issue are trichloroethylene ("TCE"), tetrachloroethylene (also known as perchloroethylene or "PCE"), and other volatile organic compounds that have been identified in soil, soil gas, and/or groundwater beneath the Site. To preserve all of its defenses as to the CAO, Petitioner also seeks review of certain Required Actions in the CAO on the grounds that the actions are arbitrary, improper, or inappropriate. Section 4, below, explains the basis for this Petition.

**3) Date of Action**

The Regional Board acted on July 30, 2013, when it issued the CAO.

[6] Ortel Corporation, which leased the facility between 1981 and 2000, changed its name to Agere Systems Opto West, Inc. on January 27, 2003. Agere Systems Opto West, Inc. dissolved effective September 30, 2004.

## 4) Statement of Reasons Why the Regional Board's Action was Inappropriate or Improper, and Points and Authorities in Support of Legal Issues

### a. Background

Petitioner does not contest that TCE and other compounds are present in the soil, soil gas, and groundwater beneath the Site. The principal issue is whether, based on an independent review of the evidence in the record, there is substantial evidence that Petitioner, rather than businesses previously operating at that same location, caused or permitted these wastes to be discharged at the Site.[7]

#### i. Site History

All of the following facts regarding the history of the Site have been presented to the Regional Board for consideration and inclusion in the administrative record for the Site. *See, e.g.*, 2010 Comments pp. 10-13 (and the exhibits referenced therein).

The portion of the Site in the vicinity of current Building 2 (which is the area beneath which TCE was initially discovered in soil gas and groundwater) was formerly occupied by electric motor and electric transformer manufacturing operations. The electric transformer manufacturing operations started around 1958. As discussed in greater detail in Section 4.c.iii. below, TCE use by such manufacturers was common from the 1950s into the 1970s.

In 1954, Norris-Thermador Corporation ("Norris-Thermador") acquired the facility from its subsidiary Thermador Electrical Manufacturing Company ("Thermador"). In May 1958, Norris-Thermador relocated its electric transformer manufacturing operations from its Camfield Avenue plant in Los Angeles to what was then 715 South Raymond Avenue, Alhambra, which is the same general location as current Building 2.[8] Following this move, Norris-Thermador began producing

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[7] With respect to groundwater conditions, the Regional Board has already agreed, based on prior showings by Petitioner, that there is likely an up-gradient off-site source of the wastes in the groundwater under the Site, and consequently the Regional Board has omitted groundwater requirements from this CAO other than annual monitoring. *See* Regional Board's Response to Comments for Draft Cleanup and Abatement Order R4-2012-0020, at pp. 3-5 (Exhibit 6). Arguably even the annual monitoring requirement is inappropriate to impose on any CAO recipient under the circumstances, given that the wastes in the groundwater are coming entirely or almost entirely from an unknown off-site source.

[8] As described in the CAO and in Petitioners 2010 Comments, this is the same location as current Building 2 (2015 W. Chestnut Street). The City of Alhambra changed the addresses of the parcels in the vicinity of the site after taking these parcels by eminent domain in 1979.

electric transformers at the Alhambra facility, along with voltage regulators, transistorized power supplies, magnetic amplifiers, and other special magnetic components.

In conjunction with Norris-Thermador moving its transformer manufacturing operations to the facility, the company, through its subsidiary Thermador, obtained several building permits for work at the facility. Approximately one month before the move, the City of Alhambra Building Department issued permits to the company to install a "one hour paint spray room" and to construct a "pit for vacuum tanks." *See* 1958 Norris Thermador Permit Materials, in Exhibit G-2 to 2010 Comments (Exhibit 3). Then, three months after the move, the Building Department issued another permit to the company – this time to install a "paint booth" and "degrease pit." *Id.* Inspection records from the City of Alhambra Fire Department indicate that Norris-Thermador continued to use those fixtures, along with bake ovens, onsite as part of its operations. *Id.* As discussed in greater detail in Section 4.c.iii. below, these fixtures and equipment are common elements used in manufacturing varnished impregnated transformers – a process requiring thorough solvent cleaning of all parts.

In 1964, Spatron, Inc. took over Norris-Thermador's electric transformer manufacturing operations at the Site. (While the CAO, Paragraph 6.b, states that Spatron's "operations are unknown," Petitioner has provided all of the following information to the Regional Board.) Spatron was incorporated in California in March 1964 to engage in electronics manufacturing. *See* 1964 Spatron Articles of Incorporation, in Exhibit G-4 to 2010 Comments (Exhibit 3)[9]. After it was incorporated, Spatron purchased Norris-Thermador's electric transformer operations and began operating at the facility. *See* Alhambra Site Fact Chronology, Exhibit G to 2010 Comments (and supporting documents) (Exhibit 3). It appears that Spatron leased the facility from Norris-Thermador (which changed its name to Norris Industries, Inc. ("Norris Industries") in 1966). Norris Industries owned the Site throughout Spatron's occupancy and operation there, and, as discussed

[9] In 1964, the Los Angeles Times reported that Norris-Thermador sold its Alhambra plant to a group of former employees and that the "facility has been renamed Spatron, Inc." *See* "Norris Sells its Factory in Alhambra," Los Angeles Times (May 5, 1964) in Exhibit G-4 to 2010 Comments (Exhibit 3). The article also reported that the "new company has purchased the production facilities." *Id.*

below, was compensated $110,000 for the real property when the site was taken by eminent domain in 1979.

Like Norris-Thermador, Spatron's operations included production of electric transformers, chokes, filters, reactors, transistorized power supplies, inverters and converters, transistorized voltage sensing devices, magnetic amplifiers, and voltage regulators. *Id.* (and supporting documents, particularly Exhibit G-6 to 2010 Comments (Exhibit 3)). During its time onsite, Spatron apparently continued to use the same fixtures and equipment as Norris-Thermador to manufacture electric transformers and components.

In July 1964, an Alhambra Fire Department inspector reported that Spatron had "[r]emoved comb[ustible] material on [the] bake oven." 1958 Norris Thermador Permit Materials - Inspection Reports, Exhibit G-2 to 2010 Comments (Exhibit 3). In November 1964 and February 1965, the same inspector reported that Spatron needed a "metal container for spray booth residue and paint strainers." *Id.* Ten years later, in July 1974, another Alhambra Fire Department inspector reported the presence of many of these fixtures and equipment onsite and indicated that Spatron continued to use them: "Paint spray booth is contained in a one hour room and the west side has been penetrated. Mr. Singleton indicated that they will replace the opening with drywall. . . . Ovens and drying rooms O.K." *Id.*

Many of these elements evidently remained onsite until the Los Angeles County Superior Court issued a site condemnation order in 1979, under which Spatron was compensated $22,290 for its fixtures and equipment, including bake ovens, a "4'+ concrete lined pit," and a "humidity chamber." 1979 Alhambra Site Condemnation Order, Exhibit G-5 to 2010 Comments (Exhibit 3). Again, as discussed in Section 4.c.iii. below, these fixtures and equipment are common elements used in manufacturing electronic varnished impregnated transformers, which requires significant quantities of solvent for cleaning parts during the production process.

In 1978 and 1979, the Alhambra Redevelopment Agency obtained the individual lots in the Site area through its power of eminent domain. The Los Angeles County Superior Court ordered that Norris Industries be compensated for the real property and Spatron be compensated for the fixtures and equipment at the plant. This award indicates that Norris Industries owned the real

property from the early 1950's to 1979 and that Spatron was a lessee or otherwise occupied the facility as an operator through approximately 1979. Spatron and its subsequent purchaser Amnetics, Inc. may no longer be financially viable entities.

The Alhambra Redevelopment Agency demolished the previously existing buildings, regraded the site,[10] and combined multiple lots into a single large parcel that was sold to Wayne C. Tam and Millicent J. Tam in 1980. The Tams or the Tam Family Trust have owned the property since April 1980. As part of the purchase agreement, the Tams constructed four new buildings on the site. *See* Declaration of Wayne C. Tam, Exhibit K to the 2010 Comments (Exhibit 3). When construction was completed, about 95% of the land was covered by concrete pavement or concrete buildings on concrete slabs. Only the street frontage strips along West Chestnut Avenue and two narrow strips of land along Building 3 and Building 4 adjacent to the parking lot were left unpaved. Those areas were landscaped with a grass lawn and/or plantings. *Id.*

Ortel began its operations at the Site in about December 1981 after leasing one-half of Building 1 from the Tams. The operations involved research and development and eventually production of laser technologies for telecommunications applications. Between 1982 and 1986, Ortel expanded gradually into Building 2, and leased all of Building 2 by 1986. *Id.* According to a representative of RIM Development, Ortel leased all of Buildings 1 through 4 by early 1991. Other buildings were added to the facility in subsequent years.

As discussed in Section 4.c.ii., below, Ortel did use certain solvents at the Site, in small quantities, including in one small vapor degreaser starting in 1987 and in a second vapor degreaser starting in 1995.[11] These degreasers happened to be located in a room inside Building 2, in the

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[10] *See* Exhibit G-5 to 2010 Comments (Exhibit 3). To the extent that the regrading by the Alhambra Redevelopment Agency during its time of ownership exacerbated previously existing contamination at the site, the RWQCB should consider the Redevelopment Agency as a primarily liable party at the site. *Cf. Wenwest*, Order No. WQ 92-13 at 6. Petitioner does not know whether the Regional Board has investigated the Redevelopment Agency as a potentially liable party.

[11] Paragraph 6.b. of the CAO states somewhat misleadingly that Ortel added two vapor degreasers in 1995 in this building. The second vapor degreaser, however, was solely for the machine shop in Building 2 and never used any chlorinated solvents or other substances of the type found in the soil gas and groundwater at the Site. *See* 2003 Section 104(e) Response p. 11 (Exhibit 5).

general vicinity of the area where, as discussed below, TCE and other VOCs were discovered in soil vapor around the building. However, as discussed in detail in Section 4.c.ii., below, there is no evidence of any spills or releases to the environment of any chlorinated solvents from any of Ortel's operations.

In June 2000, Lucent Technologies, Inc. acquired Ortel and subsequently transferred Ortel to Agere Systems ("Agere"). In January 2003, Agere sold the Ortel assets to Emcore Corporation ("Emcore"). In connection with that asset purchase, Emcore subleased the facility from Agere. As of October 2005, Agere no longer leased the facility or subleased to Emcore. In April 2007, LSI Corporation merged with Agere. At no time has Ortel, Agere, or LSI ever owned the property.

**ii. Subsurface Conditions**

Paragraph 7 of the CAO describes the results of various prior Site investigations. While TCE was detected in soil vapor at shallow depths (*e.g.*, five feet below ground surface ("bgs")), the highest concentrations were quite deep, at depths ranging from 80 to 200 feet bgs.

In Paragraph 7 of the CAO, the Regional Board attempts to imply that because substances were detected in soil gas in the general vicinity of a building at which Ortel either stored or used solvents, the substances in the soil gas must have been discharged to the soil by Ortel. The Regional Board, however, has not provided any evidence, let alone substantial evidence, that Ortel caused or permitted a discharge of any of these substances to the soil, soil gas, or groundwater. Section 4.c.i., below, discusses the supposed evidence of the Regional Board in greater detail.

Three groundwater-monitoring wells have also been installed onsite. As shown in the figures included with the CAO, the first groundwater well installed at the Site, EMW-1, is in the vicinity of Building 2. The second groundwater well, EMW-2, is at the upgradient (western) edge of the Site property, near Building 5. The third well, EMW-3, is across the street to the south of Building 1. The CAO reports various results from these wells, but does not make clear the following points:

- The groundwater elevation at monitoring well EMW-2 is more than ten feet higher than the groundwater elevation at monitoring well EMW-1.
- The groundwater gradient consistently has been from the west-northwest to the east-southeast of the Site throughout the monitoring period.

- The TCE concentrations in EMW-2 have been higher than the TCE concentrations in EMW-1 in eight out of eleven groundwater monitoring events. The TCE concentrations in EMW-2 have never been lower than the lowest concentration observed at EMW-1. *See* 2013 Ortel Site Annual Groundwater Monitoring Report, Table 2, attached as Exhibit 7. In other words, the three monitoring events in which observed TCE concentrations at EMW-1 were higher than at EMW-2 likely reflected the passage of a particular concentration through EMW-2 and subsequently through EMW-1.

- This pattern is true for most of the other contaminants observed in these two monitoring wells. For example, PCE concentrations in EMW-2 are routinely at least twice as high as in EMW-1. *Id.*

These data show that there is a major plume of chlorinated solvents in the groundwater migrating beneath the Site that originated from one or more offsite upgradient sources. The Regional Board has not provided any evidence showing that the groundwater concentrations observed beneath the Site would be any different even if there were no TCE in the soil gas and/or soil beneath the Site. Instead, the Regional Board has limited the scope of the CAO with respect to groundwater, leaving the regional groundwater issue to the U.S. Environmental Protection Agency and requiring only annual monitoring. *See* Regional Board's Response to Comments for Draft Cleanup and Abatement Order R4-2012-0020, at pp. 3-5, attached as Exhibit 6.

**b. Standard of Review**

Petitioner requests that the State Board review the CAO issued by the Regional Board and make a finding as to whether the Regional Board's action in issuing the CAO to Petitioner was "inappropriate or improper." *See* California Water Code § 13320. Upon a Water Code Section 13320 Petition, the State Board must review the Regional Board record to determine if there is sufficient evidence to ensure an appropriate and proper action by the Regional Board. *See* Water Code § 13320. The State Board is required to make an independent review of the Regional Board's action, and in order to uphold the action, the State Board must be able to find that the Regional Board's action was based upon substantial evidence. *In re Exxon Company, U.S.A., et al.,* Order No. WQ 85-7 at 14-17 (SWRCB 1985); *see also In re Stinnes-Western Chemical Corporation*, Order No. WQ 86-16 at 16 (SWRCB 1986) ("in order to uphold a Regional Board action, we must be able to find that the action was based on substantial evidence."). The State Board has further stated that "there must be a reasonable basis on which to name each party. There must be substantial evidence

to support a finding of responsibility for each party named. This means credible and reasonable evidence which indicates the named party has responsibility." *See Exxon*, Order No. WQ 85-7 at 17.

**c. The Regional Board Improperly and Inappropriately Characterized Petitioner as a Discharger at the Site**

Pursuant to Water Code Section 13304, the Regional Board has the authority to issue cleanup and abatement orders to "[a]ny person who has discharged or discharges waste into the waters of this state . . . or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is . . . discharged into the waters of the state and creates . . . a condition of pollution or nuisances." Water Code §13304(a). Upon such finding, the named discharger "shall upon order of the regional board, clean up the waste or abate the effects of the waste . . ." *Id.*

The Regional Board does not have substantial evidence showing that Petitioner caused or permitted a discharge of the substances found in soil, soil vapor, and groundwater at the Site. Not only is there an absence of evidence showing that Petitioner has released or discharged chlorinated solvents or other relevant wastes at the Site, but affirmative evidence has been provided to the Regional Board showing that (1) Petitioner is highly unlikely to have released such substances and (2) prior owners and operators of the Site are the most likely sources of the substances observed in soil or soil gas at the Site.

Based on the available evidence, therefore, it was inappropriate and improper for the Regional Board to make the findings in Paragraphs 1, 9, 18, and 19 and elsewhere in the CAO that Petitioner is a discharger under California Water Code Sections 13304 and 13267. *See* Water Code § 13304 (defining discharger as a person who has caused or permitted waste to be discharged into waters of the state); Water Code § 13267 (authorizing regional board to require any person who has discharged waste to furnish technical or monitoring reports).

The Regional Board attempts to circumvent the requirement that "[t]here must be substantial evidence to support a finding of responsibility for each party named," *see Exxon,* Order No. WQ 85-7 at 17, by making findings about all "Dischargers" collectively, without any findings individualized to particular named parties. *See, e.g.*, CAO Paragraph 9(a) ("The Dischargers have stored, used,

and/or discharged VOCs, including TCE and various solvent stabilizers, on the Site"). In addition, it appears that the Regional Board is attempting to premise liability under Water Code Section 13304 on a party's storage or use of chemicals, *id.*, or on mere status as a former lessee or former sublessor of the property.[12] All of these efforts are inappropriate, for the reasons discussed below.

State Board opinions demonstrate a clear division of responsible parties into two categories: those who are responsible because they actively caused the contamination as direct dischargers, and those who are deemed responsible because of their status with respect to the subject property. *See In re Wenwest, Inc., Order No. WQ 92-13 at 7-8 (SWRCB 1992)*; *In re Arthur Spitzer*, Order No. WQ 89-8 (dry cleaning operators are responsible parties because they contributed to the contamination; current owners and current lessee are responsible parties because they have knowledge of the contamination and the ability to obviate it). There is a strong preference for naming the party responsible for the contamination in a CAO. *See In re Alvin Bacharach and Barbara Bacharach*, Order No. WQ 91-07 (SWRCB 1991) (reversing an order naming a landowner who did not contribute to contamination as the sole responsible party where substantial evidence existed to name the direct discharger); *see also Wenwest, Order No. WQ 92-13* at 5 ("No order issued by this Board has held responsible for a cleanup a former landowner who had no part in the activity which resulted in the discharge of the waste and whose ownership interest did not cover the time during which that activity was taking place").

The State Board has affirmed CAOs naming former landowners and lessees as responsible parties where they contributed to the contamination as direct dischargers. *See Wenwest, Order No. WQ 92-13* at 4; *see also Spitzer*, Order No. WQ 89-8 at 9. A review of State Water Board opinions, however, does not reveal an opinion where a former lessee has been named solely because of its status as a former lessee. *See In re Zoecon Corporation,* Order No. WQ 86-2, 10 (SWRCB 1986) (stressing the current landowner's "exclusive control over access to the property" as a crucial

[12] In its response to Petitioner's 2012 Comments, the Regional Board stated that "[t]he existence of other sources of waste does not preclude the Regional Board from naming LSI/Agere in a cleanup and abatement order where LSI leased the property and used chemicals of the type found at the site," and that it "issued the Draft CAO to the known tenants, current tenants, landowners, and former viable businesses for the burdened property." Response to Comments for Draft Cleanup and Abatement Order R4-2012-0020, at pp. 2-3.

element in holding it liable). In fact, the State Board has reversed a Regional Board's order naming a former owner that did not contribute to the contamination. *See Wenwest*, Order No. WQ 92-13 at 5-6 (stressing that "in previous orders in which we have upheld naming prior owners, they have been involved in the activity which created the pollution problem").

Courts have generally found that to be properly considered a responsible party under Water Code Section 13304, a party must have actively discharged waste or must have at least taken affirmative steps directly towards the improper discharges of wastes. For example, in *City of Modesto Redevelopment Agency v. Superior Court*, the court reviewed the legislative history of the Porter-Cologne Water Quality Control Act ("Porter-Cologne Act") and held that solvent manufacturers and distributors would not be liable under Water Code Section 13304, stating "we see no indication that the Legislature intended the words 'causes or permits' within the Porter-Cologne Act to encompass those whose involvement with a spill was remote and passive." 119 Cal. App. 4th 28, 44 (2004). Instead, only those parties who took affirmative steps directed toward the improper discharge of wastes should be held liable. *Id.* at 43. Similarly, in *Redevelopment Agency of the City of Stockton v. BNSF Railway Co.*, the Ninth Circuit followed the *City of Modesto*, favorably quoting the conclusion that "the words 'causes or permits' within section 13304 were not intended 'to encompass those whose involvement with a spill was remote and passive," and holding that railroads were not liable for a petroleum spill that occurred on other property and migrated through a French drain constructed by the railroads because the railroads had not engaged in any active, affirmative, or knowing conduct with regard to the passage of contamination through the drain and into the soil. 643 F.3d 668, 678 (9th Cir. 2011).[13]

Courts in other jurisdictions have also found that under environmental statutes similar to Water Code Section 13304, absent reliable evidence showing a nexus between an alleged

[13] In its response to the 2012 Comments, the Regional Board sought to distinguish the decision in *Redevelopment Agency of the City of Stockton v. BNSF Railway Co.* from the present case, relying on the current CAO's focus on soil and soil gas rather than on the groundwater that the Regional Board has admitted is contaminated by an up-gradient source. Response to Comments for Draft Cleanup and Abatement Order R4-2012-0020, at p. 5 (Exhibit 6). The Regional Board misses the point of the Ninth Circuit's decision, which applies with equal force to the lack of nexus between Ortel's operations and the substances in subsurface soils.

discharger's operation and a discharge of the chemicals at issue, the mere use of chemicals during its operations at the site does not provide sufficient evidence of a discharge. *See Voellinger v. Kennedy,* 2011 N.J. Super. Unpub. LEXIS 2342 (App. Div. June 29, 2011) at *17. In *Voellinger*, the New Jersey Appellate Division overturned a trial court's decision that the defendant had discharged TCE and PCE under the New Jersey Spill Compensation and Control Act[14] because the only evidence linking the alleged discharge with the contamination were fate and transport calculations that the trial judge had found to be unreliable. *Id.* The court noted that the defendant may have used TCE or engaged in the same production process involving TCE as the plaintiff, but concluded that no evidence supported the trial court's finding of defendant liable because "[e]ven an assumption that [defendant] used the substances in question does not demonstrate the substances were discharged into the environment during [defendant's] ownership." *Id.* at *24.

