



NI Industries Likely Was a Discharger

- NI Industries operated in same location where Building 2 constructed; had permit for “degrease pit” and “paint booth” and likely used TCE.
- Spatial distribution of soil gas concentrations is consistent with release in that location in that time frame.
- Unfortunate coincidence of location between NI Industries operation and Ortel Building 2.



TCE Plume Largely or Wholly Comes From Upgradient Source

- Comparison of EMW-1 and EMW-2 ground water elevations and relative VOC concentrations points to offsite upgradient source(s).
- Ortel operational history and soil gas measurements at Building 5 show no onsite source.



Many Other Offsite Historical Operations To Investigate

- - Despite records of past TCE storage at the SCE site and soil gas distributions and concentrations similar to the Ortel site, SCE has not been required to undertake a ground water investigation.
 - There are many other sites in the Alhambra area with past operations that would merit investigation, but such investigations have been limited to date.
-



IMPACT OF CONCLUSIONS ON DRAFT CAO AND NEXT STEPS

- Need to review the CAO requirements in view of the technical conclusions regarding the Site.
- LSI is prepared to continue to assist the RWQCB as appropriate.



Conceptual Site Model

- LSI willing to provide CSM to help document sources of VOCs in vadose zone and ground water at Site.
- Helps RWQCB, and fulfilling this requirement is consistent with the available information.



Further Delineation Of Soil Gas and Ground Water Contamination

- - LSI has already spent over \$500,000 on investigations at Site.
 - Investigations showed that Ortel not a discharger.
 - No basis to impose more delineation costs on LSI.
 - RWQCB has financially viable owners and discharger (NI Industries/TriMas) on which to impose this requirement.
-



Quarterly Ground Water Monitoring

- LSI not responsible for TCE plume, which largely or wholly originates offsite.
- LSI willing to undertake one more annual ground water monitoring event at existing wells to “fill gap” until RWQCB has responsible dischargers under a CAO.
- Past data indicate no need for more frequent sampling since seasonal variability is limited.



Indoor Air Sampling

- LSI not responsible for TCE in soil gas and ground water.
- LSI willing to investigate potential for indoor air issues in Site buildings (to ensure worker protection) while RWQCB puts responsible discharger(s) under a CAO.



Conduct Remedial Action for Soil, Soil Gas, Ground Water

- Evidence indicates that LSI is not a discharger of the chlorinated solvents in soil, soil gas, ground water.
- Note: Also no basis for requiring remediation of ground water at Site, given upgradient plume contributing concentrations equal to or greater than concentrations at Site.



Replacement Water Service

- Requirement for replacement water service for City of Alhambra inadvertently included in CAO? (Located apart from other requirements.)
- LSI is not a discharger.



Summary of Proposed Next Steps

- - LSI would prepare a work plan for RWQCB review and approval
 - Will include a CSM
 - Will provide for an evaluation of indoor air in Site buildings
 - Will provide for another annual round of ground water sampling at existing wells (timing open to discussion)
 - RWQCB should pursue TriMas for remaining draft CAO requirements as needed
 - RWQCB should investigate other historical operations in area and require those PRPs to investigate ground water.



Alhambra Area 3 Superfund Site

- Draft RI published Dec 2008
- Hydrology
 - Area bisected into an east and west aquifer by a “Structural Bedrock Discontinuity”
 - Ortel site is located in SW Area 3.
 - Regional ground water flow direction is easterly.
 - No production wells west of the discontinuity.
 - Ortel started operation after the aquifer separated.



Alhambra Area 3 Superfund Site

“Around the 1950’s, the water level in the eastern alluvial aquifer dropped to an elevation below the elevation of the bedrock aquifer in western Area 3, which caused a separation of the aquifers. Groundwater flow from west to east decreased and any contaminant migration from SW Area 3 likely diminished.” (CH2M Hill, Draft Report, Remedial Investigation San Gabriel Valley Area 3, December 2008, pg. 5-8)

- Ground water impacts since 1980 in southwest Alhambra Area 3 Superfund Area - not likely to have contributed to impacts found at the production wells located east of the regional discontinuity.

EXHIBIT 3

Jocelyn T. de Grandpre
Division Counsel
1110 American Parkway, NE
Room 12J-306
Allentown, PA 18109
United States of America

P (610) 712-1634
F (610) 712-1450
jocelyn.degrandpre@lsi.com



October 25, 2010

VIA E-MAIL AND 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. R4-2010-0008R
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 ("RWQCB") dated July 26, 2010, this letter provides the comments of LSI Corporation ("LSI"), successor to Agere Systems, Inc. ("Agere Systems" or "Agere"), on the above-referenced draft Cleanup and Abatement Order ("draft CAO") regarding the facility at 2015 West Chestnut Street in Alhambra, California ("Ortel facility" or "facility" or "site"). As you know, LSI, because of its merger with Agere Systems, is addressing any historical environmental liabilities of Ortel Corporation ("Ortel") that predate Agere's January 2003 sale of the Ortel assets to EMCORE Corporation ("Emcore"). LSI appreciates the comment period extensions that the RWQCB provided by letter dated August 18, 2010 and by e-mail on October 7, 2010.

All documents previously submitted to the RWQCB by Agere Systems and LSI are hereby incorporated by reference into these comments, including but not limited to the following:

- Agere Systems response to U.S. EPA's May 2003 CERCLA Section 104(e) Information Request ("2003 Section 104(e) Response"), attached as **Exhibit A**

- April 2006 Agere Systems letter to U.S. EPA discussing liability-related information
- June 2009 presentation to RWQCB concerning the Ortel facility
- September 2009 LSI letter to RWQCB commenting on draft CAO No. R4-2009-0016
- RWQCB response to LSI comments on draft CAO No. R4-2009-0016, attached as **Exhibit B**
- February 2010 LSI letter to RWQCB objecting to fundamental errors in initial issued CAO No. R4-2010-0008
- April 2010 LSI (ENVIRON) Annual Groundwater Monitoring Report, attached as **Exhibit C**
- November 2007 Agere (ENVIRON) Report for Soil Vapor Assessment between Buildings 5 and 6, attached as **Exhibit D**

We ask the RWQCB to confirm that all of these documents have been incorporated into the administrative record for this matter. Please let us know if you need any additional copies of those not attached here as Exhibits. We also request that these comments and all Exhibits to these comments be included in the administrative record for this matter.

INTRODUCTION AND SUMMARY

We have reviewed the materials that Jeffrey Ogata provided following LSI's meeting with him on October 6, 2010 (which you and Jeffrey Hu attended by telephone). As discussed further below, according to the policies and precedents expressed in those materials and relevant case law, the RWQCB should not issue a CAO to LSI, because LSI does not fall into any of the categories of parties to which issuance of a CAO has been upheld by the State Water Board.

LSI is not a current owner or a current lessee,¹ and neither LSI nor the RWQCB has identified any evidence that LSI or its subsidiaries or corporate predecessors actively discharged wastes to the soil or groundwater at the site. Based on the available evidence, LSI is simply a former lessee,² and a former parent corporation of a former lessee.³ We have not identified any State Water Board opinions or California case law upholding a CAO against a former lessee that was not involved in the activity that created the pollution problem. Even current owners and current lessees, which sometimes have been named in CAOs on the grounds that they have both control over the property and knowledge of the contamination, are held responsible for taking action only if the "primarily" liable party -- the entity that caused the pollution condition -- has defaulted on its responsibilities.

¹ The current lessee is Emcore, which is operating the Ortel assets that it purchased in January 2003.

² Lucent/Agere leased the property from June 2000 to October 2005.

³ 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.

LSI has provided substantial evidence to the RWQCB that the chlorinated solvent plume observed in groundwater beneath the site comes from an offsite upgradient source (or sources). LSI also has provided substantial evidence to the RWQCB that the solvents observed in soil gas at the site, and any incremental contribution of such materials to the groundwater plume, resulted from the activities of the pre-1980 electric transformer/component manufacturers previously occupying the land that is now occupied in part by Building 2 of the Ortel facility. LSI has provided sufficient information for the RWQCB to pursue such primarily liable parties.

Each of the above points is discussed in more detail below.

An additional overall comment is that certain requirements of the draft CAO, particularly with respect to groundwater and soil, are not supported by the available information regarding the facility. Regardless of the entities to which the RWQCB issues a CAO, the CAO should be revised to eliminate the unsupported requirements, to avoid unnecessary litigation over those requirements. This point is discussed below in further detail as well.

A year ago, the RWQCB misunderstood and, therefore, mischaracterized the nature of several Agere hazardous waste manifests documenting the proper disposal of groundwater monitoring well purge water from the site. This fundamental error contributed to the issuance of a final CAO to LSI last January. After LSI pointed out the error, the final CAO was withdrawn. LSI appreciates the RWQCB's recent commitment to discuss all available information with LSI before making similarly significant decisions regarding the site.

Notwithstanding the evidence indicating that entities other than Ortel are responsible for the soil and groundwater contamination beneath the Ortel facility, LSI remains willing to discuss with the RWQCB an appropriately scoped CAO that reflects LSI's status under State Water Board policy and California law, the current state of the information regarding LSI, upgradient dischargers, and historical dischargers, and the other LSI comments concerning the draft CAO. With an appropriately scoped CAO, the RWQCB could achieve progress at the site while upgradient and historical dischargers are pursued for any additional work that the RWQCB believes is necessary.

The remainder of this letter provides additional detail on these points.

DISCUSSION

1. Summary of State Water Board Principles and Relevant Case Law

A review of State Water Board opinions indicates that the State Water Board has not approved the issuance of a CAO to an entity solely because it is located over a groundwater plume emanating from an offsite upgradient source. In fact, the State Board has rejected an upgradient landowner's contention that the Regional Board acted inequitably in omitting from a CAO the owners of downgradient contaminated property, where the record indicated that contaminants found on the downgradient property had migrated from the upgradient landowner's property. *In re Zoecon Corp.*, Order No. 86-2 at 12 (SWRCB 1986); *see also In re Wenwest, Inc.*, Order No. WQ 92-13 at 2 (SWRCB 1992) (contamination was discovered in an offsite, downgradient owner's well, but the downgradient owner was not named in the CAO).

State Water Board opinions demonstrate a clear division of responsible parties into two categories: those who are responsible because they caused the contamination as direct dischargers, and those who are deemed responsible because of their status with respect to the subject property. See *Wenwest* at 7-8; *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 *In re Wenwest*, Order No. WQ 92-13 at 5 (SWRCB 1992) (“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 where they contributed to the contamination as direct dischargers. *Wenwest* at 4; *Spitzer* at 9. A review of State Water Board opinions, however, does not reveal an opinion where a former landowner or former lessee has been named solely because of its status as a former landowner or former lessee. See *Zoecon* at 10 (stressing the landowners “exclusive control over access to the property” as a crucial 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. *Wenwest* 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”).

Finally, where responsible parties are named in a CAO because of their current control over the property, such as current landowners and lessees, they are properly considered as secondarily liable parties. *Wenwest* at 7-8 (current owner and current lessee “neither caused nor permitted the activity which led to the discharge” and therefore had “no obligations under the order unless and until the other parties defaulted on theirs”); *Spitzer* at 7 (dry cleaner operators, who were directly responsible for the contamination, were primarily liable parties; current owners and current lessees, who had no responsibility for the contamination but had control over the property, were secondarily liable).

As Jeffrey Ogata pointed out to LSI on October 6, the State Water Board considers current landowners and lessees to be “dischargers” under California Water Code Section 13304 based on the theory that passive migration of contaminants in the soil is a “discharge.” See *Zoecon* at 3-4. LSI believes, however, that the California courts are likely to disagree with this very broad view, particularly if the State Water Board seeks to impose major burdens on an entity that did not “cause or permit” the discharge instead of the entity or entities that did cause the discharge. For example, in *City of Modesto Redevelopment Agency v. Superior Court*, 119 Cal. App. 4th 28 (2004), 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 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.” *Id.* at 44. Under another provision of

California law relating to protection of public health, the term “discharge” has been interpreted to exclude passive migration. *See Consumer Advocacy Group, Inc. v. ExxonMobil Corp.*, 104 Cal. App. 4th 438, 444-447 (2002) (in determining that “discharge” under California Health and Safety Code §25249.5 does not include passive migration of contaminants, the court surveyed three different dictionary definitions and found discharge to be “an active concept: the movement from a place of confinement to a place without confinement”). LSI believes that, in view of these precedents, a court likely would read Section 13304 in its entirety and conclude that it does not enable the State Water Board to impose huge groundwater remediation liabilities on a former lessee that did not contribute to the pollution conditions in issue.

2. LSI Is Not Responsible for the Chlorinated Solvents Discovered Beneath the Facility

LSI does not contest that TCE and other compounds are present in the soil gas and groundwater beneath the site. LSI does contest, however, any conclusion that the Ortel operation discharged these compounds. The weight of the evidence, both historical and technical, demonstrates that any CAO should be directed to offsite upgradient sources and to prior owners and operators of the parcel on which the Ortel facility now sits.

a. There Is an Offsite Upgradient Source of the Chlorinated Solvent Plume Observed in Groundwater Beneath the Ortel Facility

The RWQCB has acknowledged that “up-gradient and cross gradient sources of groundwater contamination still exist.” RWQCB Response to LSI Comments on Draft CAO No. 4-2009-0016, **Exhibit B**. Groundwater and soil gas monitoring data at the facility show that the chlorinated solvent plume detected in groundwater beneath the facility originated from an offsite upgradient source. This section of LSI’s comments summarizes those data. To assist the RWQCB in its investigations of appropriate CAO recipients, LSI also identifies several possible upgradient or cross-gradient dischargers. LSI understands that the U.S. EPA is assisting the RWQCB with its investigations of potential dischargers. Before issuing any CAO for the facility, the RWQCB should investigate and identify the direct dischargers, rather than forcing parties such as LSI to shoulder the burden of site clean up simply because of its status as a former lessee of the site. *See supra*, Part 1.

i. The data show that the chlorinated solvent plume in groundwater beneath the property originates from an upgradient offsite source

A combination of technical data and historical information regarding Ortel operations shows that there is a major plume of chlorinated solvents in the groundwater migrating beneath the facility that originated from one or more offsite upgradient sources. During our October 6, 2010 meeting, RWQCB representatives questioned whether the prior soil gas investigation of the property in the vicinity of Buildings 5 and 6 proved the absence of an Ortel contribution to the contaminated groundwater observed in EMW-2. As a result of those questions, LSI gathered additional information to support the conclusion.

- The groundwater elevation at monitoring well EMW-2, located at the west end of the Ortel facility (west of Building No. 5), is more than ten feet higher than the groundwater elevation at monitoring well EMW-1, located adjacent to Building 2 in the vicinity of the

soil gas concentrations of TCE. *See* Ground Water Elevations Tables, excerpted from Groundwater Reports 2007-2009, attached in **Exhibit E**.

- The groundwater gradient consistently has been from the west-northwest to the east-southeast of the Ortel facility throughout the monitoring period. *See id.*, **Exhibit E**. There is no reason to believe the gradient was reversed in earlier decades. In fact, in 1933, the groundwater flow direction was similar to the direction observed at the Ortel facility over the last few years.⁴ *See* EPA's Remedial Investigation Report for San Gabriel Valley Area 3, Figure 3-5 (June 2009), attached in **Exhibit E**.
- Soil gas in the vicinity of EMW-2 was investigated pursuant to a work plan that the RWQCB approved by letter dated July 31, 2007. The investigation did not indicate an onsite source of the chlorinated solvents detected in groundwater at that location. *See* Agere (ENVIRON) Report for Soil Vapor Assessment between Buildings 5 and 6 (Nov. 2007), Table 2 and Figure 3, **Exhibit D**. At the time, the RWQCB did not raise any questions about this conclusion.
 - ENVIRON advanced six soil gas borings to 50 feet below ground surface in the parking lot between Buildings 5 and 6. To the extent that TCE was detected, the concentrations were so low (ranging from non-detect to 0.49 ug/L in the top 20 feet) that they rule out a surface or near-surface release in or near the location of the current parking lot as the source of the elevated TCE concentrations observed in EMW-2 groundwater.
 - Furthermore, given the subsurface lithology in this area (interfingered alluvial deposits comprised of sands, silty sands, and sandy silts) and the magnitude of a release that would be necessary to support the sustained elevated TCE concentrations observed in groundwater at EMW-2, ENVIRON considers it very unlikely that such a release could have occurred under Buildings 5 or 6 without giving rise to higher soil gas concentrations than were observed in the six soil gas borings. The universally low to non-detect TCE concentrations observed in the six borings are inconsistent with the presence of a significant TCE source in unsaturated soil under either Building 5 or Building 6. *See id.* at 5-6, **Exhibit D**.
- There is no factual basis to conclude that Ortel is a potential source of the chlorinated solvents observed in EMW-2. Ortel began leasing Building 5 in 1994. Ortel began leasing half of Building 6 in April 1995 and the other half in March 1997, and vacated Building 6 in 2003. As confirmed by Hank Blauvelt, who was an officer at Ortel between 1985 and 2001, the Ortel operations in Building 5 involved office use, final mechanical assembly, electrical testing, and perhaps shipping and receiving activities. Any possible solvent use in this area would have been limited to the final assembly process, for the cleaning of circuit boards after the hand soldering of a small number of components (e.g., finished laser modules) to the circuit boards. To the extent that this occurred, solvent would have been applied to the circuit boards with cotton swabs or similar applicators (e.g., to remove soldering flux). The quantity of solvent stored and

⁴ In light of this data, there is no basis for the statement in paragraph 8(e) of the draft CAO that “[g]roundwater flow directions appear to vary.”

used in this area for this purpose would have been very small, and Mr. Blauvelt could not recall any reason why chlorinated solvents, rather than solvents like isopropyl alcohol or acetone, would have been used for this purpose. The Ortel operations in Building 6 involved the same types of operations for a different product line. No Ortel activities or materials were ever present in Building 5 or Building 6 that could have given rise to the chlorinated solvent concentrations observed in groundwater at EMW-2. A 1999 inspection report from the Los Angeles County Fire Department confirms that none of the substances detected in the subsurface were being used in either Building 5 or Building 6 at that time. *See* 1999 Los Angeles County Fire Department – Health Hazardous Materials Division Inspection Report, attached in **Exhibit K**.

- The TCE concentrations in EMW-2 have been higher than the TCE concentrations in EMW-1 in six out of eight groundwater monitoring events. The TCE concentrations in EMW-2 have never been lower than the lowest concentration observed at EMW-1. *See* 2010 Ortel Site Annual Groundwater Monitoring Report, **Exhibit C**. In other words, the two 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. *See id.*, Table 2, **Exhibit C**.
- 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 about twice as high as in EMW-1.⁵ *See id.*, Table 2, **Exhibit C**.

These data show that there is a major plume of chlorinated solvents in the groundwater migrating beneath the Ortel facility that originated from one or more offsite upgradient sources.

ii. LSI has identified several potential upgradient and cross-gradient sources of chlorinated solvent releases

Notwithstanding the evidence of upgradient sources of the contamination beneath the facility and the RWQCB's acknowledgment that such sources exist, to date the RWQCB has not fully investigated these sources or issued a CAO to them. To assist with this effort, LSI has identified the following companies, which either are documented to have used, or are likely to have used, chlorinated solvents in areas upgradient to the Ortel facility. *See* Aerial Map/Figure with Locations of Potential Upgradient Sources, attached in **Exhibit F**.