Courts in other jurisdictions have further held that to establish discharger liability, a government agency must show that there was a reasonable connection or nexus between the discharge, the discharger, and the contamination at the site. *See, e.g., New Jersey Dep't of Envtl. Prot. v. Dimant,* 212 N.J. 153, 51 A.3d 816 (2012). In *Dimant,* the Supreme Court of New Jersey found that although the New Jersey Department of Environmental Protection had evidence that a drip of fluid containing PCE was observed at the defendant's business in the past, because the Department was not able to show a nexus over a decade later between the drip and contamination discovered in groundwater, there was no basis to hold the defendant liable under the New Jersey Spill Compensation and Control Act for compensatory damages for cleanup of the tainted groundwater, or even for the investigatory expenses associated with the remediation. 51 A.3d at 834.

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[14] The New Jersey Spill Compensation and Control Act provides for a broad scope of liability as follows:

> [A]ny person who has discharged a hazardous substance, or is in any way responsible for any hazardous substance, shall be strictly liable, jointly and severally, without regard to fault, for all cleanup and removal costs no matter by whom incurred. Such person shall also be strictly liable jointly and severally, without regard to fault, for all cleanup and removal costs incurred by the department or a local unit . . .

*See* N.J.S.A. 58:10-23.11g(c)(1).

As discussed in more detail below, the Regional Board has not provided any evidence that Petitioner caused or permitted a discharge at the Site, but instead cites only Petitioner's status as a former lessee, the presence at the Site of a small quantity of a TCE mixture that Ortel disposed of off-site in 1995, and Petitioner's status in 1997 as a large quantity generator of hazardous waste, in conjunction with the presence of TCE in subsurface soil, soil vapor, and groundwater at the Site. *See* Response to Comments for Draft Cleanup and Abatement Order R4-2012-0020, at p. 3 (Exhibit 6). Even if Petitioner provided no contrary evidence, the Regional Board would have failed to provide substantial evidence in support of its conclusion that Petition is a discharger under California law. As discussed further below, however, Petitioner has provided substantial evidence that it has not discharged wastes at the Site and that any subsurface contamination at the Site resulted from the operations of other parties before Petitioner began its operations at the Site. Thus, the Regional Board has improperly and inappropriately characterized Petitioner as a discharger at the Site.

**i. The Regional Board Has Not Provided Any Evidence that Petitioner Caused or Permitted a Discharge at the Site**

In the Regional Board's response to Petitioner's 2012 Comments, the Regional Board mentioned Petitioner's lease of the Site and its use of chemicals at the Site, but did not mention any release or discharge of those chemicals into the environment. *See* Regional Board's Response to Comments for Draft Cleanup and Abatement Order R4-2012-0020 at p. 2 (Exhibit 6) (stating "The existence of other sources of waste does not preclude the Regional Board from naming LSI/Agere in a cleanup and abatement order where LSI leased the property and used chemicals of the type found at the Site."). The Regional Board appears to rely on two documents: (1) a copy of a portion of a hazardous waste manifest dated February 28, 1995, indicating that ten gallons of a waste containing TCE and hydroquinone (a type of phenol) was sent offsite for disposal; and (2) the National Biennial RCRA Hazardous Waste Report (Based on 1997 Data), that documents that Ortel's facility, along with hundreds of other facilities in California, was designated as a large quantity generator of hazardous waste in 1997. *See* Regional Board Response to Comments at p. 3 (Exhibit 6). Neither of these documents provides the required substantial evidence that Petitioner caused or permitted a discharge of TCE or other relevant wastes at the Site.

Petitioner has previously discussed fully the manifest dated February 28, 1995 with the Regional Board and EPA. The manifest is for 10 gallons of "TCE/Hydroquinone mix" and is expressly coded 551, the California Hazardous Waste Code for waste laboratory chemicals. As explained in LSI's response to EPA's CERCLA Section 104(e) request in 2003 and again to the Regional Board, most recently in Petitioner's 2010 and 2012 comments on the Regional Board's Draft Cleanup and Abatement Orders, the facility manager that helped assemble the documents for Agere's response to EPA believed that this material was from earlier research and development activities. No information has been identified that suggests that any of this material was released or disposed of at the Site.

Likewise, the National Biennial RCRA Hazardous Waste Report only documents that the Site was designated as a large quantity generator of hazardous waste in 1997. Because this document does not indicate what types of wastes were generated at the Site, it does not even provide any evidence that TCE was used at the Site, let alone evidence that any such wastes were released at the Site. Thus, this document does not provide any evidence that Petitioner discharged TCE or other wastes at the Site. (The 1997 hazardous waste manifests provided in Petitioner's 2003 Section 104(e) Response do not indicate that Petitioner was using TCE.)

Absent substantial evidence that Petitioner actively discharged waste or took some affirmative steps toward the improper discharge of wastes, neither evidence of storage nor legal generation of some kind of hazardous waste gives rise to liability under California law for the cleanup of contamination found at a site. *See City of Modesto,* 119 Cal. App. 4th at 43-44 (requiring evidence of affirmative steps directed toward the improper discharge of wastes to find discharger liability under Water Code Section 13304); *cf. Wenwest*, Order No. WQ 92-13 at 5 ("No order issued by this Board has held responsible for a cleanup a former landowner who had no part in the activity which resulted in the discharge of the waste and whose ownership interest did not cover the time during which that activity was taking place").

The reasoning of the New Jersey Appellate Division in *Voellinger* is directly on point. In *Vollinger*, the court recognized that "[e]ven an assumption that [defendant] used the substances in question [did] not demonstrate the substances were discharged into the environment during

[defendant's] ownership." *See Voellinger,* 2011 N.J. Super. Unpub. LEXIS at *24. Thus, even if Petitioner used TCE at the Site during its past operations, this does not provide substantial evidence that TCE was ever discharged into the environment. Moreover, even if there were substantial evidence that Petitioner caused or permitted a discharge of some kind of waste, which there is not, there would also need to be some nexus between the discharge and the contamination to be remediated. *See Dimant,* 51 A.3d at 834.

The Regional Board has provided no nexus between Ortel's operations and the presence of TCE and other chlorinated solvents in subsurface soil gas. The detection of TCE and other compounds in the subsurface in the vicinity of Building 2 is not evidence of a release from Ortel operations in or around Building 2, particularly given the evidence of Ortel's careful solvent handling practices and the information indicating that the subsurface contamination resulted from prior operations at the same general location as Building 2, both of which are discussed below.

**ii. The Available Evidence Indicates That Petitioner Did Not Discharge TCE or Other Solvents to Soil, Soil Gas, or Groundwater at the Site.**

As noted previously, the Site was redeveloped in 1980 with construction of the current buildings and paving of virtually the entire Site. Based on conversations with former Ortel employees and managers, Ortel's products were at the development stage throughout the 1980s, involving only small-scale production. *See* 2010 Comments at p. 16 (Exhibit 3). According to Marc Nisenfeld, Facilities and Safety Manager for Ortel between 1986 and 1990, as Ortel moved into particular buildings or portions of buildings, it installed vinyl tile over the concrete floors in all areas to be used for manufacturing, assembly, testing, or other operations. *Id.* He and other former managers reported that, except for the vapor degreaser discussed below, all cleaning solvents were used in very small quantities at lab benches. *Id.* The solvents were typically dispensed with reusable pump or squeeze bottles over glass beakers or glass trays or applied with cotton swabs or small tissues for delicate uses. *Id.* The pump or squeeze bottles were refilled from liter-sized (or occasionally gallon-sized) glass or metal containers, and the original containers were used to collect and store spent solvents until they were disposed of offsite. *Id.* It is possible that solvents also were placed in beakers on lab benches so that small parts could be dipped into the beakers for cleaning

purposes. *Id.* Mr. Nisenfeld stated that all used solvents, and any liquids or application materials (swabs, wipes, etc.) that had come into contact with solvents, were collected and periodically disposed of offsite as hazardous wastes. *Id.*

Mr. Nisenfeld recalled that Ortel purchased its first vapor degreaser in about 1987, for use in cleaning small laser module assemblies before their containers were hermetically sealed. *Id.* The degreaser was about the size of a small chest freezer, just over three feet tall, and the inside dimensions of the vapor tank were 1 foot in width and 1 foot 8 inches in length. *See* 1988 SCAQMD Air Permit, attached as Exhibit N to 2010 Comments (Exhibit 3). According to Mr. Nisenfeld, the degreaser was on wheels and could be moved away from the wall to clean behind it (*i.e.*, it was portable and no functional components were in contact with the ground). *See* 2010 Comments at p. 16 (Exhibit 3). The vapor degreaser was placed in Building 2 after it was purchased, in a location different from the location of the current degreaser room. *Id.* Mr. Nisenfeld indicated that the degreaser was placed in the eastern 25% of Building 2 near the junction of two interior walls, roughly equidistant between the north and south exterior walls of Building 2, with a fume hood overhead and no floor drains. *Id.* (This location is not particularly near the observed locations of elevated concentrations of TCE in soil gas or groundwater.)

Mr. Nisenfeld indicated that the vapor degreaser was not used for some time after it was purchased, and once it began to be used, it was used at most once or twice per week for approximately an hour each time. *Id.* As a result, the degreaser did not have to be refilled with solvent more than once every few months, and the solvent remained usable for a long time. *Id.*

According to Mr. Nisenfeld, when he was at Ortel, solvent products for the vapor degreaser were stored in a paved and fenced chemical and waste storage area located immediately outside (north of) the northeastern corner of Building 2, up against the building. *Id.* at 17. When it was needed, solvent would be hand pumped from a drum or gravity fed from a tank valve into a stainless steel bucket that would be placed on a stainless steel cart to be rolled a short distance over pavement to a door that led into the degreaser room. *Id.* The degreaser was directly south of the door near the opposite wall of the room. *Id.* Wastes would be removed from the degreaser through a similar process, using a valve in the bottom of the degreaser to drain solvent wastes into a container that was

made for that purpose. *Id.* The container would be placed on a rolling cart for transport back to a liquid waste drum in the fenced waste storage area. *Id.* A funnel was used to pour liquid waste into the collection drum to avoid spills. *Id.* All solvent wastes were sent offsite for proper disposal. *Id.*

Mr. Nisenfeld has no recollection of any spills or releases of solvents at the facility (either inside or outside), and no knowledge of any onsite disposal of solvents at the facility (and no reason to believe that any onsite disposal occurred). *Id.* He said that he would be in a position to know of any spills or releases, as he had the spill response kit and it was his responsibility to clean up any such spills. *Id.* He also carried a mobile phone so that he could be contacted at any time. *Id.* Mr. Nisenfeld said that the process training for the lab technicians who transferred or used solvents included stressing the importance of reporting any spills or releases, and he believes that all personnel were safety conscious and conscientious about proper waste management. *Id.*

Similarly, in a declaration provided to the Regional Board on January 4, 2011, Henry A. Blauvelt, who was employed by Ortel as a Staff Scientist and Chief Technologist at the Site from January 1985 to September 2001, stated that "I do not recall any spills or releases into the environment of any solvents during the period I was employed at Ortel." *See* Declaration of Henry A. Blauvelt at ¶10 (attached to 2012 Comments) (Exhibit 4). Mark Kanipe, Ortel's environmental manager from 1990 through 2009, also reported in 2003 on Ortel's safe solvent handling practices, and stated that there had not been any spills or releases of solvents to the environment during his tenure at Ortel. *See* 2003 Section 104(e) Response at pp. 9-10, 12-17 (Exhibit 5).

There is some evidence that Ortel used 1,1,1-TCA in its vapor degreaser between at least 1985 and 1990, before switching to non-chlorinated solvents.[15] 1,1,1-TCA also may have been stored in a 150-gallon above-ground storage tank ("AST") located in a paved and bermed area

[15] As LSI discussed with the RWQCB on June 2, 2009, Mark Kanipe, the former environmental manager at Ortel's facility, had indicated to a Board representative in early 2000 that TCE had been stored in the AST, but Mr. Kanipe subsequently retracted that statement as mistaken. Mr. Kanipe had erroneously thought in early 2000 that Vapo-Kleen contained a chlorinated solvent like TCE or 1,1,1-TCA, and he had not distinguished between those compounds in his discussions with the Board representative. As described on page 15 in Agere Systems' May 23, 2003 Response to EPA's February 10, 2003 Request for Information, Exhibit 5 to this petition, upon Mr. Kanipe's review of the MSDS for Vapo-Kleen, he determined that the solvent does not contain TCE, 1,1,1-TCA, or any of the other chemicals listed in EPA's Information Request 6. Thus, the solvent stored on-site from 1990 and 1992 did not contain TCE or 1,1,1-TCA.

outside Building 2 during that period. If Ortel had been engaging in problematic solvent handling practices or using leaky equipment, one would expect to see 1,1,1-TCA in soil gas or groundwater; however, 1,1,1-TCA has not been detected in soil gas or groundwater at the Site. *See* 2013 Ortel Site Annual Groundwater Monitoring Report, Table 2 and Attachment B, attached as Exhibit 7.

In sum, the available evidence indicates that there were not any spills or releases of TCE or other chlorinated solvents from Ortel's operations to the soil, soil gas, or groundwater at the Site. The Regional Board has not provided substantial evidence to the contrary.

**iii. The Weight of the Evidence Indicates that the TCE and Other in Soil and Soil Gas Any Subsurface Contamination Comes From Pre-1980 Owners and Operators**

As detailed more extensively in Petitioner's 2010 Comments, the available evidence indicates that the subsurface contamination comes from pre-1980 owners and operators engaged in transformer manufacturing at the Facility. *See* 2010 Comments at pp. 10–15 (Exhibit 3).

The portion of the Site in the vicinity of current Building 2 (which is the area beneath which TCE was initially discovered in soil gas and groundwater) was formerly occupied by electric motor and electric transformer manufacturing operations, including Norris-Thermador, an entity for which TriMas Corporation now bears responsibility as a result of a series of mergers.[16] The electric

[16] The Regional Board has included TriMas Corporation ("TriMas") in the CAO as the successor to Norris Industries. As successor to Norris Industries, TriMas Corporation retains Norris Industries' owner liability (1958-1979) and its operator liability (1958-1964). In its comments on the 2010 draft CAO, TriMas argued that it is not the successor to this liability. For the information of the State Board, Petitioner provides below a summary of its understanding of the corporate history. Detailed documentation of the analysis is provided in the 2010 Comments.

Through a series of transactions between 1981 and 1983, Norris Industries merged with and became NI Industries. By 1989, Masco Industries – through its wholly owned subsidiary Nimas Corp. – had acquired all of NI Industries' outstanding stock, making NI Industries a wholly owned subsidiary of Masco Industries. When Masco Industries changed its name to MascoTech Inc. in 1993, NI Industries remained its subsidiary. In 1998, NI Industries merged into MascoTech Acquisition, another wholly owned subsidiary of MascoTech, thereby passing NI Industries' liability to MascoTech Acquisition. Two days later, MascoTech Acquisition merged into TriMas Corp., passing NI Industries' liability to TriMas, which MascoTech then acquired as a wholly owned subsidiary. In November 2000, Heartland Industrial Partners LP bought MascoTech and merged it with two other companies to form Metaldyne Corp. In June 2002, TriMas undertook a recapitalization to separate itself from Metaldyne – with each retaining its own liabilities by agreement. TriMas continues to retain NI Industries' liability for the Alhambra site. *See* Alhambra Site Corporate History Flow Chart, Exhibit G to 2010 Comments (Exhibit 3); Alhambra Site Corporate History Fact Chronology, *id.* (with supporting documents); *see also Price Pfister v. TriMas Corp.*, 2009 Cal. App. Unpub. LEXIS 935, No. GO39081 (Cal Ct. App. 4th Dist. Feb. 3, 2009) (referring to TriMas as "NI Industries, Inc.'s successor in interest" in a dispute over a 1983 contract).

transformer manufacturing operations by the TriMas predecessors started around 1958. As discussed in greater detail in Petitioner's 2010 Comments, TCE use by such manufacturers was common from the 1950s into the 1970s.[17]

In the 1950s and 1960s, electronic varnished impregnated transformers were a common type of transformer being manufactured. Manufacturing these types of transformers required a process known as vacuum impregnation. Harold M. Nordenberg, Electronic Transformers, at 262-64, Reinhold Publishing Corp. (1964), attached in Exhibit H to the 2010 Comments (Exhibit 3). That process required the types of equipment that were installed and used at the Norris-Thermador and Spatron facilities.

Vacuum impregnation required thorough cleaning of all parts with solvent. The transformers, coils, and cores were then baked in ovens, such as the bake ovens present at the Site

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TriMas previously acknowledged that it faced continuing liability at the Stringfellow Superfund Site in California based on historic waste disposal by Norris-Thermador and NI Industries' succession to the liability of Norris-Thermador. In 1982, EPA and certain defendants entered into a consent decree to resolve the defendants' liability for the Stringfellow Superfund site. One of the settling defendants was NI Industries. NI Industries' liability derived from Norris-Thermador, which EPA determined had disposed of 1.8 million gallons of waste at the site. *See* EPA Stringfellow Site Main Data Report (1998) and EPA Stringfellow Site Combined Data Report II (1998), both of which are in Exhibit G to 2010 Comments (Exhibit 3). Court documents in the Stringfellow site litigation reflect the chain of liability connecting NI Industries to TriMas. For example, in April 2000, when NI was a wholly-owned subsidiary of MascoTech Inc., the service list on one of the court's summary judgment orders includes "Attys for MascoTech, Inc. (sued as NI Industries, Inc.)." *See* Order Granting Summary Judgment, No. 83-2501 (C.D. Cal. Apr. 11, 2000), at 3, in Exhibit G to 2010 Comments (Exhibit 3). In June 2004, when the parties entered into another consent decree for the Stringfellow site, the court listed among the settling defendants "NI Industries, Inc. (an indirect subsidiary of TriMas Corporation)." *See* 2004 Stringfellow Site Consent Decree (excerpt), at 29, in Exhibit G to 2010 Comments (Exhibit 3).

TriMas' identification of the Stringfellow site consent decree in the "Commitments and Contingencies" section of its 2003 Annual Report also shows that it believed it retained the liability of Norris-Thermador and NI Industries. *See* 2003 TriMas Annual Report and 10-K (excerpt), at 12, 17, 19-20, 58, in Exhibit G to 2010 Comments (Exhibit 3). TriMas' 2009 Annual Report further confirms this by again referencing the consent decree as a "liability under environmental laws and regulations" and by stating separately that "[a]t our currently owned property located in Vernon, California, we [TriMas] expect to incur expenses to investigate the environmental conditions associated with historical operations of NI Industries and/or its tenants." 2009 TriMas Annual Report and 10-K (excerpt), at 15, 23, Exhibit G to 2010 Comments (Exhibit 3).