- A-1 Signal, 635 S. Date, attached as **Exhibit F-1**.
 - From at least 1951 through 2003, A-1 Signal engaged in spray painting and assembly of traffic signals that were made of aluminum and bronze castings and

⁵ The draft CAO asserts that “the groundwater contaminant plume beneath the Agere facility is unique in character” because California Notification Level concentrations of 1,4-dioxane and 1,2,3-TCP were both detected in the groundwater at EMW-1, and “such a pattern or trend” has not been observed at other groundwater monitoring wells at other facilities in the area. These statements are too vague to allow LSI to evaluate the RWQCB's claims about the uniqueness of the groundwater plume or the presence of a “pattern or trend” indicated by onsite groundwater monitoring. LSI points out, however, that 1,2,3-TCP has been detected at both EMW-1 and EMW-2 since 2009, indicating that it is a ubiquitous groundwater contaminant that appears to be coming from an upgradient source. *See* 2010 Ortel Site Annual Groundwater Monitoring Report, Table 2 **Exhibit C**.

sheet aluminum parts. Prior to spray painting, these metal parts were cleaned, possibly using a combination of solvents and caustic soda.

- Operations included: degreasing and parts washing.
- Crown Pattern & Foundry, 701 S. Date, attached as **Exhibit F-2**.
 - Crown Pattern & Foundry operated an aluminum and brass foundry beginning in the mid-1950s, making brass, bronze, and aluminum castings using sand molds. A current mold release agent used by such foundries contains 85% TCE.
 - Plant equipment and manufactured items also may have been cleaned with chlorinated solvents prior to any coating or finishing processes.
 - EPA has identified TCE and TCA as solvents used extensively by the industry to clean equipment and the cast parts.
- C.F. Braun, 1000 S. Fremont, attached as **Exhibit F-3**.
 - C.F. Braun designed and performed engineering work for refineries and chemical plants from about the 1920s through the early 1990s.
 - Buildings at the plant included research laboratories, paint rooms, electrical maintenance shops, a photo lab, and an automotive service facility.
 - As a metal fabricating and manufacturing company with a long operating history dating from at least the early 1930s through the mid-1960s at the Fremont property (when TCE was in widespread industrial use), C.F. Braun likely used a number of chlorinated solvent cleaning processes. Typically, this type of business would perform solvent cleaning prior to machining, painting, welding, fabrication and/or assembly.
 - The Campus 1000 investigations are insufficient to show the lack of a source in the area where C.F. Braun operated.
 - A 20,000-gallon solvent tank was reported to have been formerly located on the northern edge of the C.F. Braun property. No borings have been made within 100 feet of the suspected location of the former tank. Five borings with a total of 10 samples were located between 100 and 150 feet away from the tank area, and none of these borings reached depths greater than 30 feet below ground surface (“bgs”).
 - During all of the investigations of the former C.F. Braun property, only seven soil borings were advanced deeper than 30 feet bgs, and no groundwater samples were obtained. Project Navigator reported that 19 of their 32 soil gas borings met with refusal (typically at 15 to 25 feet bgs) and did not achieve the desired sampling depth.

- Samples taken from the area of the main manufacturing building were widely spaced, often 100 feet apart or more. This area had a long period of operations from at least the early 1930s to the mid-1960s during which metals were machined, welded, fabricated, and assembled.
 - Only one deep (100 feet bgs) soil gas boring was advanced in the northern half of the former C.F. Braun property (sample location B-1-1), and it was located approximately 400 feet south of the suspected location of the former 20,000-gallon solvent storage tank.
 - The conducted investigation, therefore, does not provide data to rule out historical chlorinated solvent sources in the northern half of the former C.F. Braun property, particularly in the vicinity of the suspected former 20,000-gallon solvent tank.
- Nationwide Materials Handling Equipment, 915 S. Fremont, attached as **Exhibit F-4**.
 - Company operations included paint and repair of fork lift trucks and related equipment.
 - Nationwide operated a paint spray booth in the late 1960s and used solvents and wash thinner in conjunction with it. Chlorinated solvents, particularly methylene chloride, but also PCE, TCE, and TCA, are used to remove paint over-spray from spray booths, floors, hooks, hangers, and racks used in the painting process and spray paint equipment.
 - It also is likely that the repair of fork lift trucks involved parts cleaning. Chlorinated solvents often were used in automotive cleaning and degreasing products.
 - Ray Products Company, Inc., 703 S. Palm, attached as **Exhibit F-5**.
 - Ray Products Company operated onsite from the 1950s to the 1970s as a plastic product fabricator, using forming machining and vacuum forming.
 - Currently, plastic mold cleaning and mold release agents readily available to the plastics industry contain high concentrations of TCE and/or PCE ranging from 50% to 100% by weight. These substances are currently sold in containers ranging from 1-gallon cans to 55-gallon drums. Thus, Ray Products may have used significant quantities of TCE and PCE in these operations.
 - Sam Yocum, Inc./West Coast Finishers, 710 S. Palm, attached as **Exhibit F-6**.
 - Sam Yocum operated an office furniture refinishing business onsite.

- The company installed a paint spray booth and degreaser to support these operations. The degreaser used approximately 10 gallons of PCE per month and may have been operated with other chlorinated solvents over time.

LSI urges the RWQCB to investigate these sources further and not to issue a final CAO until it has identified the entity or entities responsible for contaminating the soil and groundwater beneath the Ortel facility.

b. To The Extent That Subsurface Contamination Did Not Come From Offsite Upgradient Sources, It Appears To Have Come From Pre-1980 Owners And Operators Engaged In Transformer Manufacturing At The Facility

The activities of historical owners and operators of the facility are far more likely to have caused or permitted discharges of the relevant VOCs and other contaminants to onsite soil gas and groundwater than the activities of Ortel. These pre-1980 predecessors to Ortel in the vicinity of current Building 2 likely used TCE as a cleaning solvent for an extended period of time as part of their manufacturing processes. Over the same historical period, typical solvent disposal practices (which now have been prohibited for several decades) would have resulted in substantial environmental contamination. For these reasons, the RWQCB should investigate those entities and direct any CAO to them rather than to LSI.

i. Past Uses of the Building 2 Area

As briefly described in information previously provided to the RWQCB, the portion of the facility 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 1958.⁶ As discussed in greater detail below, TCE use by such manufacturers was common from the 1950s into the 1970s.⁷

In 1954, Norris-Thermador Corporation (“Norris-Thermador”) acquired the facility from its subsidiary Thermador Electrical Manufacturing Company (“Thermador”). 1954 Norris-Thermador Grant Deed, attached as **Exhibit G-1**. 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

⁶ See, e.g., 2003 Section 104(e) Response, **Exhibit A**. Other materials in the record relevant to this site history, which are not enclosed here, include April 4, 2006 Letter from Steven M. Jawetz, Beveridge & Diamond, P.C., to Sara Goldsmith, EPA Assistant Regional Counsel, and Lisa Hanusiak, EPA Remedial Project Manager; and September 29, 2009 Letter from Scott Houthuysen, LSI Corporation, to Curt Charmley, RWQCB. LSI also encloses the following new information about the history of owners and operators at the site: Alhambra Site Corporate History Flowchart and Alhambra Site Fact Chronology, collectively attached in **Exhibit G**, along with **Exhibits G-1 to G-14** (supporting the Alhambra Site Fact Chronology).

⁷ 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”), attached in **Exhibit H**; *id. Part 2*, at 83-93, **Exhibit H**.

current Building 2.⁸ See 1958 Norris-Thermador Annual Report, at 7, attached in **Exhibit G-3**; 1981 Alhambra Notice of Address Changes, **Exhibit G-9**. Following this move, Norris-Thermador began producing electric transformers at the Alhambra facility, along with voltage regulators, transistorized power supplies, magnetic amplifiers, and other special magnetic components. 1958 Norris-Thermador Annual Report, at 13, **Exhibit G-3**.

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.” 1958 Norris Thermador Permit Materials, attached in **Exhibit G-2**. 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.*, **Exhibit G-2**. 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. 1958 Norris Thermador Permit Materials - Inspection Reports, **Exhibit G-2**. As discussed in greater detail 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. Spatron was incorporated in California in March 1964 to engage in electronics manufacturing. 1964 Spatron Articles of Incorporation, attached in **Exhibit G-4**. After it was incorporated, Spatron purchased Norris-Thermador’s electric transformer operations and began operating at the facility. Alhambra Site Fact Chronology, **Exhibit G** (and supporting documents). 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 below, was compensated \$110,000 for the real property when the site was taken by eminent domain in 1979.⁹ Alhambra Site Fact Chronology, **Exhibit G** (and supporting documents, particularly

⁸ This is the same location as current Building 2 (2015 W. Chestnut Street). Historical Buildings at the Ortel Site map, attached as **Exhibit I**; Sanborn Maps – 1950, 1960, 1981, collectively attached as **Exhibit J**. 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. 1981 Alhambra Notice of Address Changes, **Exhibit G-9**.

⁹ In 1966, Norris-Thermador changed its name to Norris Industries. 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, 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**; Alhambra Site Corporate History Fact Chronology, **Exhibit G** (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).

Exhibits G-1, G-5, and G-7). (As successor to Norris Industries, TriMas Corporation retains Norris Industries' owner liability (1958-1979) and its operator liability (1958-1964)).¹⁰

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**). 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**. 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 through 1979, when the Los Angeles County Superior Court issued the site condemnation order, under which Spatron was

TriMas has acknowledged that it faces 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), **Exhibit G**; EPA Stringfellow Site Combined Data Report II (1998), **Exhibit G**.

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, **Exhibit G**. In addition, 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, at 29, **Exhibit G**. TriMas' identification of the Stringfellow site consent decree in the "Commitments and Contingencies" section of its 2003 Annual Report also shows that it believes it retained the liability of Norris-Thermador and NI Industries. *See* 2003 TriMas Annual Report and 10-K, at 12, 17, 19-20, 58, **Exhibit G**. 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, at 15, 23, **Exhibit G**. In the declaration accompanying Masco's response to EPA's Section 104(e) request, **Exhibit L**, Jack Meany (former CEO of NI Industries) states that Norris-Thermador moved its operations from the Alhambra site to its Vernon, California plant at about the same time that Spatron began operating at the Alhambra site.

¹⁰ TriMas Corp. remains a financially viable entity. TriMas' headquarters are located at 39400 Woodward Avenue, Suite 130, Bloomfield Hills, MI 48304.

compensated \$22,290¹¹ 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**. Again, as discussed 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 late 1979 or early-1980, Spatron relocated to Los Angeles, where it continued to manufacture electric transformers and related components through approximately 2007. Alhambra Site Fact Chronology, **Exhibit G** (and supporting documents, particularly **Exhibits G-6** and **G-14**). Sometime between 2007 and 2009, Amnetics, Inc. apparently acquired Spatron and continued producing transformers and inductors. *Id.* (and supporting documents, particularly **Exhibit G-14**).

ii. Previous owners and operators at the site likely used TCE as a cleaning solvent for electric transformer manufacturing

There is substantial evidence that Norris-Thermador and Spatron would have used TCE as a cleaning solvent in their operations at the site. As reported in Masco Corporation’s response to EPA’s Section 104(e) Request for Information, the former director of Norris Industries believes that the use of cleaning solvent for electric transformer manufacturing began at the facility around 1958. *See* Masco Corp. Section 104(e) Response (and excerpted Exhibits), attached as **Exhibit L**. Based on the timing of these activities, the equipment used to support these activities, and the type of manufacturing that took place at the facility, the cleaning solvent that Norris-Thermador and Spatron used most likely was TCE.

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**. 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 found onsite, and transferred to vacuum tanks, such as those Norris-Thermador obtained a permit to install in 1958, where varnish was applied. *Id.* The coils and cores then were baked again in ovens to ensure that the solvent was completely removed before additional varnish was applied. *Id.* 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.¹²

¹¹ This award shows that Spatron was a lessee or otherwise occupied the facility as an operator through approximately 1979.

¹² While the nature of the “degrease pit” is not entirely clear, guidance materials about vapor degreasing have long recognized the common practice of installing degreasers in pits, particularly in areas with low ceiling heights. Pictures were also obtained that show the potential height of a degreaser and degreasers installed in pits. *See Exhibit M: ASTM Committee D-26 on Halogenated Organic Solvents, Handbook of Vapor Degreasing*, at 4, 16-17 (1962); *Degreaser Instructions and Advertisements – Dow Degreaser Installation Guidance Brochure*; 1950 *Blakeslee Solvent Vapor Degreaser Advertisement*; 1945 *Vapor Degreaser Installed in Pit Photo*. Other sites with

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**. 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**. Thus, TCE was likely the solvent used in the degreasing operations at the facility through at least the late 1960s.

iii. Historic TCE use is associated with improper disposal of spent solvent

TCE disposal practices at the time Norris-Thermador and Spatron operated at the facility 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**. 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**. 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 and Spatron were manufacturing electric transformers at the facility. *Id.* Moreover, as researchers for the Santa Clara Valley Water District have recognized, “[g]iven the evidence for elevated concentrations of solvent stabilizers in still bottoms, stabilizers [such as 1,4-dioxane] are likely to be present at these sites at elevated concentrations.” *Id.* In light of the foregoing, any such disposal of TCE or other spent solvents by Norris-Thermador or Spatron during their time onsite likely would have resulted in a release of chlorinated compounds, such as those detected in the soil and groundwater beneath the facility.

iv. Additional evidence suggests that previous owners and operators at the site are responsible

Other evidence that previous owners or operators of the facility are responsible for the TCE contamination abounds. For example:

- As discussed above, both Norris-Thermador and Spatron conducted their operations, including manufacturing electric transformers and related components and operating a degrease pit, in a building that was located roughly in the same location that concentrations of TCE and other contamination were first detected.

- The overall pattern of TCE concentrations in soil gas beneath the facility is consistent with the release of TCE prior to site regrading and redevelopment.
- When Norris-Thermador and Spatron began manufacturing electric transformers onsite, they were not 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**. Nor were they subject to stringent hazardous waste disposal requirements.

In light of the evidence that pre-1980 owners and operators of the facility are responsible for the onsite contamination, LSI urges the RWQCB to delay issuing a final CAO until it has fully investigated these site predecessors.

c. Available Information Indicates that Ortel Is Not a Source of Chlorinated Solvent Releases at the Facility

Paragraph 10(a) of the draft CAO states that Ortel “stored, used, and/or released VOCs, including TCE and various solvent stabilizers on the former Agere site.” Rather than identifying evidence of any spills attributed to Ortel or pointing to company practices¹³ that could have resulted in a release, however, the RWQCB relies on the mere presence of contaminants in the subsurface and documentation of offsite waste disposal to support its findings. The absence of any documentation in the record of a release for which Ortel would be responsible demonstrates that the RWQCB should issue a CAO to those entities that are primarily liable for the contamination in the subsurface, rather than to LSI.

i. History of site ownership and occupancy after redevelopment

In 1978 and 1979, the Alhambra Redevelopment Agency obtained the individual lots comprising the site through its power of eminent domain. *See* Alhambra Site Fact Chronology, **Exhibit G** (and supporting documents, particularly **Exhibit G-5**). The Redevelopment Agency demolished the previously existing buildings, regraded the site,¹⁴ and combined multiple lots into a single large parcel that was sold to Wayne C. Tam and Millicent J. Tam in 1980. Declaration of Wayne C. Tam, attached as **Exhibit K**. The Tams or the Tam Family Trust have owned the facility since April 1980. *Id.*

As part of the purchase agreement, the Tams constructed four new buildings on the site. *Id.* When construction was completed, about 95% of the land was covered by concrete pavement or concrete buildings on concrete slabs. *Id.* 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. *Id.* Those areas were landscaped with a grass lawn and/or plantings. *Id.*

¹³ For a summary of these practices, *see* 2003 Section 104(e) Response, **Exhibit A**.

¹⁴ 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. In re Wenvest*, Order No. WQ 92-13 at 6 (SWRCB 1992).

Ortel Corporation (“Ortel”) began its operations at the site in about December 1981 after leasing one-half of Building 1 from the Tams. *Id.* 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 1-4 by early 1991. Ortel began leasing Building 5 in 1994. Ortel began leasing half of Building 6 in April 1995 and the other half in March 1997. We understand that Ortel/Agere vacated Building 6 on approximately June 30, 2003. *See* Letter from Rosemary Paraszczak (Agere Systems) to Sal Aguilar (Apr. 28, 2003), **Exhibit K**.

ii. There is no evidence that Ortel discharged TCE at the facility

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. 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. 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. 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. The pump or squeeze bottles were refilled from liter-sized (or occasionally gallon-size) glass or metal containers, and the original containers were used to collect and store spent solvents until they were disposed of offsite. 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. 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.

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. 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**. According to Mr. Nisenfeld, the degreaser was on wheels and could be moved away from the wall to clean behind it. The vapor degreaser was placed in Building 2 after it was purchased, in a location different from the location of the current degreaser room. 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.

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. 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.¹⁵

¹⁵ Beginning in March 1988, Ortel’s SCAQMD permit to operate the vapor degreaser prohibited the company from using TCE in the machine. *See* 1988 SCAQMD Air Permit, **Exhibit N**. The permit allowed Ortel to use only trichlorotrifluoroethane (Freon-113) as a cleaning solvent in the degreaser and required the company to document compliance with this condition in written records that were subject to SCAQMD review. *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. 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. The degreaser was directly south of the door near the opposite wall of the room. 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. The container would be placed on a rolling cart for transport back to a liquid waste drum in the fenced waste storage area. A funnel was used to pour liquid waste into the collection drum to avoid spills. All solvent wastes were sent offsite for proper disposal.

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). 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. He also carried a mobile phone so that he could be contacted at any time. 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.

As reported in the 2003 Section 104(e) Response, **Exhibit A**, Ortel employed similar safe solvent handling practices post-1990, as well. Mark Kanipe, Ortel's environmental manager beginning in 1990, who provided much of the information for the 2003 Section 104(e) Response, also indicated that there had not been any spills or releases of solvents to the environment during his tenure at Ortel. *Id.*

In sum, there is no evidence of any spills or releases to the environment of any chlorinated solvents from any of Ortel's operations. The RWQCB has not provided any evidence showing that Ortel ever released TCE at the facility, and there is no evidence in the record showing that such a release occurred.

The RWQCB has implied that documents indicating the presence of TCE at the Ortel facility somehow comprise evidence of a release or discharge of TCE by Ortel. There is no basis for such an implication. First, LSI is aware of very little written documentation showing the presence of TCE at the facility. Second, none of these documents would support a finding that LSI released TCE or other substances to the soil or groundwater at the facility.

LSI is aware of the following four documents:

- o A February 28, 1995 waste disposal manifest for 10 gallons of "TCE/Hydroquinone mix" that is expressly coded 551, the California Hazardous Waste Code for waste laboratory chemicals. 1995 Hazardous Waste Disposal Manifest, attached in **Exhibit O**. As explained in Agere's 2003 Section 104(e) Response, **Exhibit A**, Mark Kanipe believed that this mixture was from earlier research and development activities, which would be consistent with the manifest coding.

- A May 12, 1992 waste profile that refers to a liquid waste mixture potentially containing the following components:

Methyl alcohol	0-50%
Aliphatic hydro/oil	0-50%
Acetone	0-20%
H2O	0-20%
Trichloroethylene	0-20%.

1992 Hazardous Waste Profile, attached in **Exhibit O**. The waste profile is not a waste disposal shipping manifest. Nor does it show that waste containing TCE actually was generated at the Ortel facility. However, the profile would be consistent with the fact that 10 gallons of a mixture containing TCE was disposed of offsite in 1995.

- An incomplete document bearing the notation “Revised 04-07-92,” apparently missing its first page (with no indication on the document itself that it actually comes from Ortel), containing an alphabetical listing of chemicals and substances, abbreviations that might represent operations or locations where the chemicals were present, and the manufacturer or vendor of each chemical or substance. The document lists trichloroethylene and includes the abbreviations “MOCV, WF” next to this listing. To the extent that this document is from Ortel and reports chemicals actually present at the facility, these abbreviations may refer to wafer fabrications operations. As described above, the use of solvents during wafer fabrication involved very small quantities under highly controlled circumstances. Appearance of TCE on a 1992 chemical inventory would be consistent with the disposal of 10 gallons of TCE in 1995.
- A February 11, 2000 letter from David Rasmussen, RWQCB, to Mark Kanipe, the Ortel environmental manager at the time, referring to a February 9, 2000 site inspection. (There may be a supporting inspection report by Mr. Rasmussen as well, and later documents that refer to the 2000 letter.) The letter states that “[i]t was noted during the inspection that both TCE and TCA are used in your operations” and refers to a “former TCE above ground tank.” As previously discussed with the RWQCB, Mr. Kanipe had indicated to Mr. Rasmussen during the inspection that TCE may have been used at the facility and stored in a 150-gallon above-ground storage tank (“AST”)¹⁶ located in a paved and bermed area outside Building 2. Mr. Kanipe subsequently retracted his statements about TCE as mistaken. Mr. Kanipe had erroneously thought that the solvent stored in the prior AST (it was taken out of service in 1992) had contained a chlorinated solvent like TCE or 1,1,1-TCA, and he had not distinguished between those compounds in his discussions with the RWQCB representative. As described in Agere’s 2003 Section 104(e) Response, **Exhibit A** at 13-15, Mr. Kanipe subsequently determined that the solvents used by Ortel in its vapor degreaser since 1988 (Blaco-Tron or Vapo-Kleen, which is comprised of trichlorotrifluoroethane, and EnSolv, which is comprised of n-propyl bromide and 1,3-dioxolane, *see* MSDSs attached as **Exhibit Q**) did not contain TCE, 1,1,1-TCA, or any other chemical listed in EPA’s Information Request 6. Thus, the solvents stored in the former AST and/or used in the degreaser throughout the time of Mr.

¹⁶ The draft CAO erroneously refers to the AST as being a “200-gallon” tank. The AST reportedly held only 150 gallons.

Kanipe's employment did not contain TCE. All available information corroborates this conclusion and shows that Mr. Kanipe's statement to the RWQCB representative about TCE was a mistake. *See, e.g.*, 1988 SCAQMD Air Permit, **Exhibit N** (authorizing use of only Freon 113 in Ortel's degreaser beginning in March 1988).

If the RWQCB is aware of any additional documents mentioning TCE, LSI requests that the Board provide them to LSI for review, consistent with the commitment made by RWQCB representatives during our October 6 meeting.

Whether or not some quantity of TCE was present at the Ortel facility for a brief period, the other information provided in these comments shows that the RWQCB cannot simply assume that TCE at the facility caused the observed contamination in soil and groundwater beneath the facility. These comments describe the presence of the chlorinated solvent plume from upgradient sources, the likelihood of TCE use and onsite disposal by the predecessors at the property, the consistency of the soil gas results with TCE releases that occurred prior to the regrading and redevelopment of the site, the absence of any affirmative evidence of releases of solvents to the environment during Ortel's period of operations, Ortel's careful solvent handling practices, and the paved nature of the facility since 1981. In the face of this information, the mere presence of TCE in soil gas and groundwater beneath the Ortel facility does not constitute evidence of a discharge from the Ortel operations. As a result, the RWQCB should not issue a CAO to LSI, which is only the former lessee of the facility. Instead, the RWQCB should investigate the entities responsible for the solvent contamination under the Ortel facility and issue a CAO to those entities.

iii. There is no evidence that Ortel released solvent stabilizers at the facility

The draft CAO is vague and does not allow LSI to respond with any certainty as to the allegations or findings that the RWQCB is making regarding the discharge of solvent stabilizers detected onsite. The RWQCB discusses solvent stabilizers in paragraph 8(g) of the draft CAO as follows:

The groundwater monitoring results at the Agere site indicate that 1,4-Dioxane and TCP have been detected in 5 of 6 sampling events above the California Notification Levels for those compounds. None of the other groundwater monitoring wells at other facilities in the area show such a pattern or trend. Therefore, the groundwater contaminant plume beneath the Agere facility is unique in character. The compounds 1,4-dioxane and TCP (solvent stabilizers) are commonly used in association with other chlorinated organic solvents, some of which have been detected on-site.

The RWQCB then concludes in paragraph 10(a) that the "Dischargers have stored, used, and/or released . . . various solvent stabilizers on the former Agere site." For several reasons, this conclusion does not follow from the allegations in the draft CAO or from the available evidence.

First, while the RWQCB asserts that 1,4-dioxane and TCP "are commonly used in association with other chlorinated organic solvents, some of which have been detected on-site," the draft CAO does not identify any solvents detected onsite with which those stabilizers purportedly are associated. Moreover, as researchers with the Santa Clara Valley

Water District note, 1,4-dioxane most commonly is associated with 1,1,1-TCA. *See* Solvent Stabilizers White Paper at 9, **Exhibit H** (“Approximately 90% of the 1985 1,4-dioxane production was used as a stabilizer for chlorinated solvents, particularly TCA.”). If 1,4-dioxane in the groundwater is due to the presence of 1,1,1-TCA, then 1,1,1-TCA also should be present in the groundwater. But 1,1,1-TCA has not been detected in groundwater beneath the facility. Thus, the 1,4-dioxane is not linked to a release of 1,1,1-TCA from the facility.

Second, LSI has been unable to verify the RWQCB’s representation in paragraph 8(g) of the draft CAO that TCP is commonly used as a solvent stabilizer in any of the contaminants detected onsite. *See* EPA, Emerging Contaminant Fact Sheet – 1,2,3-Trichloropropane (TCP) (Sept. 2009), attached in **Exhibit R**; EPA, Interim Guidance for Investigating Potential 1,2,3-Trichloropropane Sources in the San Gabriel Valley Area 3 (Jul. 27, 2005), attached in **Exhibit R**. In fact, the California State Water Resources Control Board states that “TCP has been used mainly as a solvent and an extracting agent (paint and varnish remover, cleaning and degreasing agent, and cleaning and maintenance solvent).” California SWRCB, Groundwater Information Sheet – 1,2,3-Trichloropropane (TCP) (Nov. 17, 2009), attached in **Exhibit R**. There is no evidence that Ortel used TCP for any of these purposes.

Third, neither Ensolv nor Blaco-Tron TF/Vapo-Kleen, the two primary solvents Ortel used in the degreaser onsite, contains 1,4-dioxane or TCP. Ensolv Material Safety Data Sheet, **Exhibit Q**; Blaco-Tron TF Material Safety Data Sheet, **Exhibit Q**.

Fourth, the RWQCB’s representation about the uniqueness of the contamination in the groundwater beneath the site is inaccurate, as both TCP and 1,4-dioxane have been detected in monitoring wells at other sites in California, including the San Gabriel Valley Area 2 Superfund Site. TCP also was detected in groundwater monitoring well EMW-2 in 2009 and 2010, evidencing an upgradient source of the detected TCP.

Finally, 1,4-dioxane has been used for a number of purposes and has contaminated groundwater in Los Angeles County through a number of different pathways. *See* California SWRCB, Groundwater Information Sheet – 1,4-Dioxane (Apr. 20, 2009), **Exhibit R**. In addition to being used as a solvent stabilizer, 1,4-dioxane is “used as a solvent for a number of compounds including resins, oils, fats, waxes, and greases,” and is “found as a byproduct in cosmetics and shampoos.” *Id.* EPA also recognizes that 1,4-dioxane is used as “a solvent for impregnating cellulose acetate membrane filters; a wetting and dispersing agent in textile processes; and as a laboratory cryoscopic solvent for molecular mass determinations.” EPA, Emerging Contaminant Fact Sheet – 1,4-Dioxane (Sept. 2009), **Exhibit R**. 1,4-dioxane also is used in many products, including paint strippers, dyes, and varnishes, and is “a by-product in the manufacture of polyethylene terephthalate (PET) plastic and is used as a purifying agent in the manufacture of pharmaceuticals.” *Id.* According to the State Water Resources Control Board, “[b]ased on [California Department of Public Health] data through 2008, 28 active and standby groundwater sources . . . have had detections of 1,4-dioxane above the NL. All but one of the 1,4-dioxane detections in California have occurred in Los Angeles County.” California SWRCB, Groundwater Information Sheet – 1,4-Dioxane (Apr. 20, 2009), **Exhibit R**. In light of the above information, the RWQCB’s reliance on the presence of 1,4-dioxane below the site as indicative of a solvent stabilizer release by Ortel at the site is unfounded.

In short, the RWQCB has not justified its conclusion in the draft CAO that Ortel released solvent stabilizers such as 1,4-dioxane or TCP onsite, and the record contains no evidence on which to find that Ortel was a discharger of 1,4-dioxane, TCP, or any other solvent stabilizer.

3. The RWQCB Should Not Require a Former Lessee (or a Current Landowner or Lessee) to Delineate, Remediate, or Replace Contaminated Groundwater Coming From an Offsite Upgradient Source or to Delineate or Remediate Soil/Soil Vapor Contaminated by the Operations of Site Predecessors

The draft CAO requires LSI to “delineate the extent of soil, soil vapor, and groundwater contamination caused by the release of VOCs and other contaminants of concern from the former Agere site” and to “cleanup and abate the effects of soil, soil vapor and groundwater contamination.” LSI should not be required to undertake these activities.

As discussed previously, there is substantial evidence that the TCE, PCE, and other substances observed in groundwater beneath the Ortel facility come from an offsite upgradient source. There also is substantial evidence that substances observed in soil gas in the vicinity of Building 2 resulted from the operations of site predecessors (or, at depth, may be the result of off-gassing from the groundwater plume).¹⁷ The RWQCB has not provided any evidence that Ortel itself has discharged or released chlorinated solvents to the groundwater or to the soil at the facility. For all of these reasons, given the State Water Board policies and case law discussed in Part 1 of these comments, the RWQCB should not require LSI to undertake further delineation, remediation, or replacement of groundwater under or around the leased Ortel facility. *See, e.g., In re Wenwest*, Order No. WQ 92-13 (Cal. St. Water Res. Control Bd.) (former owner that caused pollution, current owner, and current lessee were properly named as responsible parties, but former owner that did not cause or contribute to pollution was not properly named as a responsible party); *see also City of Modesto Redevelopment Agency v. Superior Court*, 119 Cal.App.4th 28, 44 (2004) (based on a review of legislative history, “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”).¹⁸ For the same reasons, the RWQCB should not require LSI to undertake further delineation or remediation of the soil or soil vapor under or around the facility.

¹⁷ Equilibrium soil gas concentrations were calculated using Henry’s Law coefficients and available groundwater data from the facility for TCE, PCE, 1,1-DCE, and cis-1,2-DCE. For each compound, the average measured soil gas concentration at the depths closest to the groundwater plume (samples collected between 140 and 180 feet bgs) was less than the calculated equilibrium soil gas concentration. Thus, the deepest soil gas results are consistent with off-gassing from the groundwater plume to soil gas.

¹⁸ The groundwater-related requirements also should be deleted because Agere knew of the contamination to groundwater for only a few weeks at most while it was a lessee of the facility. *Cf. In re Wenwest*, at 5-6 (finding that a former *landowner* that owned the contaminated property only temporarily and had limited knowledge of the contamination should not be deemed a discharger with primary responsibility for remediation). When Agere was the lessee of the site beginning in June 2000, it did not know of the existence of the chlorinated solvent plume in groundwater that extended beneath the leased property from an offsite upgradient source, and therefore had no ability to address it. The available information indicates that Agere did not know of the groundwater contamination until it first received groundwater monitoring results some time in September 2005. Agere’s lease at the facility terminated at the end of September 2005.

Moreover, the presence of a major offsite upgradient source (or sources) of TCE and other contaminants to the groundwater beneath the Ortel facility would frustrate any onsite attempts to remediate groundwater, at least until the upgradient source(s) have been identified and remediated (along with the plume extending to the Ortel site). As explained in SWRCB Resolution No. 92-49, dischargers must clean up and abate the effects of discharges “in a manner that promotes attainment of either background water quality, or the best water quality which is reasonable if background levels of water quality cannot be restored” Such remediation is not possible, however, while the upgradient plume continues to migrate beneath the facility from offsite. In light of that ongoing plume migration, the background water quality levels attainable at the facility are the concentrations observed at EMW-2.

There also is no basis to require LSI to undertake replacement of groundwater used by the City of Alhambra. In addition to the points discussed previously, the RWQCB has not shown that the groundwater plume observed beneath the site has reached or will reach the current City of Alhambra production wells. EPA’s data suggest substantial uncertainty regarding the direction of groundwater flow to the east of the facility, and EPA also has suggested that there is a hydraulic discontinuity between the site and the Alhambra water supply wells that would preclude or mitigate any movement of the existing groundwater plume to current City groundwater production wells. *See* EPA’s Remedial Investigation Report for San Gabriel Valley Area 3, at Sections 8-1 and 8-2, including Exhibit 8-1, in **Exhibit S**. Because the City is fully served by its current water supply wells, and there is no showing that the contamination beneath the Ortel facility will affect those wells, there is no basis for the draft CAO to require LSI to replace groundwater.

4. Other Requirements in the Draft CAO Are Unsupported and Should Be Dropped

The draft CAO imposes several other requirements that are unsupported and should be deleted. First, the draft CAO requires the delineation and remediation of contaminants in soil. There has not been any showing, however, that onsite soils contain hazardous substances or present a risk to human health or groundwater quality, and the RWQCB has made no such findings.

All investigations at the site to date have focused on soil gas and groundwater. None of the limited soil sampling to date has suggested a need for further delineation or remediation. Most soil samples taken during the installation of vapor probes or monitoring wells have not shown the presence of TCE. Only three of 36 soil samples collected in June 2000 showed the presence of TCE, and the three samples had low TCE concentrations ranging from 5.8 micrograms per kilogram (ug/kg) to 38 ug/kg.¹⁹ Because, as has been the case at this site, VOCs are more likely to be detected in the vapor phase, the RWQCB typically relies on soil gas data rather than soil data to delineate VOC impacts at a site. Thus, the soil delineation requirements should be deleted.

¹⁹ LSI notes that the draft CAO mistakenly states that “[t]he results of the soil sample analyses indicated the presence of TCE at 283 µg/kg at 80 feet bgs.” CAO, § 8.d. The depth of those soil samples was 180.5 feet bgs, which indicates that the soils were in the saturated zone at the depth of the groundwater plume.

Second, the draft CAO requires the delineation of heavy metals. There is no evidence that LSI ever released heavy metals onsite. Nor is there any evidence that heavy metals are present or constitute a risk in soil, soil gas, or groundwater at the site. Accordingly, the requirements in the draft CAO for delineation of heavy metals in soil, soil gas, and groundwater should be deleted.

Third, the draft CAO changes groundwater monitoring frequency from annually to quarterly. LSI performed quarterly groundwater monitoring from the first quarter of 2007 through the first quarter of 2008. Based on the consistency of the groundwater data collected during those five quarterly monitoring events, LSI requested and received approval to modify the frequency of groundwater monitoring and reporting from a quarterly to an annual basis. *See* First Quarter 2008 Groundwater Monitoring Report, at 5 (April 15, 2008) (excerpt), attached as **Exhibit S**. Groundwater data collected onsite continues to be consistent. Thus, there is no basis to increase the frequency of groundwater monitoring, and any required monitoring and reporting should continue on an annual basis.

Fourth, the deadlines set forth in the draft CAO are inconsistent and infeasible. LSI assumes that these deadlines are “placeholders” and would be replaced by consistent and feasible deadlines if and when any final CAO is issued. For the RWQCB’s information, LSI notes that the schedule for the Site Conceptual Model (“SCM”) is unreasonably short, given the RWQCB’s demand to incorporate information from nearby sites. Developing the SCM will require integrating historical operational data, geologic and hydrogeologic data, and data regarding the nature and extent of contaminants of concern (“COCs”) in the subsurface. Site-specific data must be compiled and integrated with up-to-date data from nearby facilities. The CAO recipient, therefore, would need to make requests to regulatory agencies such as the RWQCB and DTSC to obtain recent information from nearby sites. It could take six weeks or more to receive the requested information. Once received, such information would need to be compiled so that it could be evaluated. And because significant information from nearby sites may not be available electronically, an electronic database may need to be developed to manage collected data. All these data then would need to be evaluated and analyzed prior to incorporation into the SCM.²⁰ Ultimately, the SCM would be developed considering historical industrial uses in the area, subsurface geology and hydrogeology, and the nature/extent of COC detections at the site and at nearby facilities. The SCM also would be used to identify data gaps that must be addressed as part of site characterization. Given all these steps, a realistic timeframe for data collection, analysis, graphics presentation, and accompanying SCM development would be on the order of 90 days, rather than the 30 days provided in the draft CAO.

Furthermore, because the SCM will be used to identify significant data gaps, which affect the scope of future investigations, the CAO recipient would be unable to develop effective work plans to delineate the extent of contamination in the unsaturated and saturated zones until the initial SCM is substantially complete. In other words, Required Action 2 in the draft CAO is partially dependent on completion of Required Action 1. The deadline for delineating contamination in the unsaturated and saturated zone, Required Action 2 in the draft CAO, therefore, would need to follow the deadline for completing the initial SCM by at least 45 days. It would be infeasible to complete the delineation just one month after submission of the SCM.

²⁰ To conduct this evaluation, graphics such as geologic/hydrogeologic cross sections, depth-specific iso-concentration maps, groundwater elevation maps, and maps of historical site uses must be developed and analyzed.

5. Other Factual Statements in the Draft CAO Are Incorrect

Paragraph 5 of the draft CAO incorrectly states that “[o]n or about August 2, 2008 Ortel Corporation sold the facility to Agere Systems, a spin-off company of Lucent Technologies.” Lucent Technologies acquired Ortel Corporation in June 2000, and transferred Ortel to Agere in February 2001. In January 2003, Agere sold the Ortel assets to Emcore. In connection with that asset purchase, Emcore subleased the facility from Agere until October 2005, when Emcore took over the lease. At no time has Ortel, Agere, or LSI ever owned the property.

Paragraph 5 of the draft CAO then states that “Agere changed its name to LSI Corporation.” This too is inaccurate. LSI Logic and Agere Systems merged in April 2007 to become LSI Corporation.

Both paragraph 5 and paragraph 6(f) incorrectly state that Emcore currently subleases the facility from Agere. As of October 2005, Agere ceased leasing the facility and subleasing it to Emcore. LSI is not a current owner, operator, or lessee of the subject property. (Emcore, the lessee of the facility since October 2005, is not a predecessor or affiliate of Agere/LSI; it is an independent and unaffiliated entity.)

6. LSI Is Willing to Continue Its History of Cooperation Through A Limited CAO That Is Consistent With LSI’s Status Under State Water Board Policy and California Law

LSI already has spent several hundred thousand dollars to address a situation that it adamantly believes it did not cause, and for which the actual responsible parties have spent nothing. The RWQCB has not provided any evidence that Ortel itself discharged chlorinated solvents to the subsurface at the site, and LSI has provided substantial evidence that those substances originated from offsite upgradient sources or were discharged by pre-1980 predecessors at the facility. Nonetheless, while the RWQCB investigates and identifies the true source(s) of the soil gas and groundwater contamination, LSI would be willing to implement, without any admissions of liability or waivers of defenses, a CAO that provides for the following tasks (or some alternative set of tasks involving a comparable level of effort):

1. LSI would prepare a supplemental investigation work plan that would include:
 - a Site Conceptual 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 RWQCB approval, LSI would implement the supplemental investigation work plan.

3. LSI then would 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.

Such a CAO would reasonably reflect the status of LSI under State Water Board Policy and California law in view of the entirety of the information that has been compiled to date, and would be consistent with a phased approach. Preparation of the draft Remedial Action Plan by LSI, and RWQCB review and approval of the Plan (which may require some iterations), will take several months. This will give the RWQCB additional time to investigate and issue one or more CAOs to prior site owners/operators and upgradient sources. The RWQCB 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 RWQCB can pursue the primarily responsible parties to implement the Remedial Action Plan.