[17] *See, e.g.,* Richard E. Doherty, A History of the Production and Use of Carbon Tetrachloride, Tetrachloroethylene, Trichloroethylene and 1,1,1-Trichloroethane in the United States: Part 1, 1 JOURNAL OF ENVIRONMENTAL FORENSICS 69-81 (2000) ("History of TCE and TCA Use in the United States"), in Exhibit H to 2010 Comments; *id.* Part 2, at 83-93 (Exhibit 3).

before 1979, and transferred to vacuum tanks, such as those Norris-Thermador obtained a permit to install in 1958, where varnish was applied. The coils and cores then were baked again in ovens to ensure that the solvent was completely removed before additional varnish was applied. Thus, the equipment that Norris-Thermador and Spatron used to manufacture electric transformers onsite matches the equipment required to manufacture electronic varnished impregnated transformers, including solvent cleaning equipment, such as the degrease pit.

In addition, there is ample evidence that TCE was the solvent of choice for metal cleaning operations in the 1950s and 1960s. In 1963, "[t]he solvent used in most vapor degreasers [wa]s trichloroethylene." Samuel Spring, Metal Cleaning, at 59, Reinhold Publishing Corp. (1963), attached in Exhibit H to 2010 Comments (Exhibit 3). By 1966, the use of TCE in Los Angeles County alone was an estimated 40 million pounds per year. History of TCE and TCA Use in the United States, Part 2, at 86, Exhibit H to 2010 Comments (Exhibit 3). Thus, TCE was likely the solvent used in the degreasing operations at the facility through at least the late 1960s.

In general, TCE disposal practices at the time Norris-Thermador operated at the Site were conducive to environmental contamination. In 1956, the Manufacturing Chemists Association directed in its TCE Chemical Safety Data Sheet that TCE residue "may be poured on dry sand, earth, or ashes at a safe distance from occupied areas and allowed to evaporate into the atmosphere." Manufacturing Chemists Assn., Chemical Safety Data Sheet SD-14, at 13 (1956 2d. Revision), attached as Exhibit H to 2010 Comments (Exhibit 3). In 1964, industry guidance on routine disposal practices for vapor degreasing sludge that contains chlorinated solvents advised that "[i]n the absence of any clearly defined ordinances, the sludge is usually poured on dry ground well away from buildings, and the solvents are allowed to evaporate." *See* Thomas K.G. Mohr, Santa Clara Valley Water District, 1,4-Dioxane and Other Solvent Stabilizers White Paper, at 10-11 (June 14, 2001) ("Solvent Stabilizers White Paper"), attached in Exhibit H to 2010 Comments (Exhibit 3). Similar industry guidance appeared again in 1974. *Id.*

As a result of these guidance materials, improper disposal of solvent residues from vapor degreasers often was the cause of solvent contamination at electronics manufacturing and metals fabrication sites at the time Norris-Thermador was manufacturing electric transformers at the

facility. *Id.* Any such disposal of TCE or other spent solvents by Norris-Thermador or other pre-1980 electric transformer manufacturing operations at the Site likely would have resulted in a release of chlorinated compounds such as those detected in the soil and groundwater beneath the facility.

In addition, when Norris-Thermador manufactured electric transformers at the Site and when Spatron began manufacturing electric transformers at the Site, neither Norris-Thermador nor Spatron were subject to the strict local and regional air rules and permit conditions designed to prevent or substantially phase out TCE use in Los Angeles County. *See, e.g.*, Los Angeles Air Pollution Control District Rule 66 (1967); SCAQMD Amended Rule 1122 (1979); SCAQMD Rule 442 (1982); SCAQMD Rule 1164 (1988); SCAQMD Rule 1171 (1991), collectively attached as Exhibit P to 2010 Comments (Exhibit 3). Nor, as noted above, were they subject to stringent hazardous waste disposal requirements.

Finally, as discussed in the 2010 Comments, the depths of the most elevated soil gas concentrations of TCE are consistent with TCE releases that occurred before 1980.

The information indicating that pre-1980 owners and operators in the area now occupied by Building 2 are most likely responsible for the presence of TCE and other solvents in the subsurface demonstrates that the Regional Board had no reasonable basis to assume that the mere presence of TCE and other substances in soil gas and groundwater beneath the Site indicated a discharge from Petitioner's historical operations at the facility.

Combined with the lack of evidence showing that Ortel caused or permitted a discharge of such substances and the affirmative evidence that Ortel's practices rendered such a discharge very unlikely, the Regional Board clearly lacked substantial evidence to include Petitioner in the CAO.

**d. Preservation of Defenses Regarding Required Actions in CAO**

For the reasons stated above, the Regional Board's action in issuing the CAO to Petitioner was inappropriate and improper. In addition, there are elements of the Required Actions in the CAO that are inappropriate and improper and not supported by substantial evidence, though these elements are of principal concern to the parties that are legitimately included in the CAO. Petitioner is noting these elements solely to preserve all of its defenses to this inappropriate CAO.

i. **The Sequencing and Scheduling of Work Plan Preparation and Implementation in the Required Actions and the Time Schedule in the CAO are Inconsistent, Technically Infeasible, and Inappropriate.**

The sequencing and scheduling of work plan preparation and implementation in the Required Actions and the Time Schedule in Attachment B to the CAO are inconsistent, technically infeasible, and inappropriate for several reasons, including, but not limited to, the following:

- The Time Schedule states that a baseline soil vapor assessment may be included in the proposed indoor air sampling work plan to evaluate contemporary data and incorporate historical data. The purpose of a baseline assessment is to enable the indoor air sampling plan to be focused on areas of current concern (locations adjacent to the most elevated subsurface vapor concentrations). Therefore, the baseline assessment needs to occur before preparation of the indoor air sampling plan. The Time Schedule, however, requires the work plan for assessment of soil vapor and the work plan for indoor air sampling to be submitted simultaneously, with no opportunity for the former to shape the latter. This is inconsistent and arbitrary.

- Paragraph 3 of the Required Actions specifically notes that completion of the assessment of wastes in soil and soil vapor may require multiple work plans. The requirement in the Time Schedule to submit "work plans to completely characterize the extent of waste in soil and soil vapor" by October 1, 2013 is inconsistent with the recognition in the Required Actions that phasing with multiple work plans may be required.

- In addition, a work plan "to completely characterize the extent of waste in soil and soil vapor," cannot reasonably be prepared and submitted by the due date of October 1, 2013. Development of such a work plan would necessarily include resurrection, review, and additional analysis of the historical data, followed by development, internal review, and finalization of the work plan itself. The preliminary estimate of Petitioner's environmental consultant is that preparation of this work plan would require approximately eight to twelve weeks.

- The due date of February 1, 2014 for the Site Conceptual Model ("SCM") is improper and inappropriate, because the SCM and preliminary Human Health Risk Assessment ("HHRA") would be useless unless based on updated data. The soil vapor data from the probes in the vicinity of Buildings 2 and 4 are now 10 years old, which is too dated for a valid preliminary HHRA and SCM. If a preliminary HHRA and SCM were prepared before current soil vapor data were collected, they would need to be completely redone once the data were collected, rendering the original versions useless. The February 1, 2014 due date does not allow sufficient time for the work plan for a soil gas survey and other site assessment to be prepared, for the Regional Board to review and approve that work plan, for a CAO respondent to implement that work plan, for the data to be analyzed and evaluated, for an indoor air sampling plan to be prepared, for the Regional Board to review and approve that work plan, for a CAO respondent to implement that work plan, for the data to be analyzed and evaluated, and for the SCM report to be prepared. All of those activities would require on the order of 10 months or more (depending on the duration of Regional Board work plan review and approval), not five months.

- Given the above timeframes, plus the time needed for the Regional Board to review and approve the SCM, the due date of March 1, 2014 for submission of a Remedial Action Plan ("RAP") to address VOCs in the unsaturated zone is also arbitrary, improper, and

inappropriate. This deadline should be established only after some of the prerequisite steps have been accomplished.

- Not only is the due date in the Time Schedule for implementation of the approved RAP obviously a typographical error, but having a "hard" date at this point is arbitrary, improper, and inappropriate, given all of the above prerequisites to be accomplished before a RAP could be implemented. Moreover, the time needed for the Regional Board to review and approve the RAP is unknown. This type of implementation deadline is typically more rationally established as "within 60 days after approval of the RAP."

**ii. The CAO Improperly and Inappropriately Refers to Groundwater.**

Consistent with the statements made by the Regional Board in its Response to Comments for Draft Cleanup and Abatement Order R4-2012-0020, all references to groundwater in the required plans and other deliverables should have been removed from the CAO. *See, e.g.*, CAO (Exhibit 1), CAO Required Actions, Paragraph 1 (include a human health risk assessment for "waste constituents in soil vapor, soil matrix *and groundwater*" and "prepare and submit a work plan to complete assessment and characterization of VOCs in soil vapor, soil matrix *and groundwater* and to fully delineate the vertical and lateral extent of wastes in the soil *and groundwater*"); Paragraph 4(a)(i) (the "RAP shall include, at a minimum: (i) Preliminary cleanup goals for soil *and groundwater*); Attachment C (references to future monitoring wells and all references to remediation systems and monitoring while remedial systems are in operation). (Emphasis added).

**5) Manner in Which the Petitioner is Aggrieved**

Petitioner has been cooperating with the Regional Board for over 12 years by helping to develop information regarding the presence of chlorinated solvents in soil gas and groundwater beneath the Site. At the same time, in the face of minimal investigative action by the Regional Board, Petitioner has developed and given to the Regional Board substantial information regarding the potential sources of those substances. Petitioner's cooperative efforts have required the dedication of significant resources.

Based on all of the information that has been developed, it is now clear that the Regional Board does not possess substantial evidence showing that Petitioner caused or permitted the discharge of the chlorinated solvents that are present in soil gas and groundwater beneath the Site. Nonetheless, the Regional Board has issued an enforceable CAO that would impose further significant costs and burdens on Petitioner. A preliminary estimate by Petitioner's environmental

consultant indicates that the Required Actions in the CAO could cost on the order of $900,000 to $1.7 million to implement. As a result of Petitioner's investigation, a prior owner and operator at the Site has now been named as a discharger in the CAO. However, Petitioner should not have been included among the dischargers in the final CAO because the Regional Board lacks substantial evidence that Petitioner caused or permitted a waste to be discharged at the Site.

**6) Specific Remedy Petitioner Requests**

For the reasons stated in this Petition, Petitioner requests that the State Board issue an order that CAO No. R4-2013-0099 be amended to remove Petitioner from the CAO and that the CAO is rescinded as to Petitioner. As discussed in Section 9, below, Petitioner also requests that the State Board issue a stay of the CAO as to Petitioner while it is considering this petition.

**7) Petition Sent to Regional Board and Other Interested Parties**

A copy of this petition has been sent via email and overnight United States mail to the Regional Board and via United States mail to the other interested parties at the addresses listed below:

RIM Development Company
Attn: Mr. Wayne Tam and Mrs. Millicent J. Tam
2225 W. Commonwealth Avenue, #206
Alhambra, CA 91801

TriMas Corporation
Attn: Mr. Albert Bostain
500 West 7th Street
Auburn, Indiana 46706

Samuel Unger, P.E.
Executive Officer, Los Angeles Region
California Regional Water Quality Control Board
320 W. 4th Street, Suite 200
Los Angeles, CA 90013
sunger@waterboards.ca.gov

Ms. Lisa Hanusiak
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U.S. EPA Region IX
75 Hawthorne Street
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San Francisco, CA 94105
hanusiak.lisa@epa.gov

Mr. Richard Hiett
Superfund Division
U.S. EPA Region IX
75 Hawthorne Street
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San Francisco, CA 94105
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Jackie Spiszman
California Department of Toxic Substances Control, Cypress Branch
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Cypress, CA 90630-4732
JSpiszma@dtsc.ca.gov

Carol Williams
Main San Gabriel Basin Watermaster
725 N. Azusa Avenue
Azusa, CA 91702
carol@watermaster.org

**8) Summary of the Manner in Which Petitioner Participated in any Process Leading to the Action in Question**

The issues raised in this petition were presented to the Regional Board before the Regional Board issued the final CAO, other than certain details regarding the Required Actions and Time Schedule that appeared for the first time in the final CAO.

The Regional Board issued a draft CAO on April 30, 2009. Petitioner provided oral comments on the draft CAO during a meeting with the Regional Board on June 2, 2009, and provided written comments on September 29, 2009. *See* September 29, 2009 Letter from Scott Houthuysen, LSI Corporation, to Curt Charmley, Regional Board in Exhibit 2 to this petition. Petitioner's comments explained that a CAO should not be issued to Petitioner because the available evidence did not demonstrate that Petitioner was responsible for the contamination in soil gas and

groundwater observed beneath the Site. After the Regional Board issued a final CAO on January 29, 2010, Petitioner pointed out several fundamental errors made by the Regional Board in the final CAO. *See* February 5, 2010 Letter from Jocelyn T. de Grandpre, LSI, to Tracy J. Egoscue, Regional Board Executive Officer, attached as Exhibit 8. In response, the Regional Board rescinded the final CAO. *See* February 24, 2010 Letter from Tracy J. Egoscue to Jocelyn T. de Grandpre, attached as Exhibit 9.

The Regional Board issued another draft CAO on July 26, 2010. Petitioner provided oral comments on the draft CAO during a meeting with State Board counsel and Regional Board staff on October 6, 2010, and provided extensive written comments on October 25, 2010. *See* 2010 Comments (Exhibit 3). As with its earlier comments, Petitioner's comments explained that a CAO should not be issued to Petitioner because the available evidence did not support the conclusion that Petitioner was responsible for the contamination in soil gas and groundwater observed beneath the Site. *Id.* Petitioner specifically rebutted arguments made orally by Regional Board staff during the October 6 meeting. Petitioner also provided several technical comments on the draft CAO for the benefit of the Regional Board.

The Regional Board issued another draft CAO on July 25, 2012. Petitioner discussed the draft CAO with Regional Board staff on September 13, 2012, and provided written comments on September 25, 2012. *See* 2012 Comments (Exhibit 4). Petitioner reiterated its earlier points and provided additional facts and additional legal analysis. Petitioner also provided additional technical comments on the draft CAO for the benefit of the Regional Board.

**9) Petitioner's Request for Stay**

Petitioner requests that the State Board issue a stay of the CAO as to Petitioner as of the date of issuance pursuant to Title 23 of the California Code of Regulations, Section 2053, while the State Board is considering this petition. As set forth in the declaration by Scott D. Houthuysen in Exhibit 10 to this petition, since the State Board has up to 270 days to review an action upon a petition, there will be substantial harm to Petitioner from the costs of implementing actions for which it is not liable. Petitioner will also experience substantial harm due to the infeasible deadlines established in the CAO, which includes the preparation of certain work plans by as early as October 1, 2013.

Granting a stay of the CAO as to Petitioner in this case will not cause substantial harm to other interested persons or to the public interest, because other entities received and can implement the CAO. In addition, the many months or even years that have passed between each of the Regional Board's efforts with regard to the Site abundantly demonstrate that the Board does not view this Site as presenting near-term risks.

As detailed above in this Petition and its appendices, there are substantial questions of fact and law regarding the RWQCB's issuance of the CAO to Petitioner and regarding certain required actions in the CAO, fully justifying the issuance of a stay of the CAO as to Petitioner.

**10) Conclusion**

For the reasons described above, the Regional Board's findings that Petitioner is a discharger at the Site are not supported by substantial evidence, and it was improper and inappropriate for the Regional Board to issue the CAO to Petitioner. Several required actions in the CAO are also arbitrary, improper, or inappropriate. The CAO would subject Petitioner to significant costs without a sufficient legal or factual basis in the record, and the issuance of the CAO to Petitioner constitutes an abuse of discretion by the Regional Board. Thus, Petitioner respectfully requests that the State Board issue an order that CAO No. R4-2013-0099 be amended to remove Petitioner from the CAO and that the CAO is rescinded as to Petitioner.

Dated: August 29, 2013

BEVERIDGE & DIAMOND, P.C.

By: Kenneth Finney

Kenneth B. Finney
Steven M. Jawetz

Attorneys for Petitioner
LSI Corporation

## PROOF OF SERVICE

I, the undersigned, declare that I am employed in the County of San Francisco; I am over the age of eighteen years and not a party to the within entitled action; my business address is Beveridge & Diamond, P.C., 456 Montgomery Street, Suite 1800, San Francisco, CA 94104-1251.

I further declare that on August 29, 2013, I served the following document(s) **LSI CORPORATION'S PETITION FOR STATE WATER RESOURCES CONTROL BOARD REVIEW AND REQUEST FOR HEARING AND STAY** on the interested party(ies) in this action as follows:

RIM Development Company
Attn: Mr. Wayne Tam and Mrs. Millicent J. Tam
2225 W. Commonwealth Avenue, #206
Alhambra, CA 91801

TriMas Corporation
Attn: Mr. Albert Bostain
500 West 7th Street
Auburn, Indiana 46706

Samuel Unger, P.E.
Executive Officer, Los Angeles Region
California Regional Water Quality Control Board
320 W. 4th Street, Suite 200
Los Angeles, CA 90013
sunger@waterboards.ca.gov

Ms. Lisa Hanusiak
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Mr. Richard Hiett
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hiett.richard@epa.gov

Grace Kast
San Gabriel Basin Water Quality Authority
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Frances McChesney
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P.O. Box 100
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Jackie Spiszman
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JSpiszma@dtsc.ca.gov

Carol Williams
Main San Gabriel Basin Watermaster
725 N. Azusa Avenue
Azusa, CA 91702
carol@watermaster.org

The documents were served by the following means:

☒ **BY UNITED STATES MAIL.** I enclosed the documents in a sealed envelope or package addressed to the persons at the addresses set forth above.

☒ deposited the sealed envelope with the United States Postal Service, with the postage fully prepaid.

☒ placed the envelope for collection and mailing, following our ordinary business practices. I am readily familiar with the firm's business practice for collecting and processing correspondence for mailing. On the same day that correspondence is placed for collection and mailing, it is deposited in the ordinary course of business with the United States Postal Service, in a sealed envelope with postage fully prepaid.

I am a resident or employed in the county where the mailing occurred. The envelope or package was placed in the mail at San Francisco, California.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed on August 29, 2013, at San Francisco, California.