The proposed approach would preserve everyone's options going forward. Productive work would continue that the RWQCB views as necessary, thereby preserving the overall schedule. At the same time, LSI would not be forced into a situation where it must litigate over a CAO that demands too much from LSI given the available information.

LSI is prepared to meet with the RWQCB promptly to discuss the above proposal and an appropriate path forward. We look forward to further discussions with the RWQCB on the above.

Sincerely,


De Grandpre,
Jocelyn [jdegrand]
2010.10.25
16:09:41 -04'00'

Jocelyn de Grandpre

(Enclosures sent on CD under separate cover)

cc:

Jeffrey Hu, LARWQCB
Jeff Ogata, State Water Resources Control Board
Jim Collins, U.S. EPA Region IX
Steve Arbaugh, U.S. EPA Region IX
Lisa Hanusiak, U.S. EPA Region IX
Wayne Tam, RIM Development Company
Richard Janisch, Chow & Freisleben
Scott D. Houthuysen, LSI
Ryan Livengood, LSI
Carol Serlin, ENVIRON
Steve Jawetz, Beveridge & Diamond, P.C.

EXHIBIT 3.G

Alhambra Site Corporate History Fact Chronology

9/30/2010 3:08 PM

Date & Time	Fact Text	Source(s)
Sat 07/31/1954	Norris Thermador Corporation acquires the Alhambra site from its subsidiary Thermador Electrical Manufacturing Company.	Chain of Title - Pacific Corporate & Title Services, Exhibit G-1; 1954 Norris Thermador Grant Deed, Exhibit G-1
Mon 03/24/1958	Norris Thermador Corporation, through its subsidiary Thermador Electrical Manufacturing Company, obtained a building permit to install a "one hour paint spray room."	1958 Norris Thermador Permit Materials and Inspection Reports, Exhibit G-2
Thu 04/24/1958	Norris Thermador Corporation, through its subsidiary Thermador Electrical Manufacturing Company, obtained a building permit to construct a "pit for vacuum tanks."	1958 Norris Thermador Permit Materials and Inspection Reports, Exhibit G-2
05/??/1958	Norris Thermador Corporation moved its electric transformer operations to the Alhambra plant at 715 South Raymond Avenue, Alhambra, California (currently the location of Building 2 at 2015 W. Chestnut Ave.), where it was producing electric transformers, voltage regulators, transistorized power supplies, magnetic amplifiers, and other special magnetic components - at AGERE003042.	1958 Norris-Thermador Corporation Annual Report: AGERE003034, Exhibit G-3
Thu 08/21/1958	Norris Thermador Corporation also obtained a building permit to install and operate a paint booth and degrease pit, along with a "tank."	1958 Norris Thermador Permit Materials and Inspection Reports, Exhibit G-2
Thu 03/09/1961	An Alhambra Fire Dept. inspector noted the presence of bake ovens at the site	1958 Norris Thermador Permit Materials and Inspection Reports, Exhibit G-2
Fri 03/13/1964	Spatron, Inc is incorporated in California to engage in electronics manufacturing. Named directors: H.P. Balderson, J.R. Singleton, and Tom K. Johns.	Spatron Articles of Incorporation, Exhibit G-4
Tue 05/05/1964	The Los Angeles Times reported that Norris Thermador Corporation sold its Alhambra plant to a group of former employees. The "facility has been renamed Spatron, Inc." "The new company has purchased the production facilities on a five-year plan and has an option to purchase the building." Norris Thermador Corporation only sold the operations, however, not the plant. Norris Thermador Corporation (later Norris Industries, Inc.) remained the site owner until 1979.	1964 LA Times Article Spatron Inc., Exhibit G-4; 1979 Alhambra Site Condemnation Order, Exhibit G-5; Chain of Title - Pacific Corporate & Title Services, Exhibit G-1
Thu 07/02/1964	An Alhambra Fire Dept. inspector noted the presence of bake ovens at the Spatron, Inc site	1958 Norris Thermador Permit Materials and Inspection Reports, Exhibit G-2
Tue 11/24/1964	An Alhambra Fire Dept. inspector reports that Spatron, Inc needs a "metal container for spray booth residue and paint strainers"	Alhambra FD Fire Inspection Report, Exhibit G-2
Fri 01/01/1965	Spatron, Inc is listed at the Alhambra site (715 S. Raymond - currently the location of Building 2 at 2015 W. Chestnut Ave.) in all California business directories from	1965 California Manufacturers Annual Register: AGERE003192, Exhibit G-6;

Alhambra Site Corporate History Fact Chronology

9/30/2010 3:08 PM

Date & Time	Fact Text	Source(s)
**	1965 through 1979. Products manufactured by Spatron, Inc included: transformers, chokes, filters, reactors, transistorized power supplies, inverters and converters, transistorized voltage sensing devices, magnetic amplifiers, and voltage regulators.	1979 California Manufacturers Manual, Exhibit G-6
Fri 07/29/1966	Norris Thermador Corporation changes its name to Norris Industries, Inc.	L.A. Times Article, Exhibit G-7; Norris-Thermador Name Change Filing, Exhibit G-7
Tue 10/07/1969	Alhambra Fire Department issues permit to Crown City Furniture Manufacturing/Crown City Table Company, located at 715 S. Palm Ave., for three spray booths.	1969 Alhambra Fire Department Permit, Exhibit G-2
Thu 02/11/1971	Sam Yocum, Inc. (aka West Coast Finishers) submits application to LA County Dept. of Health Services to install a 2.5' x 6' x 3' vapor degreaser intended to be operated with PCE at 710 S. Palm Ave.	1971 Sam Yocum Degreaser Permit, Exhibit G-2
Thu 05/04/1972	Sam Yocum, Inc. (aka West Coast Finishers) continues to operate vapor degreaser at 710 S. Palm Ave and uses @ 10-gallons/month of PCE - per LA County Dept. of Health Services report.	1972 Sam Yocum Inspection, Exhibit G-2
Wed 07/17/1974	An Alhambra Fire Dept. inspector reports that Spatron, Inc's "paint spray booth is contained in a one hour room and the west side has been penetrated. Mr. J.R. Singleton indicated that they will replace the opening with drywall." The inspector also notes the presence of bake ovens at the site.	Alhambra FD Fire Inspection Report, Exhibit G-2
??/??/1975	Norris Industries, Inc. combines its separate Thermador Electrical Manufacturing Company and Wasteking divisions and operated them as one single division.	1975 Norris Industries Annual Report, Exhibit G-3
Fri 10/20/1978	Alhambra Redevelopment Agency obtains an Order for Prejudgment Possession from the Los Angeles County Superior Court authorizing the Agency to take possession of the site effective Jan. 25, 1979.	1979 Alhambra Site Condemnation Order, Exhibit G-5
??/??/1979	Spatron, Inc has been listed at the Alhambra site (715 S. Raymond - currently the location of Building 2 at 2015 W. Chestnut Ave.) in all California business directories since 1965, but the final listing at this location is in 1979. At this point it still produces transformers, chokes, filters, reactors, transistorized power supplies, inverters and converters, transistorized voltage sensing devices, and magnetic amplifiers and voltage regulators. J.R. Singleton is President; H.P. Balderson is VP, Tom K. Johns is Sec-Treasurer.	1979 California Manufacturers Register: AGERE003253, Exhibit G-6
Thu 01/25/1979	The Order for Prejudgment Possession from the Los Angeles County Superior	1979 Alhambra Site Condemnation

Alhambra Site Corporate History Fact Chronology

9/30/2010 3:08 PM

Date & Time	Fact Text	Source(s)
**	Court authorizing the Alhambra Redevelopment Agency to take possession of the site takes effect.	Order, Exhibit G-5
Mon 10/01/1979	The Superior Court of LA County issues a final condemnation order for the Alhambra site. Norris Thermador Corporation / Norris Industries, Inc., Southern California Edison Co., and Spatron, Inc are defendants. The court awarded Spatron, Inc \$22,290 for fixtures and equipment, including bake ovens, a 4' + deep concrete lined pit, and a humidity chamber (additional confirmation that Spatron, Inc continued to operate at the site through 1979). The court orders Norris Industries, Inc. to be compensated for the real property, valued at \$110,000 (additional confirmation that Norris Industries, Inc. continued to own the site through 1979).	1979 Alhambra Site Condemnation Order, Exhibit G-5
??/??/1980	Spatron, Inc relocates to a new address - 2468 Mariondale Ave. Los Angeles, CA 90032. J.R. Singleton is President; H.P. Balderson is VP.	1980 Southern California Business Directory and Buyers Guide, Exhibit G-6
Tue 01/27/1981	Norris-NI Industries merges NI Industries into itself and changes its name to NI Industries, Inc.	Norris-NI Industries Certificate of Ownership and Merger, Exhibit G-8
Thu 09/17/1981	Street addresses for buildings at 708-720 S. Palm St. and 707-721 S. Raymond St. near the Ortel Corporation facility are changed by the City.	1981 Alhambra Address Changes Notice, Exhibit G-9
Tue 12/08/1981	NI Industries, Inc. incorporated Oct. 29, 1982 in Delaware to effect a series of transactions culminating in the acquisition of all outstanding common shares of Norris Industries, Inc.. NI Industries, Inc. succeeds to the business of Norris Industries, Inc. through a leveraged buyout.	NI Industries Certificate of Incorporation, Exhibit G-8; 1983 NI Industries Annual Report, Exhibit G-3; 1984 Moody's Industrial Manual, Exhibit G-8; LA Times Article (Dec. 9, 1981), Exhibit G-8
Wed 12/09/1981	Norind Holdings completes its purchase of Norris Industries, Inc. Kohlberg, Kravis, Roberts & Company creates Norind Holdings for the purpose of acquiring Norris Industries, Inc.	1981 Norind Holdings Cert. of Ownership, Exhibit G-8; 1983 NI Industries Annual Report, Exhibit G-3; 1981 LA Times: AGERE003376, Exhibit G-8
Tue 12/29/1981	Norind Holdings changes its name to Norris-NI Industries, Inc.	Certificate of Amendment of Norind Holdings Certificate of Incorporation, Exhibit G-8
Mon 01/04/1982	NI Industries, Inc. assumes a substantial portion of Norris Industries, Inc. assets and liabilities under a Plan of Partial Liquidation and Redemption.	1984 Moody's Industrial Manual, Exhibit G-8
Thu 10/27/1983	NI Industries, Inc. becomes a publicly traded corporation.	1983 NI Industries Annual Report,

Alhambra Site Corporate History Fact Chronology

9/30/2010 3:08 PM

Date & Time	Fact Text	Source(s)
**	**	Exhibit G-3
??/??/1984	Masco Industries, Inc. forms as a wholly-owned subsidiary of Masco Corporation during Masco Corporation restructuring. Masco Corporation transfers to Masco Industries, Inc. its Products for Industry businesses.	1986 Moody's Industrial Manual: AGERE003438, Exhibit G-10
07/??/1984	Masco Industries, Inc. becomes a separate publicly owned company in mid-1984 when Masco Corporation distributes 50% of its shares to Masco Industries, Inc. as a special dividend. Masco Corporation retains the remaining 50% of shares.	1985 Masco Corp 10-K, Exhibit G-10 at 13; 1986 Moody's Industrial Manual: AGERE003438, Exhibit G-10 1990 Moody's OTC Industrial Manual, Exhibit G-10
Fri 01/04/1985	Nimas Corporation is incorporated in Delaware.	Nimas Corporation Certificate of Incorporation, Exhibit G-10
Fri 02/01/1985	Nimas Corporation, a newly formed company owned 50% by Masco Corporation and 50% by Masco Industries, Inc., acquires +90% of outstanding shares of NI Industries, Inc.	1985 Masco Corp 10-K, Exhibit G-10 at 6; 1985 Moody's Industrial Manual: AGERE003429, Exhibit G-10; See also 1990 Moody's OTC Industrial Manual, Exhibit G-10 and 1995 Moody's Industrial Manual, Exhibit G-10
Thu 03/07/1985	Masco Corporation's subsidiary Masco Building Products Corp. acquires the building and remodeling products group of NI Industries, Inc., including Thermador Electrical Manufacturing Company and WasteKing, along with their assets and liabilities. Nimas Corporation continues to own and operate NI Industries, Inc.'s remaining industrial and defense products segments.	1985 Masco Corp 10-K, Exhibit G-10 at 2 - 8; 1985 Thermador Transfer Agreement, Exhibit G-11
Fri 03/08/1985	Nimas Corporation merges Nimas-Subsidiary into NI Industries, Inc.	Certificate of Ownership and Merger Merging Nimas-Subsidiary into NI Industries, Exhibit G-10
Tue 12/31/1985	Masco Corporation's 10-K form lists NI Industries, Inc. as a directly owned subsidiary of Nimas Corporation.	1985 Masco Corp 10-K, Exhibit G-10 at pg. 5 of Attachment 22
??/??/1986	Masco Corporation still lists Masco Industries, Inc. as a wholly owned subsidiary.	1986 Moody's Industrial Manual: AGERE003438, Exhibit G-10
Fri 05/30/1986	Campbell Industries Inc. is incorporated in Delaware (would later become TriMas Corporation).	1990 Moody's OTC Industrial Manual, Exhibit G-10
11/??/1986	Masco Industries, Inc. acquires Masco Corporation's 50% ownership interest in	1988 Masco Corp 10-K, Exhibit G-12 at

Alhambra Site Corporate History Fact Chronology

9/30/2010 3:08 PM

Date & Time	Fact Text	Source(s)
**	Nimas Corporation, making Nimas Corporation a consolidated subsidiary of Masco Industries, Inc.	F-14
Sat 10/01/1988	TriMas Corporation forms and acquires 10 businesses from Masco Industries, Inc. TriMas Corporation is created from former Campbell Industries Inc. Masco Corporation held a 19% stake; Masco Industries, Inc. held a 48% stake. The transferred businesses manufacture high-pressure gas cylinders, drum and pail closures, specialty fasteners, and precision tools. TriMas Corporation retains Masco Industries, Inc.' carrying value for the assets and liabilities of the businesses acquired.	1988 Masco Corp 10-K, Exhibit G-12 at 7 - 8; 1990 Moody's OTC Industrial Manual, Exhibit G-10; 1995 Moody's Industrial Manual, Exhibit G-12
Sat 12/31/1988	Masco Corporation owns 47% of outstanding common stock of Masco Industries, Inc.	1988 Masco Corp 10-K, Exhibit G-12 at 7 - 8
02/??/1989	TriMas Corporation becomes a separate publicly owned company when Masco Corporation distributes 28% of the outstanding TriMas Corporation common stock to its stockholders as a special dividend.	1988 Masco Corp 10-K, Exhibit G-12 at 7 - 8
Tue 12/19/1989	Nimas Corporation owns all of NI Industries outstanding stock.	Certificate of Ownership and Merger Merging Nimas Corporation into NI Industries, Exhibit G-10
Sun 12/31/1989	Masco Corporation SEC 10-K lists NI Industries, Inc. as a wholly-owned subsidiary of Masco Industries, Inc. and lists Norris Industries, Inc. as a subsidiary of NI Industries, Inc..	1989 Masco Corp 10-K, Exhibit G-12
Sun 12/31/1989	Masco Corporation's SEC 10-K continues to list Masco Building Products Corp. as a wholly-owned subsidiary.	1989 Masco Corp 10-K, Exhibit G-12
Sun 12/31/1989	Nimas Corporation merges itself into NI Industries.	Certificate of Ownership and Merger Merging Nimas Corporation into NI Industries, Exhibit G-10
Mon 01/01/1990	Masco Industries, Inc. owns 41% of TriMas Corporation outstanding common stock and Masco Corporation owns 8%.	1990 Moody's OTC Industrial Manual, Exhibit G-10
02/??/1993	Masco Corporation's common equity ownership of Masco Industries, Inc. reduced to approx. 35%	1995 Moody's Industrial Manual, Exhibit G-12
Wed 06/23/1993	Masco Industries, Inc. changes its name to MascoTech Inc.	1995 Moody's Industrial Manual, Exhibit G-12
Sat 12/31/1994	Masco Corporation owns 44% of MascoTech common stock.	1995 Moody's Industrial Manual, Exhibit G-12

Draft

Alhambra Site Corporate History Fact Chronology

9/30/2010 3:08 PM

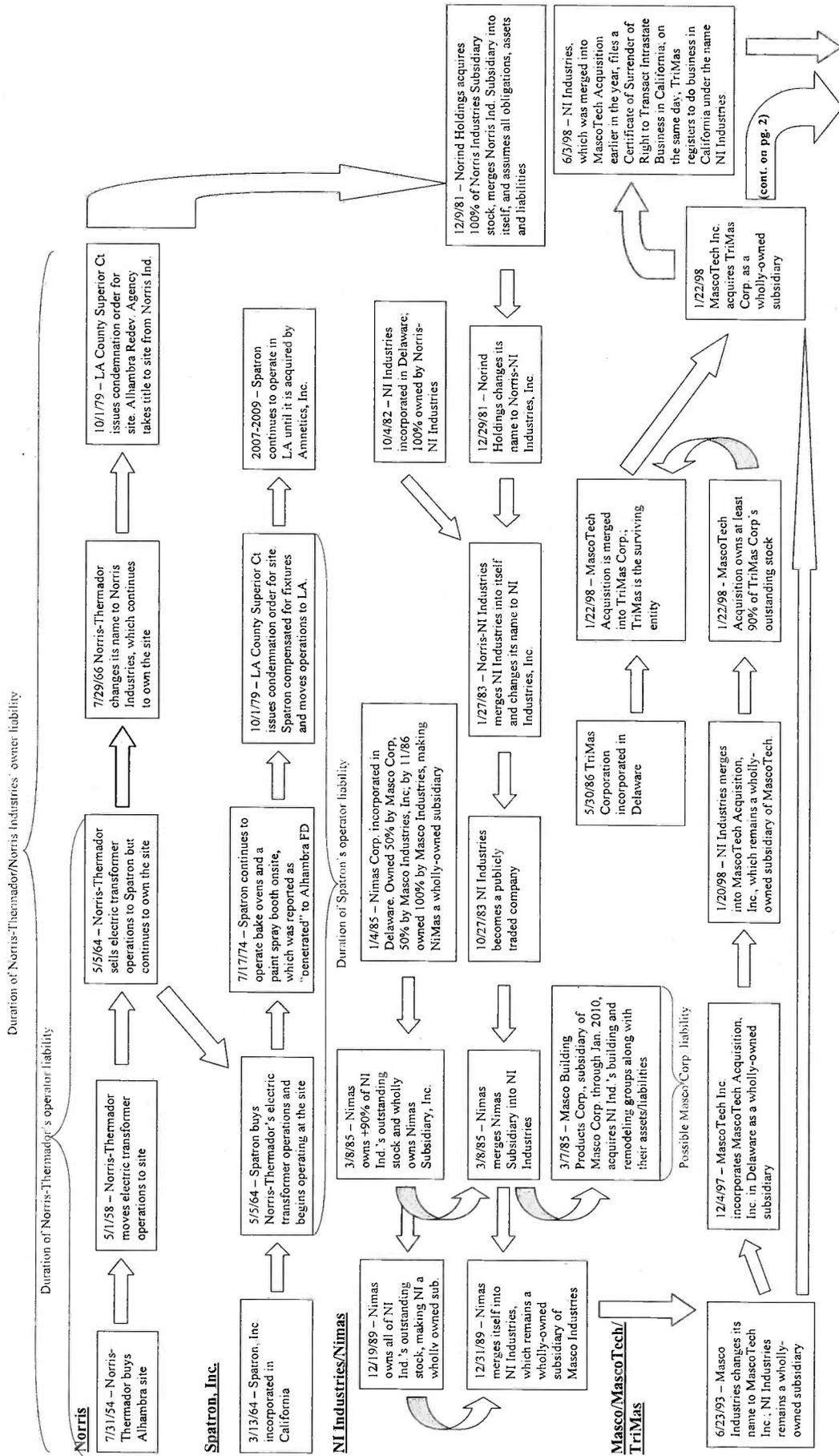
Date & Time	Fact Text	Source(s)
**		G-12
??/??/1995	NI Industries, Inc. is listed as a wholly-owned subsidiary of MascoTech	1995 Moody's Industrial Manual, Exhibit G-12
Thu 12/04/1997	MascoTech Inc. incorporates MascoTech Acquisition, Inc. in Delaware as a wholly-owned subsidiary	See 1998 Moody's Industrial Manual, Exhibit G-12 (referring to MascoTech Acquisition as a wholly owned subsidiary)
Tue 01/20/1998	NI Industries, Inc. merges into MascoTech Acquisition, Inc.	1998 Certificate of Merger - NI and Macotech Acquisition, Exhibit G-12
Thu 01/22/1998	MascoTech, Inc. acquires TriMas Corporation as a wholly-owned subsidiary.	1999 Moody's: AGERE003878, Exhibit G-12; 1999 Masco Corporation Annual Report, Exhibit G-3 at 70
Thu 01/22/1998	MascoTech Acquisition, Inc. merges into TriMas Corporation	1998 Certificate of Merger - MascoTech Acquisition into TriMas Corporation, Exhibit G-12
Wed 06/03/1998 5:00 p.m. ET	NI Industries files a Certificate of Surrender of Right to Transact Intrastate Business in California	NI Industries Certificate of Surrender of Right to Transact Intrastate Business in California, Exhibit G-12
Wed 06/03/1998 6:00 p.m. ET	TriMas Corporation registers to do business in California under the name NI Industries, Inc.. TriMas Corporation previously was doing business in California under the name Keo Cutters.	1998 TriMas Corporation Amended Statement By Foreign Corporation to d/b/a NI Industries, Exhibit G-12
??/??/1999	Heartland Industrial Partners LP, a private equity firm, is formed	2009 TriMas Corporation Annual Report and 10-K, Exhibit K; 2003 TriMas Corporation Annual Report and 10-K, Exhibit K
Tue 11/28/2000	Heartland Industrial Partners LP, a private equity firm, buys MascoTech	2009 TriMas Corporation Annual Report and 10-K, Exhibit K; 2003 TriMas Corporation Annual Report and 10-K, Exhibit K
12/??/2000	Date unconfirmed - Heartland Industrial Partners merges MascoTech with Simpson Industries and Global Metal Technologies to form Metaldyne Corp.	2009 TriMas Corporation Annual Report and 10-K, Exhibit K; 2003 TriMas Corporation Annual Report and 10-K,

Alhambra Site Corporate History Fact Chronology

9/30/2010 3:08 PM

Date & Time	Fact Text	Source(s)
**	**	Exhibit K
Fri 05/31/2002	A new NI Industries is incorporated in Delaware	2002 NI Industries Certificate of Incorporation, Exhibit G-13
Sun 01/25/2004	Beverly A. Schambeck files a Statement of Information with the Cal. Secy of State. It lists Spatron, Inc's address as 2468 Mariondale Ave, Los Angeles, CA 90032. Beverly A. Schambeck is CEO, Karin A. Briggs is Secretary, Kristin A. Payne is CFO, Fred W. Schambeck and Kameron A. Salo are Directors, and Brian K. Brown is Registered Agent. Statement says that Spatron, Inc conducts magnetics manufacturing (transformers, chokes, coils, etc.).	2004 Spatron Statement of Information, Exhibit G-14
??/??/2007 - ??/??/2009	Date unconfirmed - Spatron, Inc is acquired by Amnetics, Inc., which continues to produce transformers and inductors.	2009 Netvention Company Profile - Amnetics, Exhibit G-14; Amnetics, Inc. website, Exhibit G-14
03/??/2007	Beverly A. Schambeck and Fred W. Schambeck become unassociated with Spatron, Inc. They may have sold Spatron, Inc to Amnetics, Inc.	Chaptor 7 Petition - Schambeck, Exhibit G-14 at pg 37
Sat 03/31/2007	Beverly A. Schambeck files Spatron, Inc's Statement of Information with the Cal. Secy of State. Statement indicates that no information has changed since Spatron, Inc's last Statement of Information.	2007 Spatron Statement of Information, Exhibit G-14
Wed 12/31/2008	NI Industries, Inc. remains a wholly-owned subsidiary of TriMas Corporation	2008 Mergent Online Trimas Financial Highlights, Exhibit G-13
Thu 12/31/2009	Masco Building Products Corp. remains a wholly-owned subsidiary of Masco Corporation.	2009 Mergent Online Masco Corp. Financial Highlights, Exhibit G-12

ALHAMBRA SITE CORPORATE HISTORY



TriMas (cont./)Metaldyne

(cont. from pg. 1)

1999 - Heartland Industrial Partners LP, a private equity firm, is formed

11/28/00 - Heartland Industrial Partners LP buys MascoTech

?? - Heartland merges MascoTech with Simpson Industries and Global Metal Technologies to form Metaldyne Corp.

6/6/02 TriMas undertakes a recapitalization that results in its separation from Metaldyne by issuing 66% of its then fully diluted common equity to an investor group led by Heartland, remained under Heartland's contractual control. TriMas and Metaldyne retain the liabilities associated with their respective businesses and agree to indemnify one another for their allocated share of liabilities (TriMas = 42.01%, Metaldyne = 57.99%) not readily associated with either business.

1/11/07 - Metaldyne merges into a subsidiary of Asahi Tec Corp, becoming a wholly-owned subsidiary of Asahi & dividends all remaining stock it held in TriMas

5/28/09 - Metaldyne and its US subsidiaries file voluntary petitions for Ch. 11 bankruptcy. TriMas and Metaldyne continue to recognize the same liabilities/indemnities agreed to on 6/6/02

TriMas retains the original NI Industries' liability for the Alhambra site

5/31/02 - A new NI Industries, Inc is incorporated in Delaware and becomes associated with TriMas.

3/31/03 - TriMas identifies NI Industries as a subsidiary in its 2002 Annual Report and 10-K.

[Source: Stringfellow Site Waste Transaction Summary Reports, National Enforcement Investigation Center, April 1988.]

The MAIN DATA Report contains a summary of daily waste transactions based on information contained in the Business Records database. This database is named "SF3WASTETYPES" and contains 14,154 records.

Generator	Quantity (Gallons)	Percent of Total
Montrose Chemical Co.	4191700	14.4626
Rohr Aircraft	3141299	10.8384
Hunter Engineering	2592855	8.9461
Norris-Thermador	1822126	6.2869
General Steel and Wire	1625970	5.6101
U.S. Air Force (Norton AFB)	1341994	4.6303
Alcan Alumnum Corporation	1147460	3.9591
Rockwell (North American Aviation)	1057522	3.6488
RSR/Quem. (Western Lead Products)	990600	3.4179
McDonnell (Douglas Aircraft)	749360	2.5855
Nat'l Distillers (Bridgeport Brass)	705641	2.4347
Rainbow Canyon Manufacturing Corp.	634270	2.1884
General Electric Company	609415	2.1027
Weyerhauser	600774	2.0728
The Deutsch Company	576993	1.9908
Northrup Aircraft (Norair)	471316	1.6262
Rheem Manufacturing Co (Automotive)	440685	1.5205
McDonnell (Douglas Aircraft)	401428	1.3850
McDonnell (Douglas Aircraft)	389299	1.3432
Hunter Douglas Inc.	341535	1.1784
Ameron Steel (Etiwanda Steel)	332200	1.1462
Powerine Oil Company (Rothschild)	294000	1.0144
Atlas Galvanizing Company	256300	0.8843
Lockheed Corporation	243195	0.8391
Alumax, Inc. (Amax)	224615	0.7750
Morris P. Kirk and Son, Inc.	218200	0.7529
Sargent-Fletcher (Flair, Fletcher)	211250	0.7289
Carrier Corp. (Advanced Structures)	186953	0.6450
Rockwell (North American Aviation)	185000	0.6383
Atlas Coverall, Inc.	177000	0.6107
Rockwell (North American Aviation)	160670	0.5544
Rockwell (Autonetics)	155177	0.5354
Rockwell (Autonetics)	138798	0.4789
Northrup Aircraft (Nortronics)	136550	0.4711
Purex Corporation	134700	0.4648
Paul Hardeman, Inc.	129900	0.4482
Rockwool (Mineral Wool Insul.)	124203	0.4285
Stauffer Chemical	123675	0.4267
Rich Steel Pickling Company	91700	0.3164
McDonnell (Douglas Aircraft)	90680	0.3129
Aerojet-General Corporation	90600	0.3126
U.S. Chemical Milling Corporation	75150	0.2593
Riverside Plating Company	69440	0.2396

Manufacturer's Wire Corporation	67700	0.2336
Garrett Corp. (Greer, Airesearch)	60102	0.2074
California Metal Enameling Company	57500	0.1984
Precision Sheet Metal, Inc.	53110	0.1832
Oil and Solvent Process Company	45000	0.1553
United States Steel Corporation	43500	0.1501
McCulloch Company	43035	0.1485
Kelley Mfg Company	37500	0.1294
Tappan Company (Rangeventer)	36650	0.1265
Anadite, Inc.	30500	0.1052
Quaker Chemical Company	29400	0.1014
City of L.A. Dept. of Water & Power	28675	0.0989
North American Wire Mills, Inc.	28000	0.0966
Hughes Aircraft Company	27656	0.0954
Anchor Post Products of Calif.	25000	0.0863
Plessey Precsn Mtls (Univ Titanium)	23300	0.0804
McDonnell (Douglas Aircomb Div)	20000	0.0690
American Can Corporation	20000	0.0690
Superior Pacific Galvanizing	19700	0.0680
Manco Plating Company	19600	0.0676
Hoffman Electric Company	19590	0.0676
Virtue Brothers Mfg.	18940	0.0653
Modern Plating Company	18803	0.0649
Astro Sci/Astro-Sys/Am. Electronics	18630	0.0643
Keystone Autom. Plating (Benton)	18085	0.0624
Slauson Corporation (Atlas Plating)	17800	0.0614
Bone Engineering Corporation	16200	0.0559
Joslyn Pacific	15100	0.0521
Northrup (Electro-Mechanical Div)	12600	0.0435
Ferro Corporation	12500	0.0431
Fiberite Corporation	10040	0.0346
Van Waters and Rodgers (Univar)	10000	0.0345
Rockwell (Rocketdyne)	9885	0.0341
Estech (Swift Company)	9500	0.0328
Litho Plating	9300	0.0321
Los Angeles Galvanizing Company	9256	0.0319
J. H. Baxter & Company	8412	0.0290
Chem-Serv Corporation	8288	0.0286
Rockwell (Autonetics)	8000	0.0276
Dart Indust. (Mobil Oil, Rexall)	7819	0.0270
Cascade Oil and Refining Company	7800	0.0269
General Precision, Inc.	7600	0.0262
Briggs Mfg Company	7500	0.0259
Aero Scientific Corporation	7400	0.0255
Air Products and Chemicals, Inc.	7350	0.0254
American Mineral Spirits, Inc.	7200	0.0248
TRW, Inc.	7040	0.0243
Transamerica Delaval (Adel Div.)	6600	0.0228
Cal-Doran Metal.(C-D Heat Treating)	6500	0.0224
Bestile Mfg Company	6134	0.0212
Zero Mfg Company	5700	0.0197
Ajax Hardware Corporation	5500	0.0190

Halliburton, Inc.	5500	0.0190
PPG Industries, Inc.	5500	0.0190
Celanese Coatings Company	5478	0.0189
Day and Night Mfg Company	5450	0.0188
Calstrip Steel Corporation	5390	0.0186
Rockwell (Autonetics)	5273	0.0182
Nelson Name Plate Company	5150	0.0178
General Veneer Mfg Company	5000	0.0173
Pacific Extrusions (Aluminum Extr.)	5000	0.0173
M & M Pumping Company	5000	0.0173
Everguard Coating Company	4950	0.0171
Borg-Warner Corp. (Byron Jackson)	4700	0.0162
Holden-Pacific Corporation	4500	0.0155
Aurous-Sul Lab	4300	0.0148
Price-Pfister Brass Mfg Company	4250	0.0147
Crawford Chemical Service	4200	0.0145
Texaco, Inc.	4200	0.0145
Arco - (Richfield Oil Corp.)	4200	0.0145
Aluminum Company of Amermca	4100	0.0141
Avery International Corp. (Fasson)	4015	0.0139
Wyle Laboratories	4000	0.0138
McKesson & Robbins (Foremost-McK.)	3900	0.0135
George Industries	3900	0.0135
Reflective Laminates	3600	0.0124
Aeronca, Inc (Longren Aircraft Co)	3400	0.0117
American Electric, Inc.	3400	0.0117
Los Angeles Plating Company	3350	0.0116
Asbury Oil Company	3300	0.0114
Mission Appliance Corporation	3000	0.0104
Western Metal Finishing Company	2900	0.0100
Crown Cork and Seal Company	2750	0.0095
Utah-Hardeman-Manhattan	2700	0.0093
Ford Aerospace & Comm. (Philco)	2675	0.0092
Pacific Tube Company	2640	0.0091
Sunkist Growers (Lemon Prod. Div.)	2600	0.0090
Burton Silverplating Company	2500	0.0086
Chemplate Corporation	2500	0.0086
J. F. Kerns Industries	2500	0.0086
Orange Heights Orange Assoc.	2500	0.0086
Deutsch Pumping Service	2500	0.0086
Reich Hold Company	2500	0.0086
Union Oil (Collier & Carbon Chem.)	2415	0.0083
Die-Mold Plating Company	2400	0.0083
Mask-Off Company	2300	0.0079
Bell Wire Company	2200	0.0076
Dixon Hard Chrome	2125	0.0073
Liquid Chemical Corporation	2100	0.0072
Basic Industries, Inc.	2000	0.0069
Chemical Milling International Corp	2000	0.0069
Pastushin Industries, Inc.	2000	0.0069
Rheem Manufacturing Co.	2000	0.0069
Wileman Pumping Service	2000	0.0069

General Foods (Atlantic Gelatin)	2000	0.0069
City of L.A. Dept. of Airports	2000	0.0069
Arco - (Anaconda Company)	1981	0.0068
Alumin-Art Plating Co.	1710	0.0059
Alloy Industries, Inc.	1700	0.0059
G. W. Galloway Company	1600	0.0055
Fairbanks, Morse, & Company	1600	0.0055
Kelsey Hayes	1600	0.0055
Standard Nickel-Chromium Plating Co	1577	0.0054
Automation Indust. (Chem. Contours)	1500	0.0052
Metal Preparations	1500	0.0052
N. J. Karnes Welding Service	1500	0.0052
Selectile Company, Inc.	1500	0.0052
Cal-Dak Industries, Inc.	1450	0.0050
Reliable Transportation Company	1400	0.0048
Electro Optical Systems (Xerox)	1350	0.0047
General Electric Company	1300	0.0045
U.S. Navy (Long Beach Shipyard)	1300	0.0045
Lucky Plastic Company, Inc.	1260	0.0043
Western Electric Company	1250	0.0043
Pacific Forge, Inc.	1200	0.0041
Southern California Edison	1200	0.0041
Rockwell (Autonetics)	1156	0.0040
Press Enterprise Company	1100	0.0038
Bourns, Inc.	1050	0.0036
Alco Pacific Mining, Inc.	1000	0.0035
Panal Air Company	1000	0.0035
Poly Industries (US Propellers)	1000	0.0035
Sonken-Galamba Corp.	1000	0.0035
Teledyne, Inc. (Fabrodynamics)	1000	0.0035
J. & M. Anodizing	1000	0.0035
Metalcraft Products Company	1000	0.0035
Erle L. Bacon Corporation	972	0.0034
Harvey Aluminum, Inc.	950	0.0033
Rockwell (Rocketdyne)	950	0.0033
Swiss Dairy	910	0.0031
Buck's of Upland	870	0.0030
Foremost Engineering, Inc.	800	0.0028
Thermac Company	800	0.0028
General Telephone	795	0.0027
Ano Plating Company	720	0.0025
Engineered Motor Products, Inc.	700	0.0024
Hubinger Co. Paper Division	700	0.0024
Trojan Battery Company	700	0.0024
Spectrolab, Inc.	650	0.0022
Desert Bermuda Prop. (S. Ca. Aircraft)	600	0.0021
Proto Tool Company	600	0.0021
California Electro Plating Company	550	0.0019
Cemsco Company	500	0.0017
General Battery Corp. (States)	500	0.0017
Weber Metals and Supply Company	500	0.0017
Western Airlines	500	0.0017

Standard Oil Company of California	400	0.0014
Owens-Illinois	400	0.0014
Swanton Plating Company	335	0.0012
Aerojet-General Corporation	318	0.0011
California Electrical Company	300	0.0010
Big Bear Board Products	250	0.0009
B & C Plating Company	250	0.0009
HPE Corporation	234	0.0008
MacDermid, Inc.	180	0.0006
Northwest Mosquito Abatement Dist.	180	0.0006
Airtek Dynamics, Inc.	150	0.0005
H. W. Loud Machine Works, Inc.	40	0.0001
Total Quantity	28983097	100.00

Send questions and comments to: r9.info@epa.gov
Region 9 Office: 75 Hawthorne Street, San Francisco, California, 94105

Posted: February 10, 1997

Format Revised: January 17, 1998

[Source: Stringfellow Site Waste Transaction Summary Reports, National Enforcement Investigation Center, April 1988.]

The Combined Data Report II contains the same data as Report I, except that the original GENERATOR names have not been combined with their parent companies.