By: Adela C. Cruz
Adela C. Cruz

**LSI CORPORATION'S PETITION FOR STATE WATER RESOURCES CONTROL BOARD REVIEW AND REQUEST FOR HEARING AND STAY**

**INDEX OF EXHIBITS**

| Exhibit | Document |
|---|---|
| **1.** | Cleanup and Abatement Order No. R4-2013-0099 |
| **2.** | LSI's written comments on draft Cleanup and Abatement Order No. R4-2009-016 (September 29, 2009) ("2009 Comments") |
| **3.** | LSI's written comments on draft Cleanup and Abatement Order No. R4-2010-0008R (October 25, 2010) ("2010 Comments") (with excerpted attachments below) |
| **3.G.** | Alhambra Site Corporate History and Liability Materials<br>- Alhambra Site Fact Chronology<br>- Alhambra Site Flowchart<br>- EPA Stringfellow Site Main Data Report (1998)<br>- EPA Stringfellow Site Combined Data Report II (1998)<br>- Order Granting Summary Judgment, No. 83-2501 (C.D. Cal. Apr. 11, 2000)<br>- Stringfellow Site Consent Decree (2004) (excerpt)<br>- 2003 TriMas Annual Report and 10-K (excerpt)<br>- 2009 TriMas Annual Report and 10-K (excerpt) |
| **3.G-2.** | 1958 Norris Thermador Permit Materials |
| **3.G-4.** | - 1964 Spatron Articles of Incorporation<br>- "Norris Sells its Factory in Alhambra," Los Angeles Times (May 5, 1964) |
| **3.G-5** | Alhambra Site Condemnation Order |
| **3.G-6** | - 1965 California Manufacturers Annual Register (Spatron)<br>- 1979 California Manufactures Manual (Spatron)<br>- 1980 Southern California Business Directory and Buyers Guide (Spatron) |
| **3.H.** | - Richard E. Doherty, A History of the Production and Use of Carbon Tetrachloride, Tetrachloroethylene, Trichloroethylene and 1,1,1-Trichloroethane in the United States, 1 JOURNAL OF ENVIRONMENTAL FORENSICS (2000)<br>- Samuel Spring, Metal Cleaning, at 59, Reinhold Publishing Corp. (1963)<br>- Manufacturing Chemists Assn., Chemical Safety Data Sheet SD-14, at 13 (1956 2d. Revision)<br>- Thomas K.G. Mohr, Santa Clara Valley Water District, 1,4-Dioxane and Other Solvent Stabilizers White Paper (June 14, 2001) ("Solvent Stabilizers White Paper") |
| **3.K.** | Declaration of Wayne C. Tam (October 22, 2010) |
| **3.N.** | 1988 SCAQMD Air Permit |

| | |
|---|---|
| **3.P.** | Air Rules Restricting Chlorinated Solvent Use<br>- Los Angeles Air Pollution Control District Rule 66 (1967)<br>- SCAQMD Amended Rule 1122 (1979)<br>- SCAQMD Rule 442 (1982)<br>- SCAQMD Rule 1164 (1988)<br>- SCAQMD Rule 1171 (1991) |
| **4.** | LSI's written comments on draft Cleanup and Abatement Order No. R4-2012-0020 (September 25, 2012) ("2012 Comments") |
| **5.** | Agere's Response to U.S. EPA's February 2003 CERCLA Section 104(e) Information Request (May, 23 2003) |
| **6.** | Regional Board's Response to Comments for Draft Cleanup and Abatement Order R4-2012-0020 |
| **7.** | Ortel Site Annual Groundwater Monitoring Report (2013) |
| **8.** | Letter from Jocelyn T. de Grandpre, LSI, to Tracy J. Egoscue, Regional Board Executive Officer (February 5, 2010) |
| **9.** | Letter from Tracy J. Egoscue to Jocelyn T. de Grandpre (February 24, 2010) |
| **10.** | Declaration of Scott D. Houthuysen |

# EXHIBIT 1

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

CLEANUP AND ABATEMENT ORDER NO. R4-2013-0099
REQUIRING

LSI CORPORATION (FORMER AGERE SYSTEMS), MR. WAYNE C. AND MRS. MILLICENT J. TAM, AND THE TRIMAS CORPORATION
TO ASSESS, CLEAN UP, AND ABATE
WASTE DISCHARGED TO WATERS OF THE STATE
(PURSUANT TO CALIFORNIA WATER CODE SECTION 13304)

AT 2015 WEST CHESTNUT STREET,
ALHAMBRA, CALIFORNIA

(FILE NO. 115.0003)

This Cleanup and Abatement Order No. R4-2013-0099 (Order) is issued to LSI Corporation (Former Agere Systems), Mr. Wayne C. and Mrs. Millicent J. Tam, and the Trimas Corporation based on provisions of California Water Code sections 13304 and 13267, which authorize the Regional Water Quality Control Board, Los Angeles Region (Regional Board) to issue a Cleanup and Abatement Order and require the submittal of technical and monitoring reports.

The Regional Board finds that:

## BACKGROUND

1. **Dischargers:** LSI Corporation (Former Agere Systems), Mr. Wayne C. and Mrs. Millicent J. Tam, and the Trimas Corporation, [hereinafter called Dischargers] are Responsible Parties (RPs) due to their: (a) past ownership of the property located at 2015 West Chestnut Street, Alhambra, California (Site) and/or (b) prior operations at the Site that resulted in the discharge of wastes, including chlorinated volatile organic compounds (VOCs), to the environment.

   As detailed in this Order, the Dischargers have caused and permitted waste to be discharged or deposited where it has discharged and is, or probably will continue to be discharged into the waters of the state which creates a condition of pollution or nuisance.

2. **Location:** The Site is located at 2015 West Chestnut Street, between South Palm Avenue and South Raymond Avenue, in Alhambra. The current official address of the Site is 720 South Palm Avenue. The City of Alhambra lies adjacent to the Cities of South Pasadena and San Marino on the North, San Gabriel on the East, Monterey Park on the South, and the City of Los Angeles on the West. The Site is further described as being located within the United States Environmental Protection Agency (USEPA) superfund area designated as the Area 3 Operable Unit (Area 3 OU).

   The Site is in an industrial area designated by the City of Alhambra. Attachment A, Figure 1, Site Vicinity Map, attached hereto and incorporated herein by reference, depicts the location of the Site. Additionally, Figure 2, Site Map, of Attachment A, also attached hereto and incorporated herein, depicts the Site and the surrounding area. The Site is located in an area that has been used historically as well as currently for commercial and industrial land use.

3. **Groundwater Basin:** The Site is located on the western edge of the Main San Gabriel Valley Groundwater Basin (MSGVGB) and is further described as being in the eastern Los Angeles County and includes the water-bearing sediments underlying most of the San Gabriel Valley and includes a portion of the upper Santa Ana Valley. The MSGVGB is bounded on the north by the Raymond fault and the contact between Quaternary sediments and consolidated basement rocks of the San Gabriel Mountains. Exposed consolidated rocks of the Repetto, Merced, and Puente Hills bound the basin on the south and west, and the Chino fault and the San Jose fault form the eastern boundary (DWR 1966). The Rio Hondo and San Gabriel drainages have their headwaters in the San Gabriel Mountains, then surface water flows southwest across the San Gabriel Valley and exit through the Whittier Narrows, a gap between the Merced and Puente Hills. Precipitation in the basin ranges from 15 to 31 inches, and averages around 19 inches.

   The water-bearing formations of the MSGVGB are unconsolidated and semi-consolidated unconfined alluvial sediments that range in size from coarse gravel to fine-grained sands. Total thickness of water-bearing sediments ranges from about 300 feet to more than 2,000 feet. The depth to groundwater is present beneath the Site at approximately 185 feet bgs.

   On a regional scale, the general groundwater flow in the Area 3 OU has been from the West to the East, however groundwater production in the Eastern portion of the Area 3 OU has resulted in a separation between the western and the eastern alluvial aquifers.

   As set forth in the *Water Quality Control Plan* for the Los Angeles Region (Basin Plan), which was adopted on June 13, 1994, the Regional Board has designated beneficial uses for groundwater among which include Municipal and Domestic drinking water supplies (MUN) in the Main San Gabriel Basin and has established water quality objectives for the protection of these beneficial uses.

   The existing beneficial uses designated by the Regional Board for Main San Gabriel Groundwater Basin are Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Ground Water Recharge (GWR), Water Contact Recreation (REC-1), Non-contact Water Recreation (REC-2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Wildlife Habitat (WILD), and Rare, Threatened, or Endangered Species (RARE).

## SITE HISTORY

4. **Site Description and Activities:** The former Agere Systems facility (Site) is located on West Chestnut Street between South Palm Avenue and South Raymond Avenue in Alhambra. This area is designated as an industrial area by the City of Alhambra. The property is currently owned by Mr. Wayne C. Tam and Ms. Millicent J. Tam.

   Prior to 1981, the Site was used for various industrial purposes. Aerial photographs indicate the site was occupied for industrial purposes as early as the 1950s. Sanborn Maps from the 1950s and 1960s indicate that Norris Thermador (approximately 1952-1966) conducted electric motor manufacturing, transformer manufacturing, and machine shop operations at the site.

   Since late 1981, the Site has been occupied by electronic and laser optics equipment manufacturing businesses.

5. **Property Ownership and Leasehold Information:** Based on the information submitted to the Regional Board, and clarified by the Dischargers, the property has the following property ownership and leasehold history, as summarized in Table 1 below:

Table 1 - Site Ownership and Leasehold History

| APPROXIMATE PERIOD | OWNER / OPERATOR | MANUFACTURING OPERATION | CURRENT SUCCESSOR |
|---|---|---|---|
| 1954 to 1979 | Norris Thermador | electric motor manufacturing, transformer manufacturing, and machine shop operations | Trimas[a] |
| 1979-1980 | City of Alhambra | None | None[a] |
| 1980 | Wayne C. Tam and Millicent J. Tam | Leasing Property | None[b] |
| 1981-2000 | Ortel /Lucent/Agere System, Inc.[d] | laser optics equipment; integrated circuit components | LSI Corporation[c,d,e,f] |
| 2000-2003 | Lucent/Agere System, Inc.[d] | laser optics equipment; integrated circuit components | LSI Corporation[c,d,e,f,g] |

a) Norris Thermador owned the facility/Site from 1954 until 1979 when the City of Alhambra Redevelopment Agency took the property through eminent domain.

b) In 1980, Wayne C. Tam and Millicent J. Tam bought the property from the City of Alhambra.

c) In December 1981, Ortel began to occupy the property, and used the facility on the property for office space, warehousing, and manufacturing laser optics equipment for telecommunications.

d) In June 2000, Lucent Technologies, Inc. acquired Ortel.

e) On August 1, 2000, Agere Systems, Inc. was incorporated in Delaware, as a wholly-owned subsidiary of Lucent Technologies, Inc. Ortel Corporation was subsequently transferred to Agere Systems, Inc., an integrated circuit components company based in Allentown, Pennsylvania.

f) On December 5, 2000, pursuant to a Certificate of Merger, Agere Systems, Inc. was merged into Lucent ME. Corp, a company incorporated in Delaware on August 1, 2000. The name of the surviving corporation was, as of that date, changed to Agere Systems, Inc.

g) On April 2, 2007, Agere Systems, Inc. and LSI Logic Corporation merged and operated under a new name LSI Corporation.

6. **Chemical Usage and Storage during Manufacturing Operations at the Site:** Historical records indicate that this property was used for several, independent industrial operations. Records also indicate that Buildings I through IV on the property were constructed in 1981:

   a. **Building I** – 2015 West Chestnut: This area was formerly occupied by "Santon Reed Company" (approximately 1950s through 1960s) and operated as a contractor's storage yard. In 1981, the building was used for wafer fabrication and for office use. Since 2001, hazardous wastes have been stored in a segregated area in the northern "renovated" portion of this building.

   b. **Building II** – 2001 West Chestnut: Three businesses operated in this area: "Roton Manufacturing" (approximately 1946 through 1950s) manufactured electric motors; "Thermador Electrical" (approximately 1958 through 1966) manufactured transformers; and "Spatron Inc." (through the 1970s) operations are unknown. Ortel first occupied portions of this building in 1985. In 1990, the building housed manufacturing, light assembly and offices. From 1990 through 2001, all hazardous waste was stored in an outside storage area immediately located to the north of this building. 1,1,1,-trichloroethane (TCA) was used at the site from approximately 1985 through 1990 as a degreaser. The TCA was stored in a 200-gallon above ground storage tank (AST) located north of this building. Vapo-Kleen and Ensolve were used to clean circuit boards and laser equipment in the vapor degreaser room, located in the northern portion of the

Building II. From 1990 through 1995, this building included one vapor degreaser and in 1995 the facility added 2 additional vapor degreasers.

c. **Building III** – 706 South Palm: Three separate businesses operated here: "Alhambra Machine & Tool (approximately 1950 through the late 1970s) operated a small machine shop; "West Coast Refinisher" (approximately 1970s), operations are unknown; and "House of Rubber" (approximately 1970s), operations are also unknown. During the period from 1990 to 1992, the building was used for engineering, research and development and office operations.

d. **Building IV** – 707 South Raymond: This was a residential area from approximately 1925 through 1980. This location is also believed to have been used for the assembly of speakers. This location was used for shipping, receiving, a small machine shop operation, manufacturing of equipment used in the facility, and break and exercise rooms.

e. **710 South Palm Avenue**: Based on a review of Los Angeles County Department of Health Services (DOHS) historical records, Sam Yocum, Inc. was an occupant who in 1971 applied to install a degreaser (2.5 feet x 6 feet) in which tetrachloroethylene (PCE) would be used. Sam Yocum, Inc. was a welding and metal fabrication plant that appears to have been at this location at least until 1976.

## EVIDENCE OF WASTE DISCHARGES AND BASIS FOR SECTION 13304 ORDER

7. **Waste Discharges:** Site investigations conducted at the Site since 2000 indicate that there were waste discharges to the soil and groundwater at the Site. The Site investigations reveal that VOCs have been detected in the subsurface soil, soil vapor, and groundwater underlying the Site.

a. The initial subsurface investigation was conducted in May 2000 pursuant to information obtained from a Regional Board section 13267 Order requiring the submittal of a Chemical Use and Storage Questionnaire. A total of 17 soil vapor probes, SV1 through SV17, were installed at 5 feet below ground surface (bgs) and at 15 feet bgs. The probes were placed adjacent to the areas of concern, namely: i) a former above ground storage tank, AST, (SV12 through SV16), (ii) the degreasers (SV1 and SV11), (iii) the sump, (iv) the chemical storage area (SV2 through SV9), and (v) the sewer vault (SV17). The results of the soil vapor sampling indicated the presence of trichloroethylene (TCE), PCE, 1,1-dichloroethene (1,1-DCE), Freon, benzene, toluene, and xylenes (components of gasoline). The primary VOC detected was TCE at concentrations ranging from less than one (<1) microgram per liter (µg/L) to 31 µg/L (SV11at 5 feet bgs). On June 7, 2000, soil vapor probes SV1, SV11, and SV12 were re-sampled. The results again indicated the presence of TCE, PCE, 1,1-DCE, Freon, and gasoline components toluene and (total) xylenes. The primary VOC detected was TCE at concentrations ranging from 43 µg/L (collected from SV12 at 5 feet bgs) to 180 µg/L (collected from SV11 at 5 feet bgs).

b. Further soil assessment was conducted in October 2000. This phase of work included the installation and sampling of six multi-depth soil vapor monitoring wells: VW1-A, VW1-B, and VW2 through VW5. The probes were placed in the area of the former AST and degreasers, (Figure 2, Site Plan). A total of 15 soil vapor samples were collected from probes placed at 10 feet bgs to 105 feet bgs. TCE was detected in the soil vapor samples at concentrations ranging from 3 µg/L (VW2) to 1,500 µg/L (VW1-B). The highest concentration of TCE was detected in the soil vapor sample collected from vapor sample probe VW1- B at 85-feet bgs, a nested soil vapor monitoring well (angled well) located near the former degreaser.

c. On June 13, 2001 a multi-depth soil vapor well (VMPW), designated as "VW6" was installed in a soil boring to a depth of approximately 202 feet bgs. This well was located in the immediate area of the former degreaser. Soil vapor probes were placed at 120-, 140-, 160-, 180-, and 200-feet bgs. Soil vapor sample collection at VW6 was conducted on August 7, 2001. TCE was the primary VOC detected in the samples ranging from 1,100 µg/L (VW6 at 120 feet bgs) to 140 µg/L (VW6 at 200 feet bgs (Figure 2, Site Plan).

d. Three groundwater-monitoring wells, EMW-1, EMW2, and EMW-3 have been installed onsite. The first groundwater well installed at the Site, EMW-1, was sampled on August, 29, 2005 (Figure 3, Ground Water Elevation Contour Map). The depth to groundwater was measured at approximately 187 feet bgs. Soil samples were collected at approximately 180 feet bgs and 190 feet bgs for VOC analysis. The results of the analysis indicated the presence of TCE at 283 micrograms per kilogram (µg/kg) at 80 feet bgs. An initial groundwater sample was collected and analyzed for VOCs, and screened for the emergent chemicals 1,4-dioxane and 1,2,3-trichloropropane (1,2,3-TCP). Concentrations of TCE were detected in the groundwater sample at at 1,700 µg/L, 1,2,3-TCP at 9.1 nanograms per liter (ng/L), and 1,4-dioxane at 0.002 µg/L. The California Maximum Contaminant Level (MCL) for TCE is 5 µg/L. There are no established MCLs for 1,2,3-TCP and 1,4-dioxane, but the California Department of Public Health (CDPH) has adopted drinking water notification levels (NLs) of 5 (ng/L and 1.0 µg/L for 1,2,3-TCP and 1,4-dioxane, respectively (Table 2. Summary of Groundwater Analytical Results).

   Groundwater monitoring wells, EMW-2 and EMW-3 were installed in November 2006. The wells were sampled on November 30, 2006. Results of VOCs of the groundwater analysis remained relatively consistent through the sampling periods for wells EMW-1 through EMW-3: 1,1 dichloroethane (1,1-DCE) at levels ranging from less than (<) 40 µg/L to 29 µg/L; cis-1,2-dichloroethene (cis - 1,2-DCE) at levels ranging from < 1 µg/L to 28 µg/L; PCE at levels ranging from < 40 µg/L to 46 µg/L; and TCE at levels ranging from 30 µg/L to 3,200 µg/L. Concentrations of 1,2,3-TCP were consistently detected in monitoring well EMW-1 at levels ranging from 6 ng/L to 14 ng/L. Concentrations of 1,2,3-TCP were not detected in monitoring well EMW-3 and only in three of ten sampling events in monitoring well EMW-2 (6.2 ng/L, 8.3 ng/L, and 9.1 ng/L). Concentrations of 1,4-dioxane were detected in the groundwater samples collected from monitoring well EMW-1 at levels ranging from 2 µg/L to 8 µg/L. Two sampling events for monitoring wells EMW-2 and EMW-3 did not yield detectable concentrations of 1,4-dioxane(Table 2. Summary of Groundwater Analytical Results).

e. Groundwater sampling results from May 2011 indicate that the maximum concentrations of TCE were detected at 1,900 µg/L (in EMW-2), and 1,2,3-TCP at 6 ng/L (in EMW-1).

f. The general groundwater flow direction is to the southeast with a hydraulic gradient of 0.03 foot/foot (Figure 3. Groundwater Elevation Contour Map).

g. The emergent chemicals, 1,4-dioxane and 1,2,3-TCP are known chlorinated solvent stabilizer ingredients. According to the Regional Board records, the Dischargers have screened the groundwater samples for 1,4-dioxane and 1,2,3-TCP using USEPA Method 8270C and USEPA Method 524.5, respectively. The California NLs for 1,4-dioxane and 1,2,3-TCP in groundwater is 1 µg/L and 0.005 µg/L (or 5 nanograms per liter), respectively. The maximum concentration of 1,2,3-TCP detected in the groundwater samples collected from EMW-1 were measured at levels up to 14 ng/L. The maximum concentration of 1,4-dioxane measured in the groundwater samples collected from EMW-1 was 8 µg/L.

h. The waste constituents present at the Site include TCE in the groundwater, collected from EMW-2 at concentrations detected as high as 3,200 µg/L.

8. **Source Elimination and Remediation Status:** No remediation or cleanup has occurred on-site.

9. **Summary of Findings from Site Investigations**

Based on the technical reports and records contained in the Regional Board files pertaining to the Site history and the discharge, detection, and distribution of wastes on the Site and its vicinity:

a. The Dischargers have stored, used, and/or discharged VOCs, including TCE and various solvent stabilizers, on the Site. Elevated levels of TCE and other waste constituents have been detected in soil vapor, soil, and groundwater beneath the Site, especially near the former degreaser and in the vicinity of Building II, Figure 2. Site Plan.

b. The sources for the evidence summarized above include, but are not limited to:

i. Various technical reports and documents submitted by the Dischargers or their representatives to USEPA and the Regional Board to date.

ii. Site inspections, meetings, regulatory letters, electronic mails, and telephone communications between USEPA and the Regional Board, and the Dischargers or their representatives to date.

10. **Regulatory Compliance Status:** Prior to issuance of this Order, the Dischargers complied with all Orders issued pursuant to the California Water Code section 13267.

11. **Impairment of Drinking Water Wells:** The Regional Board has the authority to require the Dischargers and other dischargers to pay for or provide uninterrupted replacement water service to each affected public water supplier or private well owner in accordance with Water Code section 13304.

12. **Sources of Information:** The sources for the evidence summarized above include but are not limited to: reports and other documentation in Regional Board files, telephone calls and e-mail communication with responsible parties, their attorneys and consultants, and Site visits.