Generator	Quantity (Gallons)	Percent of Total
Aero Scientific Corporation	9300	0.0274
Aerojet-General Corporation	90600	0.2666
Aerojet-General Corporation	7818	0.0230
Aeronca, Inc (Longren Aircraft Co)	3400	0.0100
Air Products and Chemicals, Inc.	7350	0.0216
Airtek Dynamics, Inc.	150	0.0004
Ajax Hardware Corporation	5500	0.0162
Alcan Aluminum Corporation	1509217	4.4415
Alco Pacific Mining, Inc.	1000	0.0029
Alloy Industries, Inc.	1700	0.0050
Alumax, Inc. (Amax)	303979	0.8946
Alumin-Art Plating Co.	1710	0.0050
Aluminum Company of America	4100	0.0121
American Can Corporation	20000	0.0589
American Electric, Inc.	3400	0.0100
American Mineral Spirits, Inc.	7200	0.0212
Ameron Steel (Etiwanda Steel)	332200	0.9776
Anadite, Inc.	30500	0.0898
Anchor Post Products of Calif.	25000	0.0736
Ano Plating Company	720	0.0021
Arco - (Anaconda Comany)	1981	0.0058
Arco - (Richfield Oil Corp.)	4200	0.0124
Asbury Oil Company	8300	0.0244
Astro Sci/Astro-Sys/Am. Electronics	18630	0.0548
Atlas Coverall, Inc.	183600	0.5403
Atlas Galvanizing Company	256300	0.7543
Aurous-Sul Lab	4300	0.0127
Automation Indust. (Chem. Contours)	1500	0.0044
Avery International Corp. (Fasson)	4015	0.0118
B & C Plating Company	250	0.0007
Basic Industries, Inc.	2000	0.0059
Bell Wire Company	2200	0.0065
Bestile Mfg Company	6134	0.0181
Big Bear Board Products	250	0.0007
Bone Engineering Corporation	16200	0.0477
Borg-Warner Corp. (Byron Jackson)	5900	0.0174
Bourns, Inc.	2265	0.0067
Briggs Mfg Company	7500	0.0221
Buck's of Upland	870	0.0026
Burton Silverplating Company	2500	0.0074
Cal-Dak Industries, Inc.	1450	0.0043
Cal-Doran Metal (C-D Heat Treating)	6500	0.0191

California Avi-Tron Corporation	500	0.0015
California Electrical Company	300	0.0009
California Electro Plating Company	550	0.0016
California Metal Enameling Company	57500	0.1692
Calstrip Steel Corporation	8990	0.0265
Carrier Corp. (Advanced Structures)	186953	0.5502
Cascade Oil and Refining Company	7800	0.0230
Celanese Coatings Company	5478	0.0161
Cemsco Company	500	0.0015
Chem-Serv Corporation	8288	0.0244
Chemical Milling International Corp	2000	0.0059
Chemplate Corporation	2500	0.0074
City of L.A. Dept. of Airports	2000	0.0059
City of L.A. Dept. of Water & Power	31675	0.0932
Corona Chemical Company	1000	0.0029
Crawford Chemical Service	4200	0.0124
Crown Cork and Seal Company	2750	0.0081
Dart Indust. (Mobil Oil, Rexall)	7819	0.0230
Day and Night Mfg Company	5450	0.0160
Desert Bermuda Prop. (S. Ca. Aircraft)	600	0.0018
Deutsch Company	751568	2.2118
Deutsch Pumping Service	2500	0.0074
Die-Mold Plating Company	2400	0.0071
Dixon Hard Chrome	2125	0.0063
Electro Optical Systems (Xerox)	1350	0.0040
Engineered Motor Products, Inc.	700	0.0021
Erle L. Bacon Corporation	972	0.0029
Estech (Swift Company)	9500	0.0280
Everguard Coating Company	4950	0.0146
Fairbanks, Morse & Company	1600	0.0047
Fansteel, Inc.	700	0.0021
Ferro Corporation	12500	0.0368
Fiberite Corporation	14406	0.0424
Ford Aerospace & Comm. (Philco)	6875	0.0202
Foremost Engineering, Inc.	800	0.0024
G. W. Galloway Company	3400	0.0100
Garrett Corp. (Greer, Airesearch)	66202	0.1948
General Battery Corp. (States)	500	0.0015
General Electric Company	740015	2.1778
General Electric Company	1300	0.0038
General Foods (Atlantic Gelatin)	2000	0.0059
General Metals, Inc.	1300	0.0038
General Precision, Inc.	8850	0.0260
General Steel and Wire	2123194	6.2483
General Telephone	795	0.0023
General Veneer Mfg Company	5000	0.0147
George Industries	3900	0.0115
H. W. Loud Machine Works, Inc.	40	0.0001
Halliburton, Inc.	5500	0.0162
Harvey Aluminum, Inc.	950	0.0028
Hoffman Electric Company	19590	0.0577
Holden-Pacific Corporation	4500	0.0132
HPE Corporation	234	0.0007

Hubinger Co. Paper Division	700	0.0021
Hughes Aircraft Company	28392	0.0836
Hunter Douglas, Inc.	341535	1.0051
Hunter Engineering	2592855	7.6305
J. & M. Anodizing	1000	0.0029
J. F. Kerns Industries	2500	0.0074
J. H. Baxter & Company	8412	0.0248
Joslyn Pacific	15100	0.0444
Kelley Mfg Company	75000	0.2207
Kelsey Hayes	1600	0.0047
Keystone Autom. Plating (Benton)	18085	0.0532
Liquid Chemical Corporation	2100	0.0062
Litho Plating	9300	0.0274
Lockheed Corporation	243195	0.7157
Los Angeles Galvanizing Company	9256	0.0272
Los Angeles Plating Company	3350	0.0099
Lucky Plastic Company, Inc.	1260	0.0037
M & M Pumping Company	5000	0.0147
MacDermid, Inc.	180	0.0005
Manco Plating Company	19600	0.0577
Manufacturer's Wire Corporation	67700	0.1992
Mask-Off Company	2300	0.0068
McCulloch Company	49425	0.1455
McDonnell (Douglas Aircomb Div)	20000	0.0589
McDonnell (Douglas Aircraft)	749360	2.2053
McDonnell (Douglas Aircraft)	401428	1.1814
McDonnell (Douglas Aircraft)	389299	1.1457
McDonnell (Douglas Aircraft)	90680	0.2669
McDonnell (Douglas Aircraft)	51966	0.1529
McDonnell (Douglas Aircraft)	4359	0.0128
McKesson & Robbins (Foremost-McK.)	3900	0.0115
Metal Preparations	1500	0.0044
Metalcraft Products Company	1000	0.0029
Mission Appliance Corporation	3000	0.0088
Modern Plating Company	18803	0.0553
Montrose Chemical Co.	6485200	19.0853
Morris P. Kirk and Son, Inc.	223200	0.6569
N.J. Karnes Welding Service	1500	0.0044
Nat'l Distillers (Bridgeport Brass)	705641	2.0766
National Can Corporation	16100	0.0474
Nelson Name Plate Company	5150	0.0152
Norris-Thermador	1822126	5.3623
North American Wire Mills, Inc.	28000	0.0824
Northrup (Electro-Mechanical Div)	36309	0.1069
Northrup Aircraft (Norair)	471316	1.3870
Northrup Aircraft (Nortronics)	163700	0.4818
Northwest Mosquito Abatement Dist.	180	0.0005
Oil and Solvent Process Company	45000	0.1324
Orange Heights Orange Assoc.	2500	0.0074
Owens-Illinois	400	0.0012
Pacific Extrusions (Aluminum Extr.)	5000	0.0147
Pacific Forge, Inc.	1200	0.0035
Pacific Tube Company	2640	0.0078

Panal Air Company	1000	0.0029
Pastushin Industries, Inc.	2000	0.0059
Paul Hardeman, Inc.	129900	0.3823
Plessey Precsn Mtls (Univ Titanium)	27200	0.0800
Poly Industries (US Propellers)	1000	0.0029
Powerine Oil Company (Rothschild)	294000	0.8652
PPG Industries, Inc.	5500	0.0162
Precision Sheet Metal, Inc.	53110	0.1563
Press Enterprise Company	1100	0.0032
Price-Pfister Brass Mfg Company	5950	0.0175
Proto Tool Company	600	0.0018
Purex Corporation	134700	0.3964
Quaker Chemical Company	51000	0.1501
Rainbow Canyon Manufacturing Corp.	668589	1.9676
Reflective Laminates	3600	0.0106
Reich Hold Company	2500	0.0074
Reliable Transportation Company	1400	0.0041
Rheem Manufacturing Co (Automotive)	440685	1.2969
Rheem Manufacturing Co.	2000	0.0059
Rich Steel Pickling Company	91700	0.2699
Riverside Plating Company	75940	0.2235
Rockwell (Autonetics)	155177	0.4567
Rockwell (Autonetics)	138798	0.4085
Rockwell (Autonetics)	8000	0.0235
Rockwell (Autonetics)	5500	0.0162
Rockwell (Autonetics)	5273	0.0155
Rockwell (Autonetics)	1156	0.0034
Rockwell (North American Aviation)	1298819	3.8223
Rockwell (North American Aviation)	185000	0.5444
Rockwell (North American Aviation)	165700	0.4876
Rockwell (Rocketdyne)	9885	0.0291
Rockwell (Rocketdyne)	950	0.0028
Rockwool (Mineral Wool Insul.)	124203	0.3655
Rohr Aircraft	3758792	11.0617
RSR/Quem. (Western Lead Products)	990600	2.9152
Sargent-Fletcher (Flair, Fletcher)	211250	0.6217
Selectile Company, Inc.	71033	0.2090
Slauson Corporation (Atlas Plating)	17800	0.0524
Sonken-Galamba Corp.	1000	0.0029
Southern California Edison	1200	0.0035
Spectrolab, Inc.	650	0.0019
Standard Nickel-Chromium Plating Co	1577	0.0046
Standard Oil Company of California	400	0.0012
Stauffer Chemical	154425	0.4545
Sunkist Growers (Lemon Prod. Div.)	2600	0.0077
Superior Pacific Galvanizing	19700	0.0580
Swanton Plating Company	335	0.0010
Swiss Dairy	910	0.0027
Tappan Company (Rangeventer)	36650	0.1079
Teledyne, Inc. (Fabrodynamics)	1000	0.0029
Texaco, Inc.	4200	0.0124
Thermac Company	800	0.0024
Transamerica Delaval (Adel Div.)	6600	0.0194

Trojan Battery Company	700	0.0021
TRW, Inc.	7040	0.0207
U.S. Air Force (Norton AFB)	1344494	3.9567
U.S. Chemical Milling Corporation	75150	0.2212
U.S. Navy (Long Beach Shipyard)	1300	0.0038
Union Oil (Collier & Carbon Chem.)	2415	0.0071
United States Steel Corporation	43500	0.1280
Utah-Hardeman-Manhattan	2700	0.0079
Van Waters and Rodgers (Univar)	10000	0.0294
Virtue Brothers Mfg.	18940	0.0557
Weber Metals and Supply Company	500	0.0015
Western Airlines	500	0.0015
Western Electric Company	1250	0.0037
Western Metal Finishing Company	2900	0.0085
Weyer Hauser	796544	2.3441
Wileman Pumping Service	2000	0.0059
Wyle Laboratories	4000	0.0118
Zero Mfg Company	5700	0.0168
Total Quantity	33980150	100.00

Send questions and comments to: r9.info@epa.gov
Region 9 Office: 75 Hawthorne Street, San Francisco, California, 94105

Posted: February 10, 1997

Format Revised: January 17, 1998

1 David F. Wood (Bar No. 68063)
James C. Macdonald (Bar No. 175760)
2 **WOOD, SMITH, HENNING & BERMAN LLP**
801 South Figueroa Street, Ninth Floor
3 Los Angeles, California 90017-2573
Phone (213) 622-9300 ♦ Fax (213) 622-9394
4

Send
ENTER
NO JS

FILED
APR 11 2000
CLERK, U.S. DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
BY DEPUTY

LOGGED

2:00 FEB 28 PM 2:40

U.S. DISTRICT COURT
CENTRAL DISTRICT OF CALIF.
LOS ANGELES

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
ENTERED
CLERK, U.S. DISTRICT COURT

APR 11 2000
U.S. DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
DEPUTY

WOOD, SMITH, HENNING & BERMAN LLP
Attorneys at Law
801 SOUTH FIGUEROA, NINTH FLOOR
LOS ANGELES, CALIFORNIA 90017-2573
TELEPHONE 622-9300 ♦ FAX 622-9394

11 UNITED STATES OF AMERICA, ET AL.,)
12 Plaintiffs,)
13 v.)
14 J.B. STRINGFELLOW, ET AL.,)
15 Defendants.)

Case No. CV 83-2501-R
ORDER GRANTING SUMMARY JUDGMENT
Date: March 20, 2000
Time: 10:00 a.m.
Dept.: Courtroom 8
Hon. Manuel L. Real

17 The motion of Third-Party Defendant, Rockwool Industries, Inc. for summary judgment
18 came on regularly for hearing before this Court on March 20, 2000.

19 After considering the moving and opposition papers, arguments of counsel and all other
20 matters presented to the Court, IT IS HEREBY ORDERED THAT the motion is GRANTED.

21
22 DATED: *April 11*
~~March~~ *A*, 2000

[Signature]
HONORABLE MANUEL L. REAL

26 ✓ Docketed
27 ✓ Copies / NTC Sent
28 ✓ JS - 5 / JS - 6
✓ JS - 2 / JS - 3
✓ CLSD

THIS CONSTITUTES NOTICE OF ENTRY
AS REQUIRED BY FRCP, RULE 77(d).

3530

PROOF OF SERVICE BY MAIL
(C.C.P. § 1013a and § 2015.5)

I am employed in the County of Los Angeles, State of California; I am over the age of 18 years and not a party to the within action; my business address is 801 South Figueroa Street, Ninth Floor, Los Angeles, California 90017-2573.

On February 25, 2000, I served the foregoing document described as: **ORDER GRANTING SUMMARY JUDGMENT** on the interested parties in said action in a sealed envelope addressed as follows:

SEE ATTACHED SERVICE LIST

By Mail [Federal] I placed such envelope with postage thereon fully prepaid in the United States mail at Los Angeles, California.

By Mail [State] I am readily familiar with Wood, Smith, Henning & Berman's practice for the collection and processing of mail with the United States Postal Service; such envelope will be deposited with the United States Postal Service on the above date in the ordinary course of business at the business address shown above; and such envelope was placed for collection and mailing on the above date according to Wood, Smith, Henning & Berman's ordinary business practices.

Executed on **February 25, 2000**, at Los Angeles, California.

[State] I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

[Federal] I declare that I am employed in the office of a member of the bar of this Court at whose direction this service was made.



CATHY WALKER, Declarant

WOOD, SMITH, HENNING & BERMAN LLP
Attorneys at Law
801 SOUTH FIGUEROA, NINTH FLOOR
LOS ANGELES, CALIFORNIA 90017-2573
TELEPHONE 622-9300 • FAX 622-9394

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

SERVICE LIST

United States of America, et al. v. J.B. Stringfellow, Jr., et al.
USDC Case No. CV 83-2501-R

PLAINTIFFS:

1
2
3
4 Phillip Brooks, Esq.
United States Department of Justice
5 Environment and Natural Resources Division
6 Environmental Enforcement Section
P.O. Box 7611, Ben Franklin Sta.
7 Washington, D.C. 20044

8 Donald A. Robinson, Esq.
9 California Department of Justice
300 S. Spring St., Ste. 500
Los Angeles, CA 90013

10 Francis Breidenbach, Esq.
11 Howard L. Halm, Esq.
Breidenbach, Buckley, Huchting, Halm & Lambert
12 611 West Sixth St., 13th Floor
Los Angeles, CA 90017-3100

13 Darryl Doke, Esq.
14 Supervising Deputy Attorney General
State of California Department of Justice
1300 I St., Ste. 125
15 Sacramento, CA 95816

16 Thomas H. Pacheco, Esq.
17 Land and Natural Resources Division
Environmental Defense Section
301 Howard St., Ste. 870
18 San Francisco, CA 94105

19 Larry Lawton, Esq.
20 Superfund Attorney/Advisor
U.S. Air Force
21 Office of Regional Counsel
333 Market St., Ste. 625
San Francisco, CA 94104-2196

22 Jeanne Elias, Esq.
23 Office of Regional Counsel
U.S. Environmental Protection Agency
24 Region IX; Mail Drop ORC-3
75 Hawthorne St.
25 San Francisco, CA 94105

26 Steve Koyasako, Esq.
27 California Dept. of Toxic Substances Control
400 P Street
P.O. Box 806
28 Sacramento, CA 95814-0806

William Attwater, Esq., Chief Counsel
State Water Resources Control Board
901 P Street
Sacramento, CA 95814

Douglas P. Dixon, Esq.
U.S. Environmental Protection Agency
Office of Enforcement and Compliance Monitoring
401 M Street, S.W. LE-1345
Washington, D.C. 20460

DEFENDANTS/THIRD PARTY PLAINTIFFS

Lawrence A. Salibra, II, Esq.
Alcan Aluminum Corp.
6060 Parkland Blvd.
Mayfield, OH 44124-4185
Attys for Alcan Aluminum Corp.

Richard L. Brown, Esq.
Julander, Brown & Bollard
Two Park Plaza, Ste. 450
Irvine, CA 92614
Attys for Alcan Aluminum Corp.

David Peterson, Esq.
Troop Steuber Pasich Reddick & Tobey
2029 Century Park East, 24th Fl.
Los Angeles, CA 90067-3030
Attys for Alcan Aluminum Corp.; General Electric
Co.; McDonnell Douglas Corp.; National Distillers &
Chemical Corp.; NI Industries; Rheem Mfg. Co.;
Stauffer Chemical Corp.

Rene P. Tatro, Esq.
Craig Bloomgarden, Esq.
Tatro Coffino Zeavin Bloomgarden
1875 Century Park East, Ste. 1220
Los Angeles, CA 90067
Attys for Alumax, Inc.

Barry P. Goode, Esq.
Marilee Allan, Esq.
McCutchen, Doyle, Brown & Enersen
Three Embarcadero Center
San Francisco, CA 94111
Attys for BF Goodrich Aerospace (formerly Rohr,
Inc.)

WOOD, SMITH, HENNING & BERMAN LLP
ATTORNEYS AT LAW
801 SOUTH FIGUEROA, NINTH FLOOR
LOS ANGELES, CALIFORNIA 90017-2573
TELEPHONE 622-9300 ♦ FAX 622-9394

1 Howard B. Gest, Esq.
Jean A. Martin, Esq.
2 Sidley & Austin
555 West Fifth Street
3 Los Angeles, CA 90013-1010
Attys for BKK Corp.

4 Michael A. Kahn, Esq.
5 Thomas Koegel, Esq.
Folger Levin & Kahn LLP
6 Embarcadero Center West
275 Battery Street, 23rd Floor
7 San Francisco, CA 94111
Attys for The Deutsch Company

8 James A. Bruen, Esq.
9 Landels Ripley & Diamond LLP
350 The Embarcadero
10 San Francisco, CA 94105-1250
Attys for General Electric Co.
11 **(Special Counsel)**

12 Kenneth A. Moreno, Esq.
Murchison & Cumming
13 750 B Street, Ste. 2550
San Diego, CA 92101-4219
14 **Attys for Paul & Lucille Hubbs**

15 Allan J. Topol, Esq.
JoAnn Grossman, Esq.
16 Covington & Burling
1201 Pennsylvania Ave., NW
17 Washington, DC 20044
Attys for Masco Tech, Inc., (sued as NI Industries,
18 **Inc.; General Electric Co.; Millennium**
19 **Petrochemicals, Inc. (sued as National Distillers &**
20 **Chemical Corp., formerly Quantum Chemical**
21 **Corp.; Boeing North American (sued as Rockwell**
22 **International Corp.); Northrop Grumman Corp.**
23 **(sued as Northrop Corp.)**

24 Robert Dahlquist, Esq.
David J. Barrett, Esq.
Laham & Watkins
701 "B" St., Ste. 2100
San Diego, CA 92101-8197
Attys for Montrose Chemical Corp.

25 Howard J. Barnhorst, Esq.
Barnhorst, Schreiner & Goonan
26 550 West C St., Ste. 1350
San Diego, CA 92101-3509
27 **Attys for Montrose Chemical Corp.**
28

Clifford L. Schaffer, Esq.
Alexander Chen, Esq.
Schaffer & Lax
5757 Wilshire Blvd., Ste. 600
Los Angeles, CA 90036
Attys for Post Transportation

Daniel M. Crowley, Esq.
Booth Mitchell & Strange
3435 Wilshire Blvd., 30th Floor
Los Angeles, CA 90010-2897
Attys for Quemetco, Inc.

Robert E. Kelly, Jr., Esq.
Brian Drazich, Esq.
LaFollette, Johnson, DeHass, Fesler & Ames
865 S. Figueroa St., Ste. 3100
Los Angeles, CA 90017
Attys for Rainbow Canyon Manufacturing Corp.

Joseph D. Lonardo, Esq.
Jack Wilmer, Esq.
Vorys, Sater, Seymour & Pease
1828 L Street, NW, Ste. 111
Washington, DC 20036-5104
Attys for Stauffer Chemical Co., merged into Rhone-
Poulenc, Inc., sued herein as Stauffer Chemical Co.

Wilfrid Lemann, Esq.
Fullerton, Lemann & Schaefer
215 North "D" St., 1st Floor
San Bernardino, CA 92401-1701
Attys for Gwendolyn and William Stringfellow

Christopher P. Bisgaard, Esq.
John Shimada, Esq.
Lewis, D'Amato, Brisbois & Bisgaard
221 N. Figueroa St., Ste. 1200
Los Angeles, CA 90012
Attys for J.B. Stringfellow, Jr.; Stringfellow Quarry
Co.; Stringfellow Quarry Co., Inc.