## AUTHORITY - LEGAL REQUIREMENTS

13. Section 13304(a) of the Water Code provides that:

*"Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirements or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board cleanup the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. A cleanup or abatement order issued by the state board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. Upon failure of any person to comply with the cleanup and abatement order, the Attorney General, at the*

*request of the regional board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant."*

14. Section 13304(c)(1) of the California Water Code provides that:

*". . . the person or persons who discharged the waste, discharges the waste, or threatened to cause or permit the discharge of the waste within the meaning of subdivision (a), are liable to that government agency to the extent of the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial actions. . ."*

15. Section 13267(b)(1) of the California Water Code provides that:

*"In conducting an investigation..., the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or, discharging, or who proposes to discharge waste within its region . . .shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."*

16. The State Water Resources Control Board (hereafter State Board) has adopted Resolution No. 92-49, the *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*. This Policy sets forth the policies and procedures to be used during an investigation and cleanup of a polluted site and requires that cleanup levels be consistent with State Water Resources Control Board Resolution 68-16, the *Statement of Policy With Respect to Maintaining High Quality of Waters in California*. Resolution 92-49 and the Basin Plan establish the cleanup levels to be achieved. Resolution 92-49 requires the waste to be cleaned up to background, or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with Title 23, California Code of Regulations (CCR) Section 2550.4. Any alternative cleanup level to background must (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Board.

17. As set forth in the Water Quality Control Plan for the Los Angeles Region (Basin Plan), which was adopted on June 13, 1994, the Regional Board has designated beneficial uses for groundwater in the Main San Gabriel Basin and has established water quality objectives for the protection of these beneficial uses. The existing beneficial uses designated by the Regional Board for the Main San Gabriel Groundwater Basin are Municipal and Domestic Supply (MUN), Industrial Service Supply (IND), Industrial Process Supply (PROC), and Agricultural Supply (AGR). Water quality objectives that apply to the groundwater at the Site include the state MCLs. The California and USEPA established MCL's for TCE and PCE is 5 µg/L. TCE, PCE and other VOCs and waste constituents discharged at the Site constitute "waste" as defined in Water Code section 13050(d).

    The concentrations of both PCE and TCE in groundwater at the Site exceed the water quality objectives for the wastes. The exceedance of applicable water quality objectives in the Basin Plan constitutes pollution as defined in California Water Code Section 13050(l)(1). The wastes detected in groundwater, soil matrix and vapor at the Site threaten to cause pollution, including contamination,

and nuisance.

## DISCHARGER LIABILITY

18. As described in Findings of this Order, the Dischargers are subject to an order pursuant to Water Code section 13304 because the Dischargers have caused or permitted waste to be discharged or deposited where it has discharged to waters of the state and has created, and continues to threaten to create, a condition of pollution or nuisance. The condition of pollution is a priority violation and issuance or adoption of a cleanup or abatement order pursuant to Water Code Section 13304 is appropriate and consistent with policies of the Regional Board.

19. Due to the activities described in this Order, the Dischargers have caused or permitted wastes, including VOCs, particularly TCE and PCE, to be discharged or deposited where the wastes are, or probably will be discharged into the waters of the State which creates a condition of pollution or nuisance. The Dischargers have caused or permitted VOCs, particularly TCE and PCE, to be discharged or deposited where the wastes are or probably will pose a potential human health threat to occupants of the building onsite through direct contact exposure to contaminated soil and/or groundwater or through vapor intrusion into indoor air. The Dischargers, as the former operators of historical facilities on the property and the owners of the property, are responsible for complying with this Order.

20. This Order requires investigation and cleanup of the Site in compliance with the Water Code, the applicable Basin Plan, Resolution 92-49, and other applicable plans, policies, and regulations.

21. As described in Findings in this Order, the Dischargers are subject to an order pursuant to Water Code section 13267 to submit technical reports because existing data and information about the Site indicate that waste has been discharged, is discharging, or is suspected of discharging, at the property, which is or was owned and/or operated by the Dischargers named in this Order, LSI Corporation (Former Agere Systems), Mr. Wayne C. and Mrs. Millicent J. Tam, and the Trimas Corporation, their agents, successors, and assigns. The technical reports required by this Order are necessary to assure compliance with Section 13304 of the Water Code, including to adequately assess and cleanup the Site to protect the beneficial uses of waters of the state, to protect against nuisance, and to protect human health and the environment.

## CONCLUSIONS

22. The Regional Board is declining to name additional potentially responsible parties (PRPs) for the Site in this Order at this time. Substantial evidence indicates that the Dischargers caused or permitted waste to be discharged into waters of the state and are therefore appropriately named as responsible parties in this Order. The Regional Board will continue to investigate whether additional PRPs caused or permitted the discharge of waste at the Site and whether these or other persons should be named as additional responsible parties to this Order. The Regional Board may amend this Order or issue a separate order or orders in the future as a result of this investigation and as more information becomes available. Although investigation concerning additional PRPs is ongoing, the Regional Board desires to issue this Order as waiting will only delay remediation of the Site.

23. Issuance of this Order is being taken for the protection of the environment and as such is exempt from provisions of the California Environmental Quality Act (CEQA) (Pubic Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15061(b)(3), 15306, 15307, 15308, and 15321. This Order generally requires the Dischargers to submit plans for approval prior to implementation of cleanup activities at the Site. Mere submittal of plans is exempt from CEQA as submittal will not cause a direct or indirect physical change in the environment and/or

is an activity that cannot possibly have a significant effect on the environment. CEQA review at this time would be premature and speculative, as there is simply not enough information concerning the Dischargers' proposed remedial activities and possible associated environmental impacts. If the Regional Board determines that implementation of any plan required by this Order will have a significant effect on the environment, the Regional Board will conduct the necessary and appropriate environmental review prior to Executive Officer's approval of the applicable plan.

24. Pursuant to section 13304 of the California Water Code, the Regional Board may seek reimbursement for all reasonable costs to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action.

25. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

    http://www.waterboards.ca.gov/public_notices/petitions/water_quality

    or will be provided upon request.

## REQUIRED ACTIONS

**THEREFORE, IT IS HEREBY ORDERED**, pursuant to section 13304 and 13267 of the California Water Code,that the Dischargers shall investigate, cleanup the waste and abate the effects of waste forthwith discharging at and from 2015 West Chestnut Street, between South Palm Avenue and South Raymond Avenue, in Alhambra, California. "Forthwith" means as soon as reasonably possible, but in any event no later than the compliance dates below. More specifically, the Dischargers shall:

1. **Develop and update a Site Conceptual Model:** The Site Conceptual Model (SCM) should include a written presentation with graphic illustrations of discharge scenario, geology and hydrogeology, waste fate and transport in soil matrix, soil gas and groundwater, distribution of wastes, exposure pathways, sensitive receptors and other relevant information. The SCM shall be constructed based upon actual data collected from the former Agere site and any other nearby sites that add to the accuracy of the SCM.

    The SCM shall include a preliminary human health risk assessment (HHRA), considering all waste constituents in the soil matrix, soil gas and groundwater, all exposure pathways and sensitive receptors. The SCM shall be updated and submitted upon request by the Regional Board as new information becomes available.

    If interpretation of the SCM suggests that assessment, characterization and delineation of waste constituents is incomplete, you shall prepare and submit a work plan to complete assessment and characterization of VOCs and other potential waste constituents in soil vapor, soil matrix and groundwater and to fully delineate the vertical and lateral extent of wastes in the soil and groundwater onsite and offsite as set forth in paragraph 2.

The due date for the first SCM is included in Attachment B, Time Schedule.

2. **Indoor Air Sampling:** Conduct indoor air sampling at various locations inside the buildings located on the Site, and completely delineate as appropriate to assess human health threat posed to the occupants of the buildings from potential vapor intrusion as result of volatilization of VOCs from the underlying impacted soil.. Air samples should be collected in Summa canisters, and analyzed for VOCs using USEPA Method TO-15 by a State certified laboratory.

   Air sample results shall be compared to the California Human Health Screening Levels (CHHSLs) for indoor air to evaluate the threat posed by the potential vapor intrusion to human health. Both indoor and outdoor ambient air data shall be collected in accordance with the California EPA/Department of Toxic Substances Control (DTSC) 2011, *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*, October, 2011.

   Before implementing the indoor air sampling, you shall prepare and submit a work plan to the Regional Board for review and approval by the due date included in Attachment B, Time Schedule.

3. **Develop and Submit a Site Assessment Work Plan to Assess, Characterize and Delineate the Extent of Wastes in Soil and Groundwater:**

   a. Fully assess and characterize the vertical and horizontal extent of wastes onsite and offsite in the soil matrix and soil vapor including VOCs, such as TCE and PCE.

   b. Identify the locations of all waste sources at the Site such as USTs, clarifiers, sumps, and other sources to allow for full assessment of the extent of waste discharged at the Site.

   c. Update the current concentrations of waste constituents in the soil vapor by conducting a site-wide soil vapor survey.

   d. Include a time schedule for implementation of the Site Assessment Work Plan within the Plan.

   e. Upon Executive Officer approval of the Site Assessment Work Plan(s), you shall implement the Site Assessment Work Plan in accordance with the approved time schedule.

   f. Completion of the site assessment may require multiple work plans.

4. **Conduct Remedial Action:** Implement a cleanup and abatement program for the cleanup of wastes in the soil and soil vapor and the abatement of the effects of the discharges of waste on beneficial uses of water. Specifically, you shall:

   A. Develop a comprehensive Remedial Action Plan (RAP) for cleanup of wastes in the soil and soil vapor, originating from the Site and submit it for Regional Board review and approval. Groundwater cleanup will be addressed under the USEPA Superfund program. The RAP shall include, at a minimum:

      i. Preliminary cleanup goals for soil and groundwater in compliance with State Water Board Resolution 92-49 ("*Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*"). Resolution 92-49, Section III.G. requires cleanup to background, unless that is not reasonable. Alternative cleanup levels to background must comply with California Code of Regulations, Title 23, sections 2550.4, and be consistent with maximum benefit to the people of the state, protect beneficial uses, and

result in compliance with the Basin Plan. Alternative cleanup levels for groundwater shall not exceed water quality objectives in the Basin Plan, including California's MCLs and Notification Levels for drinking water as established by the State Department of Public Health. Alternative cleanup levels for soil and soil vapor shall not exceed levels that will result in groundwater exceeding water quality objectives in the Basin Plan, including California's MCLs and NLs for drinking water as established by the State Department of Public Health.

ii. Discussion of the technology(ies) proposed for remediation of soil matrix and the soil vapor.

iii. Description of the selection criteria for choosing the proposed method over other potential remedial options. Discuss the technical merit, suitability of the selected method under the given site conditions and waste constituents present, economic and temporal feasibility, and immediate and/or future beneficial results.

iv. Estimation of cumulative mass of wastes to be removed with the selected method. Include all calculations and methodology used to obtain this estimate.

v. A proposed time schedule for completion of the remedial action plan.

The following information shall be considered when establishing preliminary cleanup goals:

a. Soil cleanup levels set forth in the Regional Board's *Interim Site Assessment and Cleanup Guidebook*, May 1996.

b. Human health protection levels set forth in the current USEPA Region IX's Regional Screening levels (RSLs)

c. Protection from vapor intrusion and protection of indoor air quality based on the California EPA's January 2005 (or later version) *Use of Human Health Screening Levels (CHHSLS) in Evaluation of Contaminated Properties*. Soil vapor sampling requirements are stated in the Department of Toxic Substances Control (DTSC) and Regional Board January 2003 *Advisory - Active Soil Gas Investigations, and the DTSC February 2005* (or latest version) *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*.

Revisions to or additional RAPs may be needed if the implemented remedial measure does not completely achieve all Site cleanup goals.

B. Upon Regional Board approval of the Remedial Action Plan(s), you shall implement the RAP in accordance with the approved time schedule.

C. You shall submit quarterly remediation progress reports to this Regional Board as set forth in the Monitoring and Reporting Program (Attachment C). The quarterly remediation progress reports shall document all performance data associated with the operating systems.

5. **Conduct Groundwater Monitoring:** Implement a groundwater monitoring program as set forth in the Monitoring and Reporting Program (Attachment C). The next groundwater monitoring report shall be due by the due date included in Attachment B, Time Schedule.

6. **Time Schedule:** The Dischargers shall submit all required work plans and reports and complete work within the time schedule listed in Attachment B attached hereto and incorporated herein by reference, which may be revised by the Executive Officer without revising this Order.

7. The Regional Board's authorized representative(s) shall be allowed:

   a. Entry upon premises where a regulated facility or activity is located, conducted, or where records are stored, under the conditions of this Order.

   b. Access to copy any records that are stored under the conditions of this Order.

   c. Access to inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order.

   d. The right to photograph, sample, and monitor the Site for the purpose of ensuring compliance with this Order, or as otherwise authorized by the California Water Code.

8. **Contractor/Consultant Qualification:** As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by, or under the supervision of, a California registered professional engineer or geologist and signed by the registered professional. All technical reports submitted by the Dischargers shall include a statement signed by the authorized representative certifying under penalty of law that the representative has examined and is familiar with the report and that to his knowledge, the report is true, complete, and accurate. All technical documents shall be signed by and stamped with the seal of the above-mentioned qualified professionals that reflects a license expiration date.

9. This Order is not intended to permit or allow the Dischargers to cease any work required by any other Order issued by the Regional Board, nor shall it be used as a reason to stop or redirect any investigation or cleanup or remediation programs ordered by the Regional Board or any other agency. Furthermore, this Order does not exempt the Dischargers from compliance with any other laws, regulations, or ordinances which may be applicable, nor does it legalize these waste treatment and disposal facilities, and it leaves unaffected any further restrictions on those facilities which may be contained in other statutes or required by other agencies.

10. The Dischargers shall submit a 30-day advance notice to the Regional Board of any planned changes in name, ownership, or control of the Site and shall provide a 30-day advance notice of any planned physical changes to the Site that may affect compliance with this Order. In the event of a change in ownership or operator, the Dischargers also shall provide a 30-day advance notice, by letter, to the succeeding owner/operator of the existence of this Order, and shall submit a copy of this advance notice to the Regional Board.

11. Abandonment of any groundwater well(s) at the Site must be approved by and reported to the Executive Officer at least 30 days in advance. Any groundwater wells removed must be replaced within a reasonable time, at a location approved by the Executive Officer. With written justification, the Executive Officer may approve the abandonment of groundwater wells without replacement. When a well is removed, all work shall be completed in accordance with California Department of Water Resources Bulletin 74-90, "California Well Standards," Monitoring Well Standards Chapter, Part III, Sections 16-19.

12. In the event compliance cannot be achieved within the terms of this Order, the Dischargers have the opportunity to request, in writing, an extension of the time specified. The extension request shall include an explanation why the specified date could not or will not be met and justification for the requested period of extension. Any extension request shall be submitted as soon as the situation is recognized and no later than the compliance date. Extension requests not approved in writing with reference to this Order are denied.

13. Reference herein to determinations and considerations to be made by the Regional Board regarding the terms of the Order shall be made by the Executive Officer. Decisions and directives made by the Executive Officer in regards to this Order shall be as if made by the Regional Board.

14. The Regional Board, through its Executive Officer, may revise this Order as additional information becomes available. Upon request by the Dischargers, and for good cause shown, the Executive Officer may defer, delete or extend the date of compliance for any action required of the Dischargers under this Order. The authority of the Regional Board, as contained in the California Water Code, to order investigation and cleanup, in addition to that described herein, is in no way limited by this Order.

15. Continue any remediation or monitoring activities until such time as the Regional Board determines that sufficient cleanup has been accomplished and this Order has been rescinded.

16. Reimburse the Regional Board for reasonable costs associated with oversight of the investigation and cleanup of the Site soils and groundwater emanating from the Site. Provide the Regional Board with the name or names and contact information for the person to be provided billing statements from the State Water Resources Control Board.

17. A Public Participation Plan shall be prepared and/or updated when directed by the Executive Officer as necessary to reflect the degree of public interest in the investigation and cleanup process.

18. The Regional Board, under the authority given by Water Code section 13267(b)(1), requires you to include a perjury statement in all reports submitted under this Order. The perjury statement shall be signed by a senior authorized representative (not by a consultant). The perjury statement shall be in the following format:

    "I, [NAME], certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision, in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

19. The State Water Board adopted regulations requiring the electronic submittals of information over the internet using the State Water Board GeoTracker data management system. You are required not only to submit hard copy reports required in this Order, but also to comply by uploading all reports and correspondence prepared to date on to the GeoTracker data management system. The text of the regulations can be found at the URL:

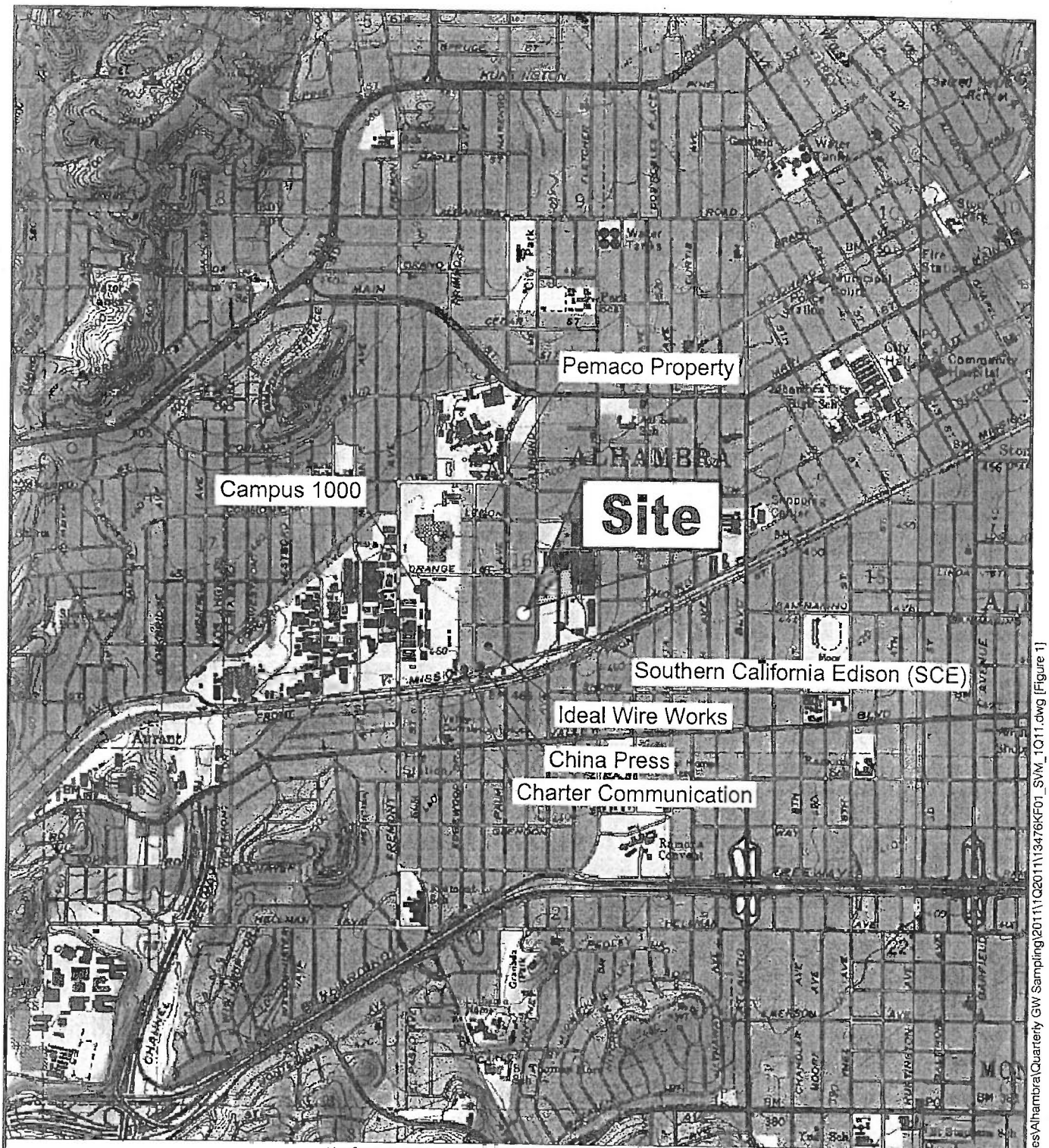
    http://www.waterboards.ca.gov/ust/cleanup/electronic_reporting/docs/final_electronic_regs_dec04.pdf.

20. Failure to comply with the terms or conditions of this Order may result in imposition of civil liabilities, imposed either administratively by the Regional Board or judicially by the Superior Court in accordance with sections 13268, 13304, 13308, and/or 13350 of the California Water Code, and/or referral to the Attorney General of the State of California.

21. None of the obligations imposed by this Order on the Dischargers are intended to constitute a debt, damage claim, penalty or other civil action which should be limited or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the State of California intended to protect the public health, safety, welfare, and environment.

Ordered by: Samuel Unger
Samuel Unger, P.E.
Executive Officer

Date: July 30, 2013




Map Created with TOPO! (tm) (c)2001 National Geographic Holdings (www.topo.com)

0 1/2 1 MILE

2000 0 2000 4000 FEET

SOURCE:
U.S.G.S. 7.5 minute series (topographic)
Los Angeles Quadrangle, version 1991, current as 1994
El Monte Quadrangle, version 1991, current as 1994

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
SCALE 1:24000

ENVIRON

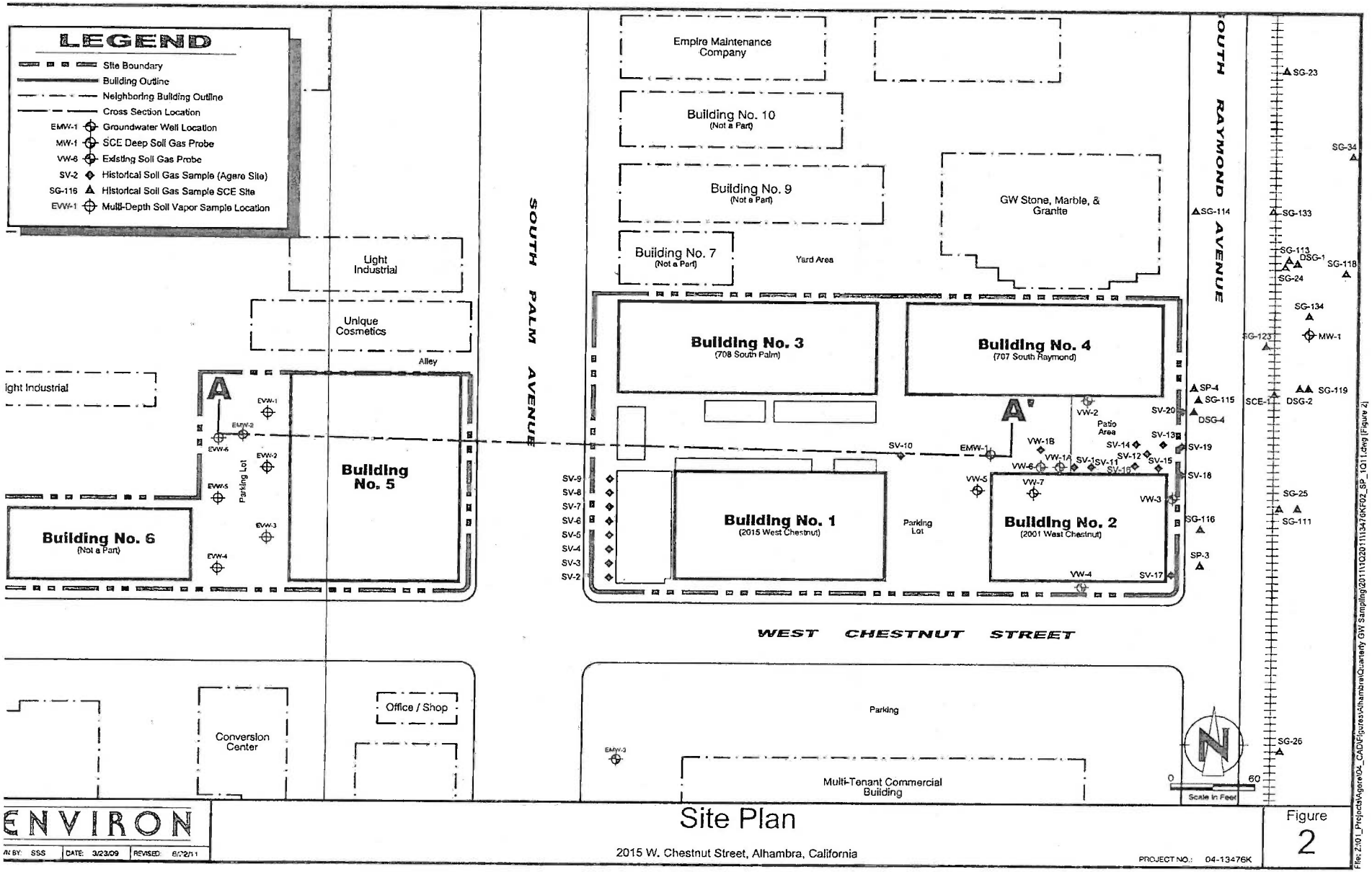
# Site Vicinity Map

2015 W. Chestnut Street, Alhambra, California

Figure 1

| Drafter: | SSS | Date: | 3/23/09 | Contract Number: | 04-13476K | Approved: | Revised: | 6/22/11 |
|---|---|---|---|---|---|---|---|---|

File: Z:\01_Projects\Agere\04_CAD\Figures\Alhambra\Quarterly GW Sampling\2011\1Q2011\13476KF01_SVM_1Q11.dwg [Figure 1]




# Site Plan

2015 W. Chestnut Street, Alhambra, California

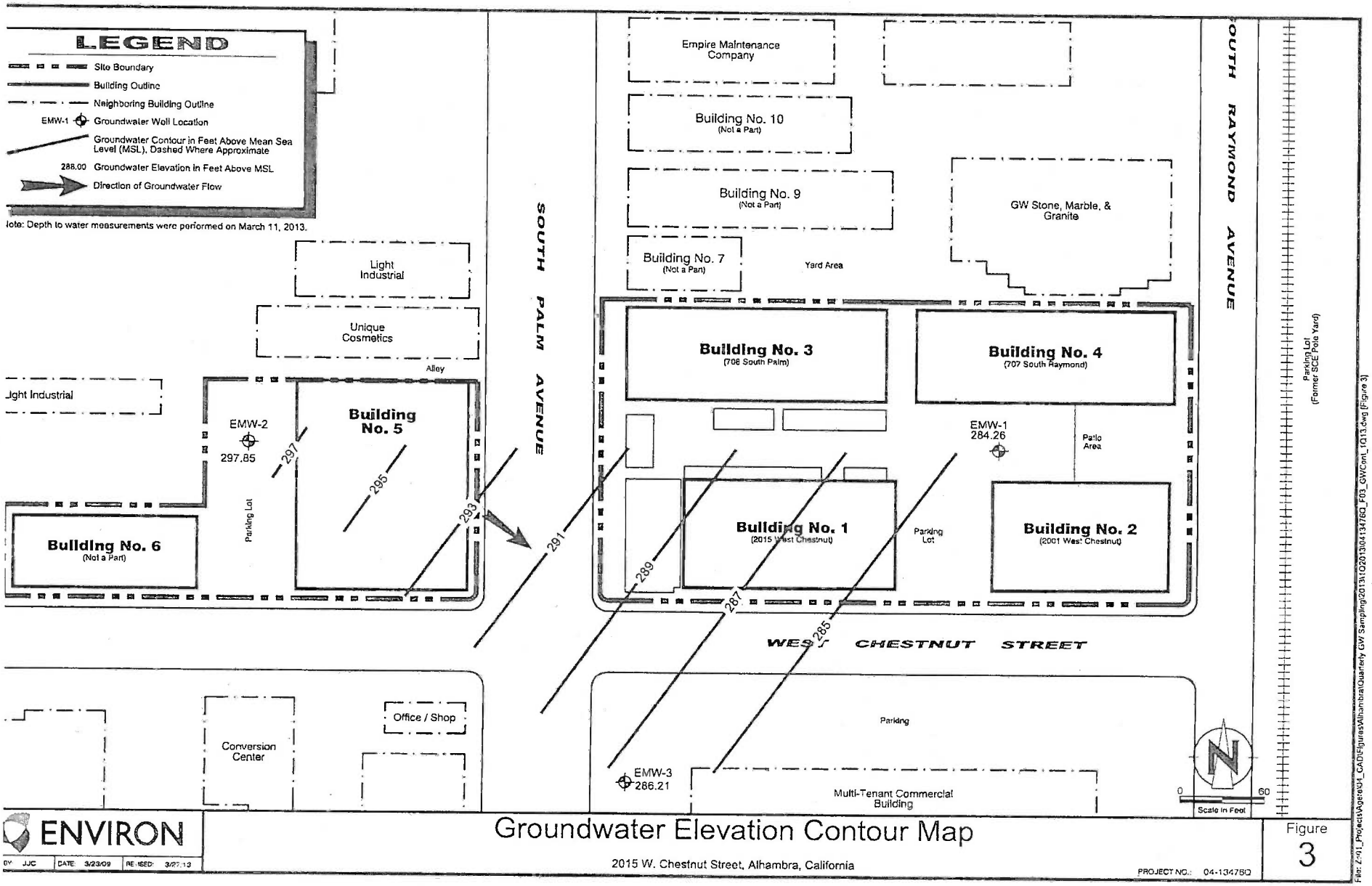
ENVIRON

DRAWN BY: SSS | DATE: 3/23/09 | REVISED: 6/22/11

PROJECT NO.: 04-13476K

Figure 2

File: Z:\01_Projects\Agere\04_CAD\Figures\Alhambra\Quarterly GW Sampling\20111102011113476KF02_SP_1Q11.dwg [Figure 2]




ENVIRON

BY: JJC | DATE: 3/23/09 | REVISED: 3/27/13

# Groundwater Elevation Contour Map

2015 W. Chestnut Street, Alhambra, California

PROJECT NO.: 04-13476Q

Figure 3

File: Z:\01_Projects\Aspen\01_CAD\Figures\AlhambraQuarterly GW Sampling\2013\1Q2013\04134760_F03_GWCont_1Q13.dwg [Figure 3]

Table 2: Summary of Groundwater Analytical Results
Agere Systems
Alhambra, California

| Sample Number | Date Sampled | Benzene | CT | Chloro-form | 1,1-DCA | 1,2-DCA | 1,1-DCE | cis-1,2-DCE | PCE | TCE | 1,2,3-TCP | 1,4-Dioxane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (µg/l) | | | | | | | | | (ng/l) | (µg/l) |
| EMW-1 | 8/29/2005 | <20 | <20 | <40 | <40 | <20 | <40 | <40 | <40 | 1,700 | 9.1 | 2 |
| | 2/16/2006 | <0.5 | **0.72** | 3.5 | 3.6 | <0.5 | **17** | **17** | **5.1** | 2,200 | N/A[1] | 3.3 |
| | 11/30/2006 | <10 | <10 | <20 | <20 | <10 | **20** | **<20** | **<20** | 2,200 | **12** | 8 |
| | *11/30/2006* | *<5* | *<5* | *<10* | *<10* | *<5* | ***18*** | ***13*** | *<10* | *2,200* | *11* | *7.6* |
| | 2/27/2007 | <20 | <20 | <40 | <40 | <20 | <40 | <40 | <40 | 2,500 | **14** | 6.2 |
| | *2/27/2007* | *<10* | *<10* | *<20* | *<20* | *<10* | *20* | *<20* | *<20* | *2,600* | ***13*** | *6* |
| | 6/27/2007 | <0.5 | **1.1** | 3.6 | 2.7 | 0.5 | **17** | **10** | **10** | 2,200 | 11 | -- |
| | *6/27/2007* | **<2.5** | *<5* | *<5* | *<5* | *<2.5* | ***16*** | ***13*** | *9.4* | *2,100* | *12* | -- |
| | 9/18/2007 | <2.5 | <2.5 | <5 | <5 | <2.5 | **16** | **9** | 8.6 | 1,800 | **12** | -- |
| | *9/18/2007* | *<2.5* | *<5* | *<5* | *<5* | *<2.5* | ***14*** | ***9.3*** | *9.2* | *1,800* | *9.1* | -- |
| | 12/12/2007 | <0.5 | **0.58** | 2.50 | 2.0 | <0.5 | **11** | **8.0** | 7.6 | 1,300 | **8.8** | -- |
| | *12/12/2007* | *<2.5* | *<2.5* | *<5* | *<5* | *<2.5* | ***9*** | ***7.4*** | *8.8* | *1,400* | *8* | -- |
| | 2/28/2008 | **<2.5** | <2.5 | <5 | <5 | <2.5 | 16 | **11** | **13** | **2,400** | 10 | -- |
| | *2/28/2008* | *<2.5* | *<2.5* | *<5* | *<5* | *<2.5* | ***16*** | ***8.6*** | ***13*** | *2,300* | *9.6* | -- |
| | 2/26/2009 | <5 | <5 | <5 | <5 | <5 | **18** | **17** | **11** | 2,200 | 14 | -- |
| | *2/26/2009* | *<5* | *<5* | *<5* | *<5* | *<5* | ***19*** | ***17.0*** | *11* | *2,200* | *14* | -- |
| | 3/3/2010 | <2.5 | **3.8** | <5 | <5 | <2.5 | **18** | **17** | 9.2 | 2,100 | 11 | -- |
| | 5/11/2011 | <2.0 | <2.0 | <4 | <4 | <2 | **11** | **12** | 7.6 | 1,400 | 8.4 | -- |
| | *5/11/2011* | *<2.0* | *<2.0* | *<4* | *<4* | *<2* | ***11*** | ***12*** | *7.4* | *1,400* | *6* | -- |
| EMW-2 | 11/30/2006 | <0.5 | **2.2** | 1.3 | 4.1 | **11** | **15** | **17** | **33** | 2,300 | <5 | <0.48 |
| | 2/27/2007 | <20 | <20 | <40 | <40 | <20 | <40 | <40 | <40 | 1,900 | <5 | <0.47 |
| | 6/27/2007 | <2.5 | **3.0** | <5 | <5 | **11** | **21** | **15** | **27** | 1,700 | <5 | -- |
| | 9/18/2007 | <0.5 | **3.2** | 1.2 | 3.1 | **10** | **15** | **12** | **25** | 2,100 | <5 | -- |
| | 12/12/2007 | <2.5 | <2.5 | <5 | <5 | **10** | **16** | **17** | **28** | 1,700 | <5 | -- |
| | 2/28/2008 | <5 | <5 | <10 | <10 | **15** | **29** | **26** | **46** | 3,200 | <5 | -- |
| | 2/26/2009 | <5 | <5 | <10 | <10 | **11** | **22** | **28** | **26** | 2,700 | 6.2 | -- |
| | 3/3/2010 | <2.5 | **4.2** | <5 | **5.4** | **4.1** | **16** | **21** | **23** | 2,400 | 8.3 | -- |
| | *3/3/2010* | *<2.5* | ***4.2*** | *<5* | ***5.8*** | ***3.7*** | ***16*** | ***22*** | *25* | *2,600* | *9.1* | -- |
| | 5/11/2011 | <2.5 | <2.5 | <5 | <5.0 | **4.4** | **16** | **13** | **23** | 1,900 | <5 | -- |
| EMW-3 | 11/30/2006 | 0.54 | **0.60** | <1 | <1 | <0.5 | 3.2 | <1 | 3.2 | **51** | <5 | <0.47 |
| | 2/27/2007 | <0.5 | <0.5 | <1 | <1 | <0.5 | 3.9 | <1 | 2.9 | **63** | <5 | <0.48 |
| | 6/27/2007 | <0.5 | <0.5 | <1 | <1 | <0.5 | 3.7 | <1 | 3.1 | 63 | <5 | -- |
| | 9/18/2007 | <0.5 | **0.63** | <1 | <1 | <0.5 | 2.3 | <1 | 3.3 | **66** | <5 | -- |
| | 12/12/2007 | <0.5 | <0.5 | <1 | <1 | <0.5 | 1.7 | <1 | 4.2 | **30** | <5 | -- |
| | 2/28/2008 | <0.5 | **0.61** | <1 | <1 | <0.5 | **1.5** | <1 | **6.7** | **42** | <5 | -- |
| | 2/26/2009 | <0.5 | <0.5 | <1 | <1 | <0.5 | 1.8 | <1 | 3.8 | **35** | <5 | -- |
| | 3/3/2010 | <0.5 | **1.1** | <1 | <1 | <0.5 | 2.3 | <1 | 3.3 | **44** | <5 | -- |
| | 5/11/2011 | <0.5 | <0.5 | <1 | <1 | <0.5 | 2.3 | <1 | 3.3 | 39 | <5 | -- |
| CDHS MCL | | 1.0 | 0.5 | - | 5.0 | 0.5 | 6.0 | 6.0 | 5.0 | 5.0 | 5.0[2] | 3.0[2] |

Q:\A\Agere\Alhambra\Quarterly GW Sampling\0413476N - 2011 GW Sampling\Tables\[All Tables2011.xlsx]Table 2

Notes:
CT = Carbon Tetrachloride
DCA = Dichloroethane
DCE = Dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
TCP = Trichloropropane
CDHS MCL = California Department of Health Services Maximum Contaminant Level
µg/l = micrograms per liter
ng/l = nanograms per liter
FD = field duplicate
<1 = not detected above reporting limit shown
N/A[1] = Not Available – The laboratory report indicated that the 40 mL vials with hydrochloric acid supplied for sample collection were contaminated with 1,2,3-trichloropropane. As a result all 1,2,3-trichloroporpane results reported for this set of samples are potentially biased high and cannot be used as an accurate measure of analyte concentration from the sample sources
-- = Not analyzed per requirements of the March 20, 2007 RWQCB letter
2 = California Action Level
Bold = Analytical result exceeding a regulatory limit
Italics = Duplicate sample analytical results



ENVIRON

Attachment B: Time Schedule

| | REQUIREMENT | DUE DATE |
|---|---|---|
| 1. | VOCs in the Unsaturated and Saturated Zones:<br><br>Prepare and submit work plans to completely characterize the extent of waste in soil and soil vapor.<br><br>Indoor Air Sampling<br><br>Prepare and submit a work plan for indoor air sampling to assess the ambient indoor air for VOCs inside the buildings at the Site at areas where previous soil vapor assessments detected shallow soil vapors at levels that exceed or threaten on-site workers. A baseline soil vapor assessment may be included in the proposed workplan to evaluate contemporary data and incorporate historical investigative data.<br><br>Implement the approved Indoor Air Sampling work plan. | October 1, 2013 |
| 2. | Site Conceptual Model: The Site Conceptual Model (SCM) should include a written presentation with graphic illustrations of the release scenario and the dynamic distribution of wastes from the former Agere site and vicinity. You shall construct the SCM based on actual data collected from the Site and any other nearby sites that add to the accuracy of the SCM. | February 1, 2014 |
| 3. | **Soil Remedial Action Plan (RAP)**<br><br>Prepare and submit a Remedial Action Plan (RAP) to clean up the VOCs in the Unsaturated Zone (Source removal) onsite and offsite. | March 1, 2014 |
| 4. | Implementation of the approved Remedial Action Plans for VOCs in the Unsaturated Zone:<br><br>Implement RAP.<br><br>Submit post-remedial technical reports. | December 31, 2013 |

Attachment B: Time Schedule (Cont.)

| | | |
|---|---|---|
| 6. | **Indoor Air Sampling:**<br><br>Prepare and submit a work plan for indoor air sampling to assess the ambient indoor air for VOCs inside the buildings at the Site at areas where previous soil vapor assessments detected shallow soil vapors at levels that exceed or threaten on-site workers. A baseline soil vapor assessment may be included in the proposed workplan to evaluate contemporary data and incorporate historical investigative data.<br><br>Implement the approved Indoor Air Sampling work plan. | As directed by the Assistant Executive Officer |
| 7. | **Groundwater Monitoring**<br><br>Conduct annual groundwater monitoring according to the current monitoring and reporting schedule. However, if remedial work is implemented, the Regional Board typically requires groundwater monitoring to be conducted on a quarterly basis. | The next groundwater monitoring report is due on May 15, 2014. |

## ATTACHMENT C
## MONITORING AND REPORTING PROGRAM FOR CLEANUP AND ABATEMENT ORDER NO. R4-2013-0099

This Monitoring and Reporting Program is part of Cleanup and Abatement Order No. R4-2013-0099 (CAO). Failure to comply with this program constitutes noncompliance with the CAO and California Water Code, which can result in the imposition of civil monetary liability. All sampling and analyses shall be by USEPA approved methods. The test methods chosen for detection of the constituents of concern shall be subject to review and concurrence by the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board).