Vincent Fish, Esq.
Law Offices of Vincent Fish
301 E. Colorado Blvd., Ste. 200
Pasadena, CA 91101
Attys for Weyerhaeuser Co.

Refugio Carrasco
UNABLE TO LOCATE
Capri Pumping Service

WOOD, SMITH, HENNING & BERMAN LLP
ATTORNEYS AT LAW
801 SOUTH FIGUEROA, 31ST FLOOR
LOS ANGELES, CALIFORNIA 90017-3573
TELEPHONE 622-9300 • FAX 622-9394

INTERVENORS

Laura Diamond, Esq.
Center for Law in the Public Interest
10951 West Pico Blvd., 3rd Floor
Los Angeles, CA 90064
Attys for Concerned Neighbors in Action, et al.

Lawrence S. Graven, Esq.
Graven, Perry, Block & Qualls
523 W. Sixth St., Suite 1130
Los Angeles, CA 90014-1109
Attys for Anadite, Inc.

John L. Erikson, Jr., Esq.
Jones Bell Abbott Fleming & Fitzgerald
601 S. Figueroa St., 27th Fl.
Los Angeles, CA 90017-5759
Attys for Atlas Galvanizing Co.

THIRD PARTY DEFENDANTS

Patrick L. Finley, Esq. and
Glynn & Finley
100 Pringle Ave., Suite 600
Walnut Creek, CA 94596
**Attys for Advanced Structures (a Division of
Whittaker Corporation); Aerojet-General
Corporation; Aeroscientific Corporation; Carrier
Corporation; City of Los Angeles, Department of
Water and Power; Day and Night Manufacturing
Company; The Garrett Corporation; Lockheed
Corp.; Morris P. Kirk and Son, Inc.; Purex
Corporation; Rich Steel Pickling Co.; The Tappan
Company; Whittaker Corporation, as successor in
interest to Telecomputing Corp., dba Advanced
Structures**

Robinson, Diamant, Brill & Klausner
1888 Century Park East, Suite 1500
Los Angeles, CA 90067
**Attys for Arco Energy Corporation (successor in
interest to U.S. Propellers, Inc.)**

Karen A. Jantzen, Esq.
Berger Kahn Shafton Moss Figler
Simon & Gladstone
2 Park Plaza, Suite 650
Irvine, CA 92614-8516
**Attys for Electro Optical Systems; Scientific Data
Systems; SDS Data Systems**

Sarah G. Flanagan, Esq. and
Pillsbury, Madison & Sutro
235 Montgomery Street
P.O. Box 7880
San Francisco, CA 94120-7880
**Attys for Alumin-Art Plating Co, Inc.; Modern
Plating Compan; Sargent-Fletcher Company**

Bruce E. Disenhouse, Esq.
Kinkle Rodiger and Spriggs
3333 Fourteenth Street
Riverside, CA 92501
**Attys for Fansteel, Inc. (As successor by merger to
Precision Sheet Metal, Inc.); Quaker chemical
Corporation**

David S. Poole, Esq.
Poole & Shaffery
445 S. Figueroa St., 27th Fl.
Los Angeles, CA 90071
Attys for American National Can Company

Robert A. Muhlbach, Esq.
Kirtland and Packard
1900 Avenue of the Stars, Suite 2600
Los Angeles, CA 90067-4301
**Attys for General Veneer Manufacturing Co.; Gould,
Inc.**

W. Reece Bader, Esq.
Orrick, Herrington and Sutcliffe
1020 Marsh Rd.
Menlo Park, CA 94025
Attys for Ameron, Inc.

Nancy O. Marutani, Esq.
Plotkin, Marutani & Kaufman
15060 Ventura Blvd., Ste. 490
Sherman Oaks, CA 91403-2426
Attys for George Industries

Steven C. Metzger, Esq.
Jane E. Dillinger, Esq.
Prager Metzger & Kroemer
2626 Cole Ave., Suite 900
Dalla, TX 75204
Attys for Anchor Post Products of California

Stephen T. Swanson, Esq. and
Walter Finestone & Richter
11601 Wilshire Blvd., Suite 1900
Los Angeles, CA 90025
Attys for Hughes Aircraft Co.; Spectrolab

WOOD, SMITH, HENNING & BERMAN LLP
ATTORNEYS AT LAW
801 SOUTH FIGUEROA, NINTH FLOOR
LOS ANGELES, CALIFORNIA 90017-2573
TELEPHONE 622-9300 • FAX 622-9394

1 Thor Pedersen
3875 Palm Drive
2 Thermal, CA 92274-7105
Attys for Karnes Industrial Tank; Sales

Russell Scott Woodward
7901 S. Painter Ave., Suite 5
Whittier, CA 90602-2401
Attys for Smick, Inc., dba Superior Pacific Galvanizing

3 Richard G. Reinjohn, Esq.
4 One Wilshire Blvd., Suite 2100
Los Angeles, CA 90017-3806
5 **Attys for Manufacturers Wire Company**

Dennis B. Hansen, Esq.
Overton, Lyman & Prince
520 S. Grand Ave.
Los Angeles, CA 90071
Attys for Strumpells, Inc. (California Avi-Tron)

6 David D. Cooke, Esq.
Beveridge & Diamond
7 One Sansome Street, Suite 3400
San Francisco, CA 94204
8 **Attys for McCulloch Corporation**

William J. McKim, Esq.
Assistant General Counsel
USX Corporation
600 Grant St., Room 1500
Pittsburgh, PA 15219-2749
Attys for USX Corporation

9 Woodrow W. Pollock, Jr., Esq. and
Springer & Pollock
10 100 W. 2nd St., Suite 210
Pomona, CA 91766
11 **Attys for Metal Preparations, Inc.**

Jeffrey D. Dintzer, Esq. and
Christopher H. Norton, Esq.
Gibson, Dunn & Crutcher
333 So. Grand Ave.
Los Angeles, CA 90071
Attys for Virco Mfg. Corporation (Virtue Bros. Mfg. Co.)

12 Fritz B. Max, Esq.
Waters, McCluskey & Boehle
13 3250 Ocean Park Blvd., Suite 300
Santa Monica, CA 90405-3208
14 **Attys for California Metal Enameling Co.**

Elliott Heide, Esq. and
Weston Benschhof Rochefort
Rubalcava & MacCuish
444 S. Flower St., 4th Floor
Los Angeles, CA 90071-2322
Attys for Wickes Manufacturing Co. (As successor in interest to Paul Hardeman, Inc.)

15 Deborah C. Prosser, Esq.
Burke Williams & Sorensen
16 3403 Tenth St., Suite 300
Riverside, CA 95201
17 **Attys for Northwest Mosquito and Vector Control District; Owens Illinois, Inc.**

18 Candace E. Kallberg, Esq. and
19 Schell & Delamer
888 S. Figueroa, Suite 1740
20 Los Angeles, CA 90017-0968
Attys for Oil & Solvent Process Co.

21 Marshall A. Rutter, Esq.
22 Olivia Goodkin, Esq.
Rutter Hobbs & Davidoff, Inc.
23 1900 Ave. Of the Stars, Suite 2700
Los Angeles, CA 90067
24 **Attys for Plessy Precision Metals, Inc.; Plessy Titanium Co., Inc.**

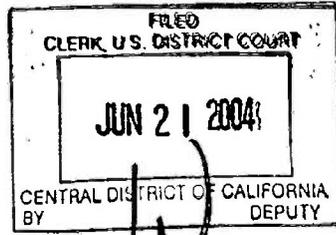
25 Bicoastal Corp.
26 1111 N. Westshore Blvd., Suite 200A
Tampa, FL 33607
27 **Attys for The Singer Company, as successor in interest to General Precision, Inc., N/K/A Bicoastal Corporation**
28

WOOD, SMITH, HENNING & BERMAN LLP
Attorneys at Law
801 SOUTH FIGUEROA, NINTH FLOOR
LOS ANGELES, CALIFORNIA 90017-2573
TELEPHONE 622-9300 * FAX 622-9394

send
ENTER
(closed)

1 THOMAS L. SANSONETTI
Assistant Attorney General
2 Environment and Natural Resources Division
United States Department of Justice
3 PHILLIP A. BROOKS
Environmental Enforcement Section
4 United States-Department of Justice

5 DEBRA W. YANG
United States Attorney
6 Central District of California
SUZETTE CLOVER
7 Assistant United States Attorney
Central District of California
8 312 North Spring Street
Los Angeles, California 90012
9 (213) 894-2442
CA Bar #89066



10 J. ANDREW HELMLINGER
11 Assistant Regional Counsel
United States Environmental Protection Agency
12 75 Hawthorne Street
San Francisco, California 94105
13 (415) 972-3904
CA Bar #212286

14 Counsel for the United States Environmental
15 Protection Agency

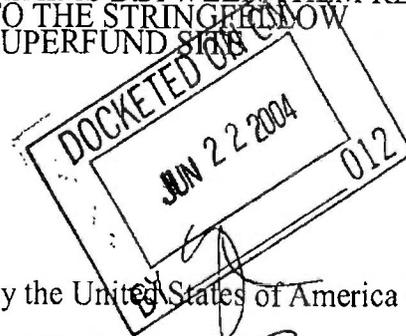
LOGGED

2004 FEB 19 11:35 AM
[Handwritten signature]

16 UNITED STATES DISTRICT COURT
17 CENTRAL DISTRICT OF CALIFORNIA

18
19 UNITED STATES OF AMERICA, et
al.,
20 Plaintiffs,
21 v.
22 J.B. STRINGFELLOW, JR., et al.,
23 Defendants.

CASE NO. CIV 83-2501 R
[PROPOSED] CONSENT DECREE
BETWEEN THE UNITED STATES OF
AMERICA AND THE SETTLING
DEFENDANTS RESOLVING ALL
CLAIMS BETWEEN THEM RELATED
TO THE STRINGFELLOW
SUPERFUND SITE



24 AND RELATED CROSS ACTIONS.

26 This Consent Decree is entered into by the United States of America (the
27 "United States") on behalf of the United States Environmental Protection Agency
28

[Handwritten signature]

1 (“EPA”) pursuant to Section 122 of the Comprehensive Environmental Response,
2 Compensation, and Liability Act of 1980, as amended (“CERCLA”), 42 U.S.C.
3 § 9622(h)(1), and pursuant to the authority of the Attorney General of the United
4 States to compromise and settle claims of the United States.

5 This Consent Decree is entered into by the United States and the Settling
6 Defendants (as that term is defined herein) to resolve the claims in this suit
7 regarding the Stringfellow Superfund Site, as set forth more specifically herein.
8 Each Party consents to and will not contest the authority of the United States to
9 enter into this Consent Decree.

10 **I. RECITALS**

11 1. Whereas, this Consent Decree concerns the Stringfellow Acid Pits
12 Superfund Remedial Site (the “Stringfellow Site”) located near Glen Avon,
13 California. The Stringfellow Site was a disposal facility for liquid industrial
14 wastes that operated from 1956 to 1972. The wastes received at the Stringfellow
15 Site were “Class 1 wastes,” many of which now are listed as “hazardous
16 substances” pursuant to CERCLA. The Stringfellow Site is a “facility” as defined
17 by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9);

18 2. Whereas, in 1983, the United States and the state of California (the “State”)
19 filed suit in the United States District Court for the Central District of California
20 (the “Court”) under CERCLA and other federal laws, seeking reimbursement of
21 response costs and injunctive relief from the defendants to remedy the release of
22 hazardous substances from the Stringfellow Site. The State also alleged state law
23 theories of liability seeking similar remedies. The suit alleged that the various
24 defendants alternatively had owned or operated, arranged for the disposal of
25 hazardous substances at, or transported hazardous substances to, the Stringfellow
26

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

FOR THE BOEING COMPANY (successor to Boeing North American, Inc., which was sued as Rockwell International Corporation); GENERAL ELECTRIC COMPANY; McDONNELL DOUGLAS CORPORATION; MILLENNIUM PETROCHEMICALS, INC. (successor of Quantum Chemical Company; sued as National Distillers and Chemical Corporation); NORTHROP GRUMMAN CORPORATION (formerly Northrop Corporation); and NI INDUSTRIES, INC. (an indirect subsidiary of TriMas Corporation)



By: _____ Date: 12/18/03

Allan J. Topol, Esq.
S. William Livingston, Jr., Esq.
Covington & Burling
1201 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2401

10-K 1 file001.htm FORM 10-K

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

Form 10-K

(Mark One)

 ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2003.

Or

 TRANSITION REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number 333-100351

TRIMAS CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

Delaware(State or Other Jurisdiction of
Incorporation or Organization)**38-2687639**(IRS Employer
Identification No.)**39400 Woodward Avenue, Suite 130
Bloomfield Hills, Michigan 48304**

(Address of Principal Executive Offices, Including Zip Code)

(248) 631-5450

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the Registrant is an accelerated filer (as defined in Rule 12b-2 of the Act).

Yes No

There is currently no public market for the Registrant's common stock.

As of March 25, 2004, the number of outstanding shares of the Registrant's common stock, \$.01 par value, was 20,010,000 shares.

TRIMAS CORPORATION INDEX

	<u>Page No.</u>
Forward Looking Statements	1
PART I.	
Item 1. Business	3
Item 2. Properties	18
Item 3. Legal Proceedings	19
Item 4. Submission of Matters to a Vote of Security Holders	20
PART II.	
Item 5. Market for Registrant's Common Equity and Related Stockholder Matters	21
Item 6. Selected Financial Data	21
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operation	23
Item 7A. Quantitative and Qualitative Disclosures about Market Risk	38
Item 8. Financial Statements and Supplementary Data	38
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	81
Item 9A. Controls and Procedures	81
PART III.	
Item 10. Directors and Executive Officers of the Registrant	82
Item 11. Executive Compensation	87
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	91
Item 13. Certain Relationships and Related Transactions	92
Item 14. Principal Accounting Fees and Services	95
PART IV.	
Item 15. Exhibits, Financial Statement Schedules, and Reports on Form 8-K	98
Signatures	99
Exhibit Index	

fragmented and is characterized by numerous smaller suppliers, even the largest of which tends to focus in narrow product categories. For instance, we believe that, across the various products that Cequent offers, only a few competitors maintain a significant or number-one market share in more than one specific product area. By comparison, Cequent competes on the basis of its broad range of products, the strength of its brands and distribution channels, as well as quality and price. Cequent's most significant competitors in towing products include Valley Automotive (AAS), Putnam Hitch Products and Curt Manufacturing. Cequent's trailer products competitors include Dutton-Lainson, Peterson, Atwood and Shelby, each of whom competes within one or at most a few categories of Cequent's broad trailer products portfolio.

Industrial Specialties

Our Industrial Specialties segment companies design and manufacture a range of industrial products for use in diverse niche markets, including construction, commercial, energy, medical and defense. Such products include precision tools, gaskets, cylinders, steel munitions casings, pressure sensitive tape and vapor barrier facings, and specialized engines. In general, these products are highly engineered, customer-specific items that are sold into niche markets with few competitors. These products are manufactured under several names, including Compac™, Lamons® Gasket, Norris Cylinder, Arrow® Engine, NI Industries, Keo® Cutters, Richards Micro-Tool, Cutting Edge Technologies and Reska Spline Products and, where useful, Industrial Specialties seeks to maintain the names for customer brand recognition.

Compac. Compac manufactures flame-retardant facings and jacketings and insulation tapes used in conjunction with fiberglass insulation as vapor barriers. These products are principally used for commercial, residential and industrial construction applications, and are sold to major manufacturers of fiberglass insulation. Compac's product line also includes pressure-sensitive specialty tape products that are marketed to insulation manufacturers, as well as to numerous other customers. Pressure-sensitive products for the insulation industry are utilized for sealing pipe jacketing, ducts and fiberglass wrappings to increase the efficiency and cost effectiveness of heating and cooling installations. Combined with facing and jacketing products, pressure-sensitive specialty tapes enable us to offer customers a complete systems approach to insulation installation. With important product positions in several specialty tape markets, we are expanding our presence in the industry utilizing an asphalt coater in residential insulation applications. Utilizing existing pressure-sensitive adhesive technologies, Compac continues to develop new product programs to expand its pressure-sensitive product positions into sub-segments of existing markets, including the electronics and transportation industries.

Lamons Gasket. Lamons manufactures and distributes metallic and nonmetallic industrial gaskets and complementary fasteners for refining, petrochemical and other industrial applications principally in the United States and Canada. Gaskets and complementary fasteners are supplied both for industrial original equipment manufacturers and maintenance repair operations. Gasket sales are made directly from the factory to major customers through twelve sales and service facilities in major regional markets, or through a large network of independent distributors. Lamons' overseas sales are either through Lamons' licensees or through its many distributors.

Norris Cylinder. We believe that Norris is one of a small number of North American manufacturers of a complete line of large and intermediate size, high-pressure and low-pressure steel cylinders for the

transportation, storage and dispensing of compressed gases. Norris' large high-pressure seamless compressed gas cylinders are used principally for shipping, storing and dispensing oxygen, nitrogen, argon, helium and other gases for industrial and health-care markets. In addition, Norris offers a complete line of low-pressure steel cylinders used to contain and dispense acetylene gas for the welding and cutting industries. Other products Norris produces include seamless low-pressure chlorine cylinders and ASME-approved accumulator cylinders primarily used for storing breathing air and nitrogen. Norris markets cylinders primarily to major industrial gas producers and distributors, welding equipment distributors and buying groups as well as equipment manufacturers.

Precision Tool Company. Precision Tool Company produces a variety of specialty precision tools such as combined drills and countersinks, NC spotting drills, key seat cutters, end mills, reamers, master gears and gages. Markets served by these products include the automotive, industrial, aerospace and medical industries. Precision Tool Company's Keo® brand is the market share leader in the industrial combined drill and countersink niche. Richards Micro-Tool is a leading supplier of miniature end mills to the tool-making industry. Richards Micro-Tool has also been successful in providing the growing medical device market with bone drills and reamers.

Arrow Engine. Arrow manufactures specialty engines, chemical pumps and engine replacement parts for

the oil and natural gas extraction and other industrial engine markets. Arrow is focused on new product development in the industrial engine spare parts market, selective acquisitions, expanding market share in the United States and Canadian markets for oilfield pumping and gas compression engines and expanding its marketing and distribution capabilities to new geographic regions outside the United States and Canada.

NI Industries. NI Industries manufactures large diameter shell casings provided to the United States government and foreign defense markets. We believe that NI Industries is a leading manufacturer in its product markets, due in part to its capabilities in the entire metal forming process from the acquisition of raw material to the design and fabrication of the final product. This gives NI Industries the flexibility and capacity to fully address the varied requirements of the munitions industry. The ability to form alloyed metals into the complex configurations needed to meet precise specifications in producing quality parts is a strength of this business. We believe that NI Industries is the only manufacturer in North America currently making deep drawn steel cartridge cases. NI Industries has the capability to manufacture mortars and projectiles as well as rocket and missile casings using both hot and cold forming methods. It also has a highly automated line capable of producing grenade bodies for the recently-improved design of munitions including the extended and guided multiple launch rocket systems.

Growth Opportunities

The businesses comprising the Industrial Specialties segment have opportunities to grow through the introduction of new products, entry into new markets, and the development of new customer opportunities to reduce costs and strategic acquisitions.

- *Introduction of New Products.* The Industrial Specialties segment has a history of successfully creating and introducing new products to drive growth and there are currently several significant new product initiatives underway. Compac has recently developed a new asphalt coating product to add to its existing line of products and has secured significant long term contracts that now absorb the majority of the machine capacity. Arrow Engine has recently developed new products in the area of industrial engine spare parts for various industrial engines, including selected engines manufactured by John Deere, Caterpillar, Waukesha, Ajax and Gemini. Norris has recently developed a lightweight, high volume acetylene cylinder for trailer applications and is in the process of developing a line of cylinders to be used in the scuba diving recreational market. Precision Tool Company is developing new products for use in the medical tool market.