Laboratory analytical reports to be included in technical reports shall contain a complete list of chemical constituents which are tested for and reported on by the testing laboratory. In addition, the reports shall include both the method detection limit and the practical quantification limit for the testing methods. All samples shall be analyzed allowable holding time. All quality assurance/quality control (QA/QC) samples must be run on the same dates when samples were actually analyzed. Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report. All analyses must be performed by a California Department of Public Health accredited laboratory.

The Regional Board's *Quality Assurance Project Plan, September 2008,* can be used as a reference and guidance for project activities involving sample collection, handling, analysis and data reporting. The guidance is available on the Regional Board's web site at:

http://www.waterboards.ca.gov/rwqcb4/water_issues/programs/remediation/Board_SGV-SFVCleanupProgram_Sept2008_QAPP.pdf

### GROUNDWATER MONITORING

The Dischargers shall collect groundwater samples from groundwater monitoring wells installed for the purpose of site investigation and monitoring. Any monitoring wells installed in the future shall be added to the groundwater monitoring program and sampled quarterly. The groundwater surface elevation (in feet above mean sea level [MSL]) in all monitoring wells shall be measured and used to determine the gradient and direction of groundwater flow.

The following shall constitute the monitoring program for groundwater.

| Constituent | EPA Method |
|---|---|
| Volatile Organic Compounds (full scan) | EPA 8260B |
| Total petroleum hydrocarbons as gasoline | EPA 8015 modified |
| Metals | EPA 6010B |
| Hexavalent Chromium | EPA 7199 |
| Ammonium Perchlorate | EPA 314.0 |
| 1,4-dioxane | EPA 8270C |
| N-Nitrosodimethylamine (NDMA) | EPA 1625C |
| Temperature | Field* |
| pH | Field* |
| Electrical Conductivity | Field* |
| Dissolved oxygen | Field* |
| Oxidation-Reduction Potential (ORP) | Field* |
| Turbidity | Field* |

*Field - To be measured in the field.

## REMEDIATION SYSTEMS

Reports on remediation systems shall contain the following information regarding the site remediation systems:

1. Maps showing location of all remediation wells and groundwater monitoring wells, if applicable;
2. Status of each remediation system including amount of time operating and down time for maintenance and/or repair;
3. Air sparge well operating records including status of each well and volume and pressure of air being injected;
4. Soil vapor extraction well records including status of each well and PID readings or other acceptable methods of determining relative volatile concentrations taken at a minimum quarterly. Readings of volatile concentrations drawn from SVE wells need to be taken at a frequency that allows the efficient operation and evaluation of the SVE system;
5. The report shall include tables summarizing the operating and performance parameters for the remediation systems; and
6. System inspection sheets shall document field activities conducted during each Site visit and shall be included in the quarterly reports.

## MONITORING FREQUENCIES

Specifications in this monitoring program are subject to periodic revisions. Monitoring requirements may be modified or revised by the Executive Officer based on review of monitoring data submitted pursuant to this Order. Monitoring frequencies may be adjusted or parameters and locations removed or added by the Executive Officer if Site conditions indicate that the changes are necessary.

## REPORTING REQUIREMENTS

1. The Dischargers shall report all monitoring data and information as specified herein. Reports that do not comply with the required format will be REJECTED and the Dischargers shall be deemed to be in noncompliance with the Monitoring and Reporting Program.

2. Quarterly groundwater monitoring reports while remedial systems are in operation shall be submitted to the Regional Water Board according to the schedule below or on an alternative schedule approved by Executive Officer. Otherwise continue annual groundwater monitoring and reporting on May 15 of each year .

| Monitoring Period | Report Due |
|---|---|
| July - September | October 15 |
| October – December | January 15 |
| January – March (2014) | April 15 |
| April - June | July 15 |

Groundwater monitoring reports shall include a contour map showing groundwater elevations at the Site and the groundwater flow direction. The quarterly groundwater monitoring reports shall include tables summarizing the historical depth-to-water, groundwater elevations and historical analytical results for each monitoring well. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported

to the Regional Water Board. Field monitoring well sampling sheets shall be completed for each monitoring well sampled and included in the report.

Quarterly remediation progress reports shall be submitted to the Regional Water Board according to the schedule below.

| Monitoring Period | Report Due Date |
|---|---|
| July - September | October 31 |
| October - December | January 31 (2014) |
| January - March | April 30 |
| April – June | July 30 |

3. Remediation progress reports shall include an estimate of the cumulative mass of contaminant removed from the subsurface, system operating time, the effectiveness of the remediation system, any field notes pertaining to the operation and maintenance of the system and, if applicable, the reasons for and duration of all interruptions in the operation of any remediation system and actions planned or taken to correct and prevent interruptions.

4. In reporting the monitoring data, the Dischargers shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements. All data shall be submitted in electronic form in a form acceptable to the Regional Water Board.

# EXHIBIT 2

Scott Houthuysen
Global Director, EH&S
LSI Corporation
1110 American Parkway, NE
Allentown, PA 18109

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F (610) 712-1450
scott.houthuysen@lsi.com

LSI

September 29, 2009

VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Curt Charmley
Engineering Geologist
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Re: Draft Cleanup and Abatement Order No. R4-2009-0016
2015 W. Chestnut St., Alhambra, CA (File No. 115.0003, Site ID No. 2040293)

Dear Mr. Charmley:

As invited by the letter of the Regional Water Quality Control Board ("Board") dated April 30, 2009, this letter provides the comments of LSI Corporation (successor to Agere Systems, Inc.) on the above-referenced Draft Cleanup and Abatement Order ("CAO"). In addition, this letter memorializes the proposal that LSI made to the Board during our telephone conference on September 15, 2009. LSI appreciates the comment period extensions that the Board provided, as well as the opportunities that we had to meet with you and other Board representatives in person on June 2, 2009 and by telephone on September 15, 2009 regarding the draft CAO.

We enclose another copy of the presentation that we left with you on June 2, 2009, and we hereby incorporate the presentation by reference into these comments. We also enclose and incorporate by reference additional copies of the response of Agere Systems to the information request of U.S. EPA dated May 23, 2003 (without enclosures), the letter from Agere Systems to U.S. EPA dated April 4, 2006 (without enclosures) and the 2009 Annual Groundwater Monitoring Report that ENVIRON provided to the Board on April 15, 2009. These documents contain detailed information in support of the overall points made in LSI's June 2 presentation and in this letter. We omit the enclosures that were submitted to EPA with the 2003 and 2006 letters due to size, but please let us know if you need copies of any of those enclosures.

LSI's principal comment regarding the draft CAO is that any such CAO should not be issued to LSI, as substantial information indicates that LSI is not responsible for the chlorinated solvents in soil gas and groundwater observed beneath what is now Building 2 of the Ortel facility. A secondary comment is that certain requirements of the draft CAO, particularly with respect to groundwater, are inconsistent with the available information regarding the site. Nonetheless, as discussed during our June 2 meeting and September 15 call, LSI is willing to continue its history of cooperation with the Board by implementing certain tasks described in the draft CAO, perhaps through a Memorandum of Agreement with the Board. The remainder of this letter provides additional detail on these points.

**A. LSI Is Not Responsible for the Chlorinated Solvents Discovered Beneath What Is Now the Ortel Facility**

Without repeating all of the information in the enclosed documents, the following facts show that LSI is not responsible for the chlorinated solvents discovered beneath what is now the Ortel facility.

1. Norris Thermador, now known as NI Industries (a subsidiary of TriMas Corporation) owned the relevant portion of the site from 1954 to 1978, and obtained building permits in 1958 for a "degrease pit" and a "paint booth." Other electronics manufacturers, including Spatron, Inc. and Roton Products, also operated at this location. TCE use by such manufacturers was common from the 1950s into the 1970s. While LSI has not performed modeling in an attempt to "date" the releases of TCE to the soil, the depths of the most elevated soil gas concentrations of TCE are consistent with TCE releases that occurred decades ago.

2. The property was redeveloped in 1980 with construction of the current buildings and paving of virtually the entire site. We do not know whether the new site owners investigated prior uses or soil conditions before or during site redevelopment.

3. Ortel leased the site in 1981 and began operations around December 1981. The room in which Ortel had a small vapor degreaser had no drains. A second vapor degreaser was added only in 1995. (There was another degreaser in the machine shop starting in 1994; it used only petroleum distillates, which aren't found in soil gas or groundwater at the site.)

4. There is no evidence showing that Ortel used TCE in its vapor degreasers.

5. There is some evidence that Ortel used 1,1,1-TCA in its vapor degreaser between at least 1985 and 1990, before switching to non-chlorinated solvents. 1,1,1-TCA also may have been stored in a 150-gallon above-ground storage tank ("AST") located in a paved and bermed area outside Building 2 during that period. There is no 1,1,1-TCA in soil gas or groundwater at the site, indicating the lack of a pathway from these locations to soil and groundwater.[1]

6. The groundwater table in monitoring well EMW-2, located at the west end of the Ortel facility, is 10 feet higher than the groundwater table in monitoring well EMW-1, located adjacent to Ortel Building 2 in the vicinity of the soil gas concentrations of TCE. The TCE concentrations in EMW-2 have been higher than the TCE concentrations in EMW-1 in five out of seven groundwater monitoring events, and have never been lower than the lowest concentration observed at EMW-1. Soil gas in the vicinity of EMW-2 was investigated and did not indicate an onsite source of the TCE. These data show that the TCE in the groundwater beneath the Ortel facility has an offsite upgradient source. As discussed briefly during our September 15 call, there appears to be no technical disagreement that the data from EMW-2 show the existence of an offsite upgradient source.

For these reasons and the other reasons detailed in the enclosed documents, and in view of the tremendous scope and cost of the draft CAO, LSI would be compelled to oppose such a CAO, and the Board would face substantial litigation risk in pursuing enforcement of such a CAO against LSI. The Board's goal of timely and efficient remediation of threats to groundwater would be met much more

[1] As discussed on June 2, Mark Kanipe of Ortel had indicated to a Board representative in early 2000 that TCE had been stored in the AST, but Mr. Kanipe subsequently retracted that statement as mistaken. Mr. Kanipe had erroneously thought in early 2000 that Vapo-Kleen contained a chlorinated solvent like TCE or 1,1,1-TCA, and he had not distinguished between those compounds in his discussions with the Board representative.

effectively by issuance of an appropriate CAO to the parties that are in fact responsible for the TCE in the soil gas and groundwater beneath the site.

**B. The Offsite Upgradient Source of TCE in Groundwater and Other Factors Eliminate Any Basis for the CAO Requirements Relating to Groundwater Delineation, Remediation, or Replacement**

As discussed on June 2, there is no basis to require LSI to undertake further delineation or remediation of groundwater at the site. LSI cannot be required to delineate the lateral or downgradient extent of a TCE plume that originates from one or more offsite upgradient sources. Moreover, the presence of a major offsite upgradient source (or sources) of TCE to the groundwater beneath the Ortel facility would frustrate any onsite attempts to remediate groundwater, at least until the upgradient source(s) had been identified and remediated (along with the plume extending to the Ortel facility).

There is also no basis to require LSI to undertake replacement of groundwater used by the City of Alhambra. In addition to the continuing offsite upgradient source of the TCE plume detected at the Ortel facility, the current and future groundwater conditions beneath the Ortel facility are unlikely to affect the Alhambra water supply wells, due to the hydraulic discontinuity between the site and the Alhambra water supply wells that U.S. EPA describes in its Remedial Investigation Report for San Gabriel Valley Area 3.

We note that some of the investigation requirements relating to groundwater were puzzling, such as the vaguely stated requirement to assess "emerging chemicals" and metals in the vadose zone and groundwater. Based on the investigations performed to date (including the U.S. EPA Remedial Investigation for San Gabriel Valley Area 3), we are not aware of any information indicating that metals are a problem in the vadose zone or groundwater underlying the Ortel facility, and we have not seen information linking Ortel to the presence of any metals or "emerging chemicals" in the vadose zone or groundwater. We believe that these requirements lack a technical basis at this site, at least with respect to Ortel and LSI.

**C. LSI Is Willing to Continue Its History of Cooperation Through Reasonable Steps That Are Consistent With The Evidence**

As we discussed with the Board during our June 2 meeting and September 15 call, LSI is willing to take certain limited steps to continue assisting the Board with achievement of its goals.

At the June meeting, LSI proposed to prepare a work plan that would include a Conceptual Site Model, a plan for evaluation of indoor air in Ortel Building 2 (the building in the vicinity of the elevated soil gas readings), and another round of groundwater sampling at the existing wells in about six months (to supplement the existing data). Upon approval, LSI would then implement this work plan. All of these elements were drawn from the draft CAO. The total cost of these actions would be on the order of $30,000 or more.

Sam Unger indicated that that Board was willing to try and work out a path forward with LSI that involved a Memorandum of Agreement rather than a CAO. There was also general consensus that such an agreement with LSI would involve substantially less work than the scope of work included in the draft CAO. However, it was indicated that what LSI had proposed at the meeting was not enough work to pursue this alternative course of action.

LSI considers its June proposal to be significant, given the money spent to date and the lack of evidence that LSI is responsible for the chlorinated solvents in soil and groundwater under the facility. LSI has already spent several hundred thousand dollars to address a situation for which it may have no

responsibility, and for which the actual responsible parties have spent nothing. Nonetheless, as requested by the Board, LSI is willing to undertake the following tasks.

In addition to the actions that LSI proposed in June, LSI is willing to prepare a draft Remedial Action Plan that details the installation and monitoring program for a soil vapor extraction system at the Site. The design would provide for a nested SVE well in the central courtyard of the Ortel facility near EMW-1, screened at three depth intervals. The existing Ortel vapor monitoring points would be used to monitor the performance of the system.

This proposal is consistent with a phased approach that provides a logical next step for the Board. Preparation of the draft Remedial Action Plan by LSI, and Board review and approval of the Plan (which may require some iterations), will take several months. This will give the Board additional time to investigate prior site operators and upgradient sources. However, the Board would not lose any time relative to the overall schedule for addressing soil gas at the site, because preparing a Remedial Action Plan is an integral part of the process for addressing the site. At the appropriate time, the Board can pursue responsible parties for implementation of the Remedial Action Plan.

Preparation and revision of the draft Remedial Action Plan will cost LSI on the order of $25,000 over and above the cost of the work proposed in June, for a total expenditure of around $55,000, plus Board oversight costs. This is a major commitment by LSI in view of the available information, and justifies entry into a short Memorandum of Agreement in lieu of the draft CAO.

The proposed approach preserves everyone's options going forward. Work will continue that the Board views as necessary, thereby preserving the overall schedule. At the same time, LSI will not be forced into a situation where it has to fight now over a CAO that demands too much given the available information.

To summarize LSI's current proposal for further work at 2015 W. Chestnut Street, which is subject to negotiation of a mutually acceptable Memorandum of Agreement encompassing the proposed scope of work:

1. LSI would prepare a supplemental investigation work plan that would include:
    - a Conceptual Site Model;
    - a plan for evaluation of indoor air in the Ortel building in the vicinity of the elevated soil gas readings, probably through indoor air sampling; and
    - another round of groundwater sampling at the existing wells in January or February 2010.
2. Upon Board approval, LSI would implement the supplemental investigation work plan.
3. LSI would then prepare a draft Remedial Action Plan that would include:
    - a plan for installation of a soil vapor extraction system involving a nested SVE well in the central courtyard of the Ortel facility near EMW-1, screened at three depth intervals; and
    - a plan for monitoring the performance of the system over time, using the existing Ortel vapor monitoring points.

We look forward to further discussions with the Board on the above proposal. LSI is prepared to meet again with the Board as needed to finalize the scope of work and develop an appropriate Memorandum of Agreement.

Sincerely,

Scott D. Houthuysen

Enclosures

cc:
Tracy J. Egoscue, Executive Officer, RWQCB (without enclosures)
Sammuel Unger, P.E., Asst. Executive Officer, RWQCB (without enclosures)
Arthur Heath, Remediation, RWQCB (without enclosures)
Dixon Oriola, Sr. Engineer, RWQCB (without enclosures)
Lisa Hanusiak, U.S. EPA Region IX
Wayne Tam, RIM Development Company
Jocelyn de Grandpre, LSI (without enclosures)
Ryan Livengood, LSI (without enclosures)
Carol Serlin, ENVIRON (without enclosures)
Steven Jawetz, Beveridge & Diamond, P.C. (without enclosures)

# Discussion of Draft CAO for 2015 West Chestnut, Alhambra, CA

**June 2, 2009**

ENVIRON

# Introduction

- Agere Systems (now LSI) has cooperated with RWQCB for 9 years to investigate soil and ground water at 2015 West Chestnut Avenue in Alhambra (Site)
- LSI has complied with all RWQCB requests to date at significant cost to the company
- RWQCB issued Draft CAO to LSI on April 30, 2009 regarding VOC releases at the Site
- LSI appreciates opportunity to discuss Draft CAO. Available information indicates a need for adjustment in RWQCB direction

# Introduction

- LSI would like to discuss following topics:
  - Overview of Site history, including owners/operators before 1981 and Ortel operations since 1981
  - Summary of Site investigations to date
  - Other PRPs in the area
  - Impacts on Draft CAO
  - Proposed next steps by LSI and RWQCB

# Site History

## Recent History

- Tam's purchased Site in 1980 & redeveloped it with the current structures.
- Ortel Corporation started operations at the leased Site around December 1981.
- In June 2000, Lucent Technologies purchased Ortel and subsequently transferred Ortel to Agere.
- In 2003 Agere sold the Ortel Division assets to Emcore Corporation and Emcore subleased the facility from Agere.
- In April 2007 LSI Corporation merged with Agere.

# Site History

- Current/Past Site Owners
  - At no time did LSI/Agere/Lucent own the Site.
  - The Tam's (Tam Family Trust) purchased the Site in 1980.
  - In 1978/1979 the Site was owned by the Alhambra Redevelopment Agency via eminent domain.
  - From approximately 1954 to 1978/1979 the Site was owned by Norris Thermador (NI Industries).
    - NI Industries currently is TriMas.

# Site History

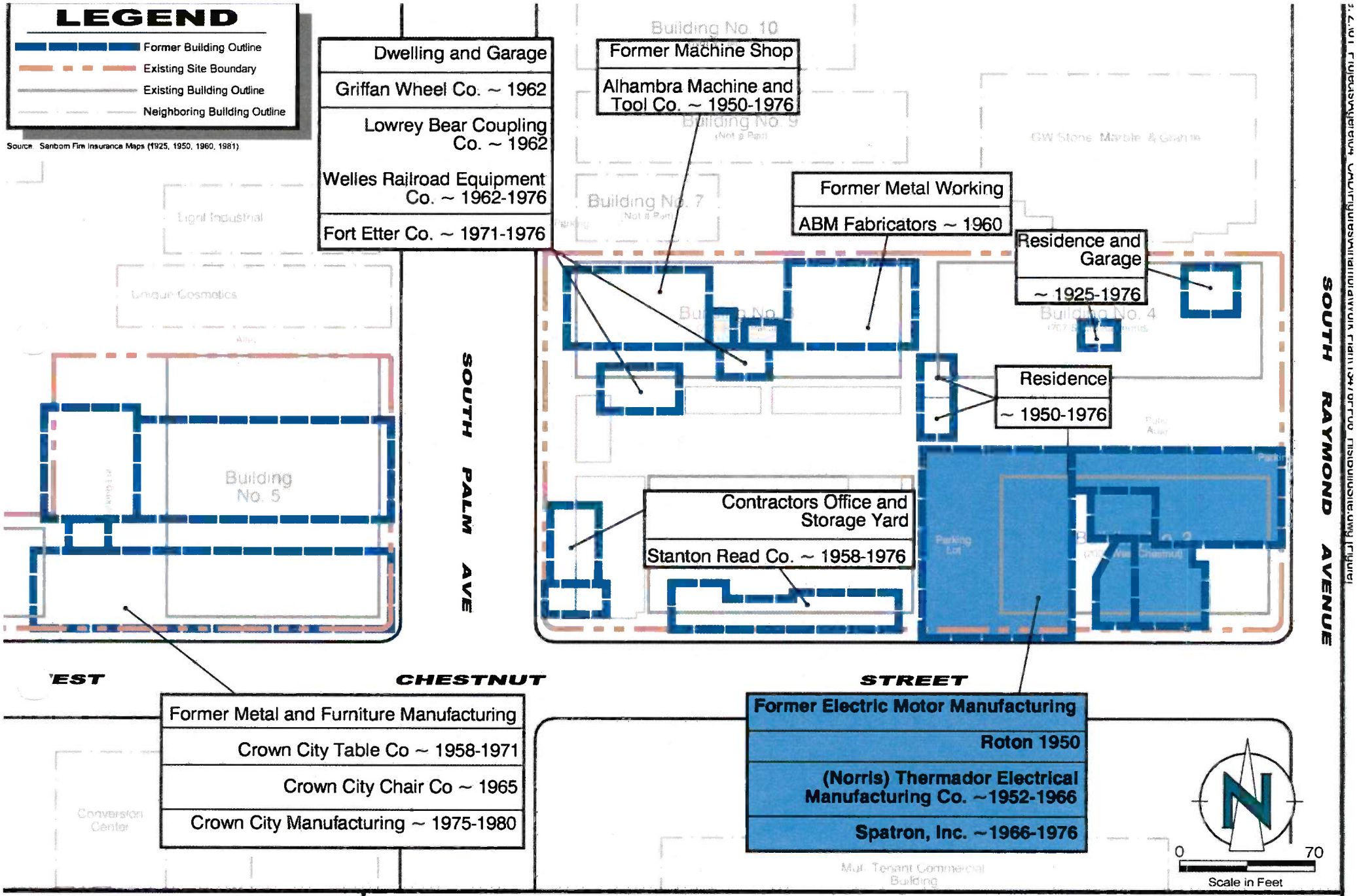
- Current/Past Site Occupants
  - Ortel - 1981 to present.
  - Key Occupants of building near current Building 2 and location of higher VOC soil gas concentrations.
    - Spatron, Inc. - ~1966 to 1976

      Manufactured transformers
    - Norris Thermador - ~1952 to 1966 (now TriMas)

      Electrical manufacturer

      1958 building permits for "degrease pit" and "paint booth"
    - Roton Products - ~1950 or earlier to 1952

      Possible motor manufacturer




ENVIRON

# Historical Buildings at the Ortel Site

2015 W. Chestnut Street
Alhambra, California

Drafter: HC Date: 5/27/09 Contract Number: 04-13476F Approved: Revised:

# Summary of Ortel Practices

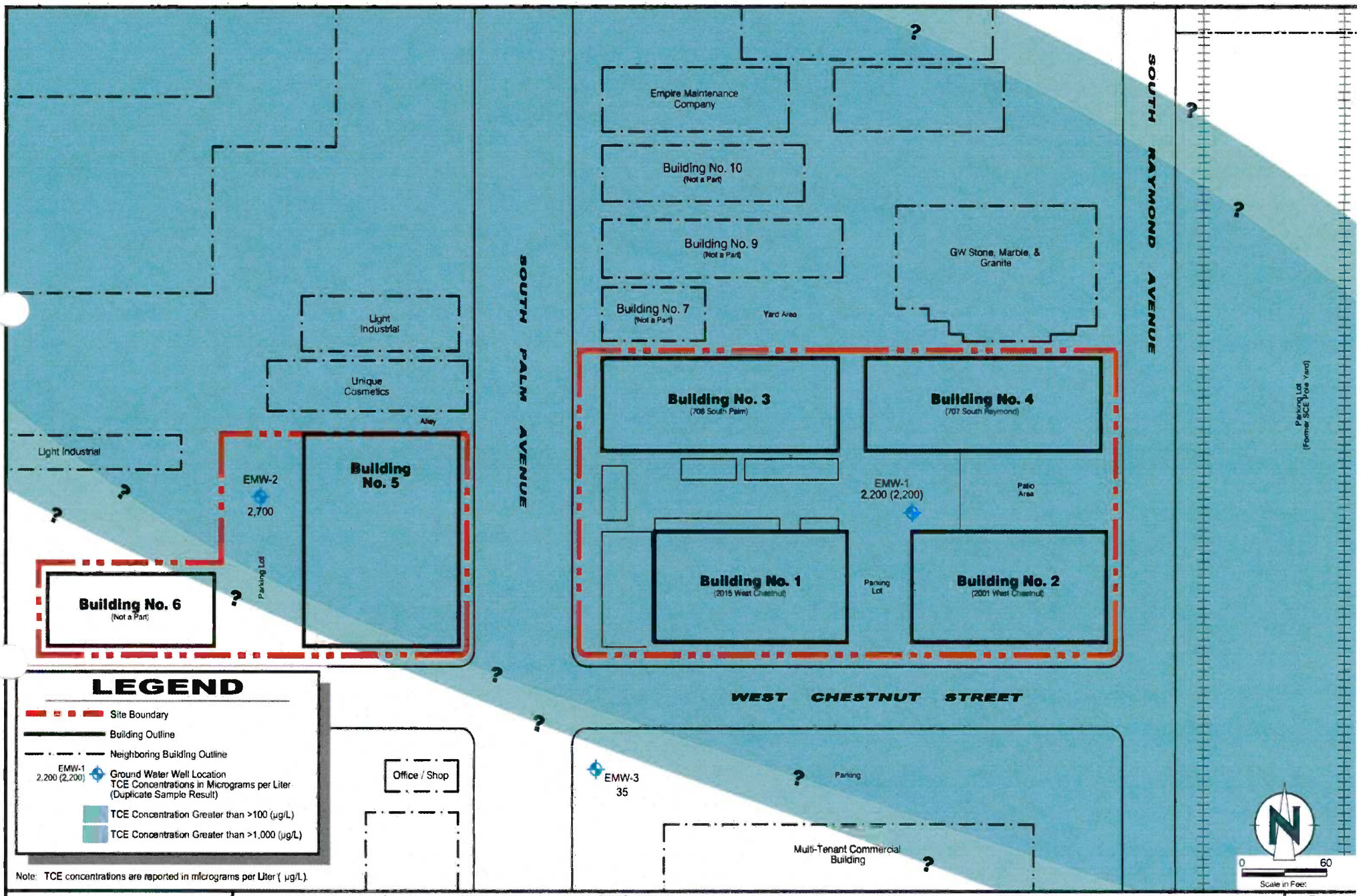
- Site fully developed and paved when Ortel began leasing it in 1981.
- Ortel reportedly operated:
  - 3 small vapor degreasers
    - One in machine shop that used petroleum distillates – 1994-1998
    - Two in Building 2 that used Vapo-Kleen and EnSolv – 1990/95- p
    - 1,1,1-TCA reportedly used as degreaser – 1985-1990
  - 150–gal AST from 1985 to 1992 that reportedly stored 1,1,1-TCA, then Vapo-Kleen. Use ceased in 1992 and AST removed in 1994. Contrary to Draft CAO, no evidence that AST stored TCE.
- Neither Vapo-Kleen (Freon 113) nor EnSolv (n-propyl bromide/1,3 dioxalane) contained TCE.

# Summary of Site Investigations to Date

- All field work has been completed in cooperation with RWQCB requests.
- Several soil gas investigations have been conducted from 2000 to 2007:
  - Highest shallow TCE concentration was 180 ug/l at 5' bgs near Building 2.
  - TCE concentrations increased with depth with a maximum concentration of 2,300 ug/l at ~86' bgs in the vicinity of Building 2.
  - No or low level VOCs detected on the western portion of the property near Buildings 1, 5 and 6.
  - Primary detections are TCE; no 1,1,1-TCA detected in soil gas

# Summary of Site Investigations to Date - Continued

- Three ground water wells were installed in 2005 and 2006.
  - 1 near Building 2, 1 cross gradient and south of the site, and 1 up gradient near Building 5
  - TCE ranges from 1,300 to 2,600 ug/l in the well near Building 2, from 1,700 to 3,200 ug/l in the upgradient well, and from 30 to 66 ug/l in the cross gradient well.
  - In 5 out of 7 monitoring events (last 4) TCE more elevated in upgradient well.
- Soil gas and operational history show Ortel is not the source for TCE in upgradient well – points to offsite upgradient source.
- Site impacts to soil gas and ground water are primarily TCE. TCA, which Ortel reportedly used in at least the 1980's, has not been detected.




ENVIRON

DRAWN BY: JJC | DATE: 3/23/09 | REVISED

# Estimated TCE Isoconcentration Contour Map

First Quarter 2009

2015 W. Chestnut Street, Alhambra, California

PROJECT NO: 04-13476A

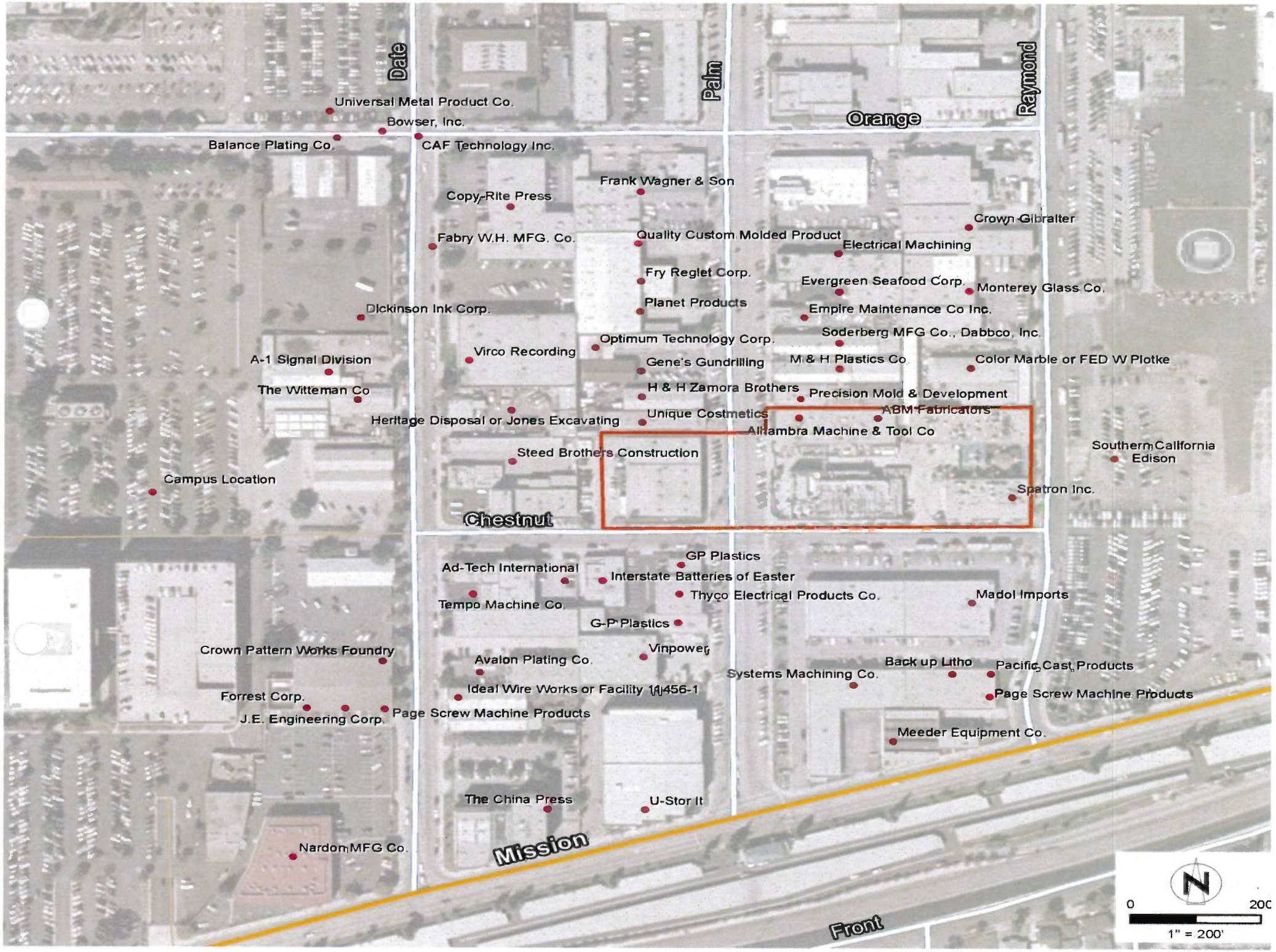
Figure 5

# Conclusions of Site Investigations

- Site impacts to soil gas and ground water are primarily TCE – not consistent with Ortel's historical site use.
  - No record of TCE use at the site – only record of TCE onsite is one manifest of disposal in 1995 (plant personnel believe it may have been used in small quantities as part of research and development).
  - The distribution of the TCE impacts in soil gas suggest an older release. Order of magnitude lower shallow soil gas concentrations compared to concentrations at ~75 to 150' bgs.
  - NI Industries operations likely source of on-site soil gas impacts
  - TCE concentrations in ground water suggests a significant off-site upgradient source migrating on to the Ortel property.

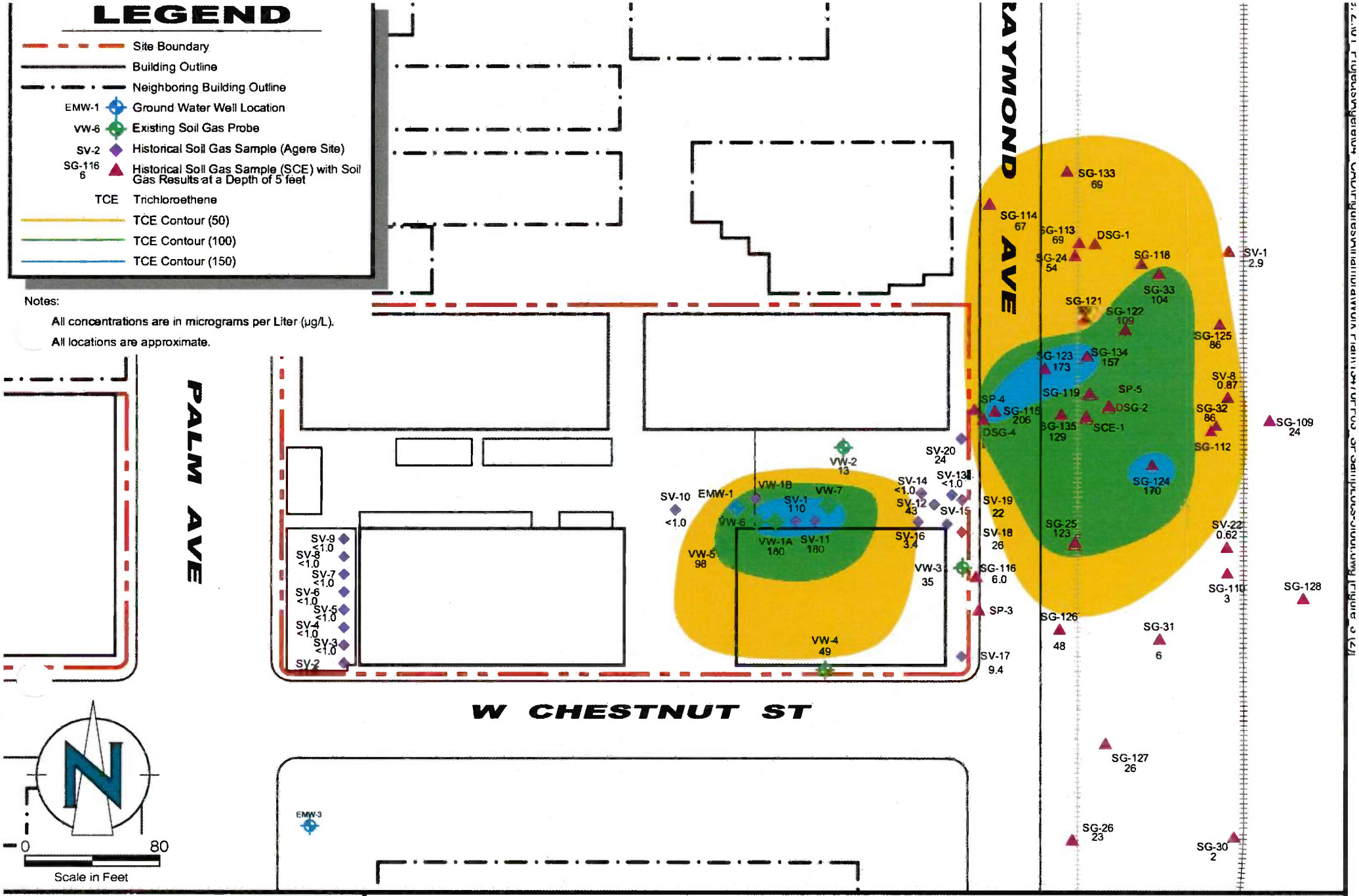
# Other PRPs in Area

- China Press/Pemaco/Ideal Wire Works/Charter Communications/others
  - Have they been issued CAOs?
- Over 50 sites in the area along Date and Palm had historical operations that likely utilized TCE.
- Geotracker lists many sites with open cases and no investigation.


Date
Palm
Orange
Raymond
Universal Metal Product Co.
Bowser, Inc.
Balance Plating Co.
CAF Technology Inc.
Frank Wagner & Son
Copy-Rite Press
Crown Gibralter
Fabry W.H. MFG. Co.
Quality Custom Molded Product
Electrical Machining
Fry Reglet Corp.
Evergreen Seafood Corp.
Monterey Glass Co.
Dickinson Ink Corp.
Planet Products
Empire Maintenance Co Inc.
Soderberg MFG Co., Dabbco, Inc.
Optimum Technology Corp.
Virco Recording
A-1 Signal Division
Gene's Gundrilling
M & H Plastics Co.
Color Marble or FED W Plotke
The Witteman Co
H & H Zamora Brothers
Precision Mold & Development
ABM Fabricators
Heritage Disposal or Jones Excavating
Unique Costmetics
Alhambra Machine & Tool Co
Steed Brothers Construction
Southern California Edison
Campus Location
Spatron Inc.
Chestnut
GP Plastics
Ad-Tech International
Interstate Batteries of Easter
Thyco Electrical Products Co.
Madol Imports
Tempo Machine Co.
G-P Plastics
Vinpower
Crown Pattern Works Foundry
Avalon Plating Co.
Back up Litho
Pacific Cast Products
Systems Machining Co.
Ideal Wire Works or Facility 1 (456-1
Forrest Corp.
Page Screw Machine Products
J.E. Engineering Corp.
Page Screw Machine Products
Meeder Equipment Co.
The China Press
U-Stor It
Nardon MFG Co.
Mission
Front
N
0
200
1" = 200'

# Southern California Edison Site

- Known VOC impacts in soil and soil gas in the vicinity of former railroad tracks
- Historical records show that at least two 1000 gallon USTs reportedly stored TCE.
- TCE has been detected in shallow (5 ft) and deep soil gas samples extending to ground water at essentially the same concentrations as the Ortel Site.
- No ground water data.
- SCE attributes all the VOC impacts to the Ortel site. However, based on the site history (known TCE use) and investigation results, SCE is the likely source of the VOCs observed on its site.




# Soil Gas Locations with TCE at 5'

2015 W. Chestnut Street
Alhambra, California

ENVIRON

Drafter: HC Date: 5/27/09 Contract Number: 04-124765 Approved: Revised:

# CONCLUSIONS

- LSI has fully cooperated to date and complied with all Board requests for Site investigation.
- LSI's investigation has developed information showing it is not responsible for solvents found in ground water beneath the Site.

# Ortel Is Not A Discharger

- Ortel operated only since 1981, in redeveloped buildings. Site fully paved, no drains in room with vapor degreaser, outdoor AST in paved and bermed area, no evidence Ortel used TCE, no evidence AST ever contained TCE, no TCA in soil gas or ground water.
- Therefore, the available evidence indicates Ortel did not release the solvents observed in ground water beneath the Site.