12

-
- *Entry into New Markets and Development of New Customers.* The Industrial Specialties segment has many significant opportunities to grow its businesses by offering its products to new customers and new markets. Lamons is presently targeting both additional industries (pulp and paper, power plants, mining) and international expansion, including plans to ship directly from India and China, and plans to enter markets in Australia and South America. Compac has recently entered the residential construction market with its asphalt coated product and has attracted major new customers for its pressure sensitive tape products, including 3M and automotive suppliers. Arrow Engine is also expanding the markets it serves, with growth plans to enter markets in Russia, Eastern Europe, Asia and Africa. Norris is entering the recreational scuba tank marketplace and Precision Tool Company is entering the market for medical tools.
 - *Capitalize on Cost Savings Opportunities.* As the businesses in the Industrial Specialties segment expand and develop, we believe that there will be opportunities to reduce their cost structures by consolidating and streamlining manufacturing, overhead and administrative functions. Over the last three years, several businesses in the Industrial Specialties segment have undergone cost restructuring initiatives to further enhance profitability. This activity is ongoing, and several new projects are underway. Lamons is in the process of completing a major initiative to close several facilities and to consolidate several manufacturing, distribution, back office and sales functions into its Houston, Texas headquarters. Lamons' 11 gasket products manufacturing sites will be consolidated by moving a significantly higher share of manufacturing to our newly built, technologically-advanced gasket manufacturing facility in Houston, Texas and eliminating duplicative infrastructure activities. As a result of this consolidation, we believe that Lamons will generate significant savings from the rationalization of inefficient operations and the shift to centralized manufacturing using current information technology systems and third-party logistics vendors to provide parts just-in-time to customers. Compac is in the process of completing a state-of-the-art manufacturing facility in New Jersey. This new operation will combine two facilities currently operating today into one facility with a resulting gain of efficiency and cost reduction. This new facility has already started initial

unionized. At such date, approximately 11.4% of our employees were located outside the United States. We currently have union contracts covering 11 facilities worldwide (nine in the United States) and will be negotiating a collective bargaining agreement for certain employees at our Goshen, Indiana facility. The contracts covering approximately 120 employees at our Warren, Michigan (Reska) and Lakewood, Ohio (Lake Erie) facilities will expire and be renegotiated in 2004. Employee relations have generally been satisfactory. We cannot predict the impact of any further unionization of our workplace.

Seasonality; Backlog

Sales of towing and trailer products within Cequent are generally stronger in the second and third quarters, as trailer OEMs, distributors and retailers acquire product for the spring selling season. No other operating segment experiences significant seasonal fluctuation in its business. We do not consider backlog orders to be a material factor in our business.

Environmental Matters

Our operations are subject to federal, state, local and foreign laws and regulations pertaining to pollution and protection of the environment, health and safety, governing among other things, emissions

16

to air, discharge to waters and the generation, handling, storage, treatment and disposal of waste and other materials, and remediation of contaminated sites. We have been named as potentially responsible parties under CERCLA, the federal Superfund law, or similar state laws at several sites requiring cleanup based on disposal of wastes they generated. These laws generally impose liability for costs to investigate and remediate contamination without regard to fault and under certain circumstances liability may be joint and several resulting in one responsible party being held responsible for the entire obligation. Liability may also include damages to natural resources. We have entered into consent decrees relating to two sites in California along with the many other co-defendants in these matters. We have incurred substantial expenses for all these sites over a number of years, a portion of which has been covered by insurance. See Item 3. "Legal Proceedings", below. In addition to the foregoing, our businesses have incurred and likely will continue to incur expenses to investigate and clean up existing and former company-owned or leased property, including those properties made the subject of sale-leaseback transactions for which we have provided environmental indemnities to the lessor.

We believe that our business, operations and facilities are being operated in compliance in all material respects with applicable environmental and health and safety laws and regulations, many of which provide for substantial fines and criminal sanctions for violations. Based on information presently known to us and accrued environmental reserves, we do not expect environmental costs or contingencies to have a material adverse effect on us. The operation of manufacturing plants entails risks in these areas, however, and we may incur material costs or liabilities in the future that could adversely affect us. Potentially material expenditures could be required in the future. For example, we may be required to comply with evolving environmental and health and safety laws, regulations or requirements that may be adopted or imposed in the future or to address newly discovered information or conditions that require a response.

Intangibles And Other Assets

Our identified intangible assets, consisting of customer relationships, trademarks and trade names and technology, are valued at approximately \$322.7 million at December 31, 2003, net of accumulated amortization. We utilized an independent valuation expert to assist us in valuing our intangible assets. The valuation of each of the identified intangibles was performed using broadly accepted valuation methodologies and techniques.

Customer relationships — We have developed and maintained stable, long-term buying relationships with customer groups for specific branded products and/or niche market product offerings within each of our operating group segments. Useful lives of customer relationship intangibles range from six to forty years and have been estimated using historic customer retention and turnover data. Other factors contributing to estimated useful lives include the diverse nature of niche markets and products of which we have significant share, how customers in these markets make purchases and these customers' position in the supply chain.

Trademarks and Trade Names — Each of our operating groups designs and manufactures products for niche markets under various trade names and trademarks including Draw-Tite®, Reese®, Hidden Hitch®, Bulldog®, Tekonsha®, Highland The Pro's Brand®, Fulton®, Wesbar®, Lake Erie Screw™, Visu-Lok®, Poly-ViseGrip™, and FlexSpout® among others. Our trademark/trade name intangibles are well-established and considered long-

lived assets that require maintenance through advertising and promotion expenditures. Because it is our practice and intent to maintain and to continue to support, develop and market these trademarks/trade names in the future, we consider such intangible assets to have an indefinite life.

Technology— We hold a number of United States and foreign patents, patent applications, and unpatented or proprietary product and process oriented technologies, particularly within Rieke Packaging Systems and Cequent Transportation Accessories. We have, and will continue to dedicate, technical resources toward the further development of our products and processes in order to maintain our competitive position in the transportation, industrial and commercial markets that we serve. Estimated useful lives for our technology intangibles range from five to thirty years and are determined in part by any legal, regulatory, or contractual provisions that limit useful life. Other factors considered include the

17

expected use of the technology by the operating groups, the expected useful life of the product and/or product programs to which the technology relates, and the rate of technology adoption by the industry.

Annually, or as conditions may warrant, we assess whether the value of our identified intangibles has been impaired. Factors considered in performing this assessment include current operating results, business prospects, customer retention, market trends, potential product obsolescence, competitor activities and other economic factors. We continue to invest in maintaining customer relationships, trademarks and trade names, and the design, development and testing of proprietary technologies that we believe will set our products apart from those of our competitors.

International Operations

Approximately 17.7% of our net sales for the fiscal year ended December 31, 2003 were derived from sales by our subsidiaries located outside of the United States, and we may significantly expand our international operations through acquisitions. In addition, approximately 14.5% of our operating net assets as of December 31, 2003 were located outside of the United States. We operate manufacturing facilities in Australia, Canada, England, Germany, Italy, Mexico and the United Kingdom. Within Australia, we operate three facilities that manufacture and distribute hitches, towing accessories and roof rack systems with approximately 220 employees. Our Canadian operations, with approximately 140 employees, include the production and distribution of towing products through Cequent, distribution of closures and dispensing products through Rieke's U.S. operations, and the manufacturing and distribution of gaskets produced in three gasket facilities. Within the United Kingdom, Rieke Packaging Systems Ltd. has approximately 340 employees. Englass produces specialty sprayers, pumps and related products in one facility in the U.K. TOV, a manufacturer of specialty steel industrial container closures, operates in one location in Italy. In Germany, Stolz has one facility that manufactures a wide variety of closures for industrial packaging markets. In Mexico, we conduct contract manufacturing of Cequent's electrical products and accessories, as well as metal fabrication. Additionally, Rieke's Mexico City operations produces steel and plastic drum closures and dispensing products in one factory. For information pertaining to the net sales and operating net assets attributed to our international operations, refer to Note 18, "Segment Information," to the financial statements included in this report.

Sales outside of the United States, particularly sales to emerging markets, are subject to various risks that are not present in sales within U.S. markets, including governmental embargoes or foreign trade restrictions such as antidumping duties, changes in U.S. and foreign governmental regulations, tariffs and other trade barriers, the potential for nationalization of enterprises, foreign exchange risk and other political, economic and social instability. In addition, there are tax inefficiencies in repatriating portions of our cash flow from non-U.S. subsidiaries.

Item 2. Properties

Our principal manufacturing facilities range in size from approximately 10,000 square feet to approximately 380,000 square feet. Except as set forth in the table below, all of our manufacturing facilities are owned. The leases for our manufacturing facilities have initial terms that expire from 2003 through 2022 and are all renewable, at our option, for various terms, provided that we are not in default under the lease agreements. Substantially all of our owned U.S. real properties are subject to liens under our amended and restated credit facility. Our executive offices are located in Bloomfield Hills, Michigan under a lease assumed by us from Heartland under a term that expires in June 2010. See Item 13. "Certain Relationships and Related Transactions." Our buildings, machinery and equipment have been generally well maintained, are in good operating condition and are adequate for current production requirements. We may enter into leases for equipment in lieu of making

capital expenditures to acquire such equipment or to reduce debt.

The following list sets forth the location of our principal owned and leased manufacturing and other facilities and identifies the principal operating segment utilizing such facilities. Multiple references to the same location denote separate facilities or multiple activities in that location.

18

<u>Rieke Packaging Systems</u>	<u>Coquent Transportation Accessories</u>	<u>Industrial Specialties</u>	<u>Fastening Systems</u>
<i>United States:</i>	<i>United States:</i>	<i>United States:</i>	<i>United States:</i>
Indiana:	Indiana:	California:	California:
Auburn	Albion	Riverbank(2)	Commerce(1)
Hamilton(1)	Elkhart	Vernon	Illinois:
<i>International:</i>	Goshen(1)	Massachusetts:	Wood Dale(1)
Germany:	South Bend	Plymouth(1)	Indiana:
Neunkirchen	Michigan:	Michigan:	Frankfort(1)
Italy:	Tekonsha(1)	Warren(1)	Michigan:
Valmadrera	Plymouth	New Jersey:	Livonia(1)
Mexico:	Pennsylvania:	Edison(1)	Ohio:
Mexico City	Sheffield	Hackettstown(1)	Lakewood
United Kingdom:	Wisconsin:	Netcong	
Leicester	Mosinee(1)	Oklahoma:	
China:	Wausau	Tulsa	
Hangzhou(1)	Schofield	Texas:	
	Ohio:	Houston(1)	
	Solon	Longview	
	<i>International:</i>	<i>International:</i>	
	Australia:	Canada:	
	Dandenmong, Victoria	Fort Erie, Ontario(1)	
	Regents Park,	Sarnia, Ontario(1)	
	New South Wales(1)		
	Wakerley,		
	Queensland(1)		
	Canada:		
	Huntsville, Ontario		
	Oakville, Ontario		
	Mexico:		
	Juarez(1)		
	Reynosa		

(1) Represents a leased facility. All such leases are operating leases.

(2) Owned by U.S. Government, operated by our NI Industries business under a facility maintenance contract.

We have entered into sale-leaseback transactions with respect to 12 real properties in the United States and Canada. In general, pursuant to the terms of each sale-leaseback transaction, we transferred title of the real property to a purchaser and, in turn, entered into separate leases with the purchaser having a 20-year basic lease term plus two separate ten-year renewal options. The renewal option must be exercised with respect to all, and not less than all, of the property locations. Rental payments are due monthly. All of the foregoing leases are accounted for as operating leases. Our Livonia, Michigan facility is subject to a previous sale-leaseback by Metaldyne having terms comparable to the foregoing.

Item 3. Legal Proceedings

A civil suit was filed in the United States District Court for the Central District of California in April 1983 by the United States of America and the State of California under CERCLA, commonly known as "Superfund," against over 30 defendants, including us, for alleged release into the environment of hazardous substances disposed of at the Stringfellow Disposal Site in California. The plaintiffs have requested, among other things, that the defendants clean up the contamination at that site. A consent decree has been entered into by the plaintiffs and the defendants, including us, providing that the consenting parties perform partial remediation at the site. The State of California has agreed to take over clean-up of the site, as well as responsibility for governmental entities' past response costs. We estimate that we will have no share of the clean-up expense at this site. The plaintiffs had sought other relief such as reimbursement of response costs and injunctive relief from the defendants under

CERCLA and other similar state law theories, but the consent decree governs the remedy.

19

Another civil suit was filed in the United States District Court for the Central District of California in December 1988 by the United States of America and the State of California against more than 180 defendants, including us, for alleged release into the environment of hazardous substances disposed of at the Operating Industries, Inc. site in California. This site served for many years as a depository for municipal and industrial waste. The plaintiffs have requested, among other things, that the defendants clean up the contamination at that site. Consent decrees have been entered into by the plaintiffs and a group of the defendants, including us, providing that the consenting parties perform certain remedial work at the site and reimburse the plaintiffs for certain past costs incurred by the plaintiffs at the site. We estimate that our share of the clean-up will not exceed \$500,000, for which we have insurance proceeds. Plaintiffs had sought other relief such as damages arising out of claims for negligence, trespass, public and private nuisance, and other causes of action, but the consent decree governs the remedy.

While, based upon our present knowledge and subject to future legal and factual developments, we do not believe that any of these litigations will have a material adverse effect on our financial position, results of operations or cash flow, future legal and factual developments may result in materially adverse expenditures.

As of March 16, 2004, we were a party to approximately 829 pending cases involving an aggregate of approximately 34,423 claimants alleging personal injury from exposure to asbestos containing materials formerly used in gaskets (both encapsulated and otherwise) manufactured or distributed by certain of our subsidiaries for use in the petrochemical refining and exploration industries. In addition, we acquired various companies to distribute our products that had distributed gaskets of other manufacturers prior to acquisition. We believe that many of our pending cases relate to locations at which none of our gaskets were distributed or used. Total settlement costs (exclusive of defense costs) for all such cases, some of which were filed over 12 years ago, have been approximately \$2.0 million. We do not have significant primary insurance to cover our settlement and defense costs. We believe that significant coverage under excess insurance policies of former owners is available to us, but we are in the process of reconstructing the documentation for these policies, and such insurance may not be available. Based upon our experience to date and other available information (including the availability of excess insurance), we do not believe that these cases will have a material adverse effect on our financial condition or future results of operations. However, we may be subjected to significant additional claims in the future, the cost of settling cases in which product identification can be made may increase, and we may be subjected to further claims in respect of the former activities of our acquired gasket distributors.

We are subject to other claims and litigation in the ordinary course of our business, but do not believe that any such claim or litigation will have a material adverse effect on our financial position or results of operations.

Item 4. Submission of Matters to a Vote of Security Holders

None.

20

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

No trading market for the Company's common stock exists. We did not pay dividends in 2003 and except for the dividend paid to Metaldyne in connection with the June 6, 2002 common stock issuance and related financing transactions, we did not pay dividends in 2002 on our common stock. Our current policy is to retain earnings to repay debt and finance our operations and acquisition strategies. In addition, our credit facility restricts the payment of dividends on common stock. See the discussion under Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources" and Note 12 to the Company's consolidated financial statements captioned "Long-term Debt," included in Item 8 of this report.

13. Leases

TriMas leases certain equipment and plant facilities under non-cancelable operating leases. Rental expense for TriMas totaled approximately \$16.2 million in 2003, \$8.4 million in 2002 and \$4.6 million in 2001.

During 2003, the Company entered into sale-leaseback arrangements with third-party lenders for certain of its machinery and equipment and facilities. These leases are accounted for as operating leases. The Company has an eight year lease term with respect to machinery and equipment which requires annual lease payments of approximately \$8.4 million. The Company has a fifteen year lease term with respect to a leaseback of three facilities which require annual lease payments of approximately \$1.7 million. The proceeds from these transactions were applied against outstanding balances under the Company's revolving credit facility. In connection with these sale-leaseback transactions, the Company recognized losses in the first and second quarters of 2003 of approximately \$18.1 million and a deferred gain of approximately \$4.6 million in the third quarter of 2003. The loss on disposition of property and equipment is separately identified in the accompanying statement of operations for all periods presented while the deferred gain is included in other long-term liabilities in the accompanying balance sheet and is being amortized to income over the life of the respective lease.

Minimum payments for operating leases having initial or remaining non-cancelable lease terms in excess of one year at December 31, 2003 are summarized below:

Year ended December 31:	<u>(in thousands)</u>
2004	\$ 24,120
2005	22,180
2006	20,690
2007	19,160
2008	17,990
Thereafter	<u>102,580</u>
Total	<u>\$206,720</u>

In the first quarter 2002, as part of financing arranged by Metaldyne and Heartland, the Company entered into sale-leaseback arrangements with a third-party lender for certain facilities utilized by the Company. The 20 year lease term continues until 2022 and requires annual lease payments of approximately \$2.7 million per year. The proceeds from these transactions were applied against the Metaldyne Corporation net investment and advance balance. Because Metaldyne provided the third-party lender with a guarantee of the Company's lease obligations, these lease arrangements were accounted for as capitalized leases and lease obligations approximating \$19 million at March 31, 2002 were recorded in long-term debt.

As a result of the recapitalization and related financing transactions completed during the second quarter of 2002, Metaldyne no longer guarantees the Company's lease obligations with the third party

TRIMAS CORPORATION NOTES TO FINANCIAL STATEMENTS (Continued)

lender. Subsequent to June 6, 2002, the Company accounts for these lease transactions as operating leases. During the quarter ended June 30, 2002, the Company eliminated the capitalized lease obligation and related capitalized lease assets.

14. Commitments and Contingencies

A civil suit was filed in the United States District Court for the Central District of California in April 1983 by the United States of America and the State of California under the federal superfund law against over 30 defendants, including the Company, for alleged release into the environment of hazardous substances disposed of at the Stringfellow Disposal Site in California. The plaintiffs have requested, among other things, that the defendants clean up the contamination at that site. A consent decree has been entered into by the plaintiffs and the defendants, including us, providing that the consenting parties perform partial remediation at the site. The State of California has agreed to take over clean-up of the site, as well as responsibility for governmental entities' past response costs.

Another civil suit was filed in the United States District Court for the Central District of California in December 1988 by the United States of America and the State of California against more than 180 defendants, including TriMas, for alleged release into the environment of hazardous substances disposed of at the Operating Industries, Inc. site in California. This site served for many years as a depository for municipal and industrial waste. The plaintiffs have requested, among other things, that the defendants clean up contamination at that site. Consent decrees have been entered into by the plaintiffs and a group of defendants, including TriMas, providing that the consenting parties perform certain remedial work at the site and reimburse the plaintiffs for certain past costs incurred by the plaintiffs at the site.

As of March 16, 2004, the Company is party to approximately 829 pending cases involving approximately 34,423 claimants alleging personal injury from exposure to asbestos containing materials formerly used in gaskets (both encapsulated and otherwise) manufactured or distributed by certain of our subsidiaries for use in the petrochemical refining and exploration industries. The Company believes that many of the pending cases relate to locations at which none of our gaskets were distributed or used. In addition, TriMas acquired various companies to distribute the Company's products that distributed gaskets of other manufacturers prior to acquisition. Total settlement costs (exclusive of defense costs) for all such cases, some of which were filed over 12 years ago, have been approximately \$2.0 million. Based upon the Company's experience to date and other available information (including the availability of excess insurance), the Company does not believe that these cases will have a material adverse effect on its financial condition or future results of operations. However, we may be subjected to significant additional claims in the future, the cost of settling cases in which product identification can be made may increase and we may be subjected to further claims with respect to the former activities of our acquired gasket distributors.

The Company has provided reserves based upon its present knowledge and, subject to future legal and factual developments, does not believe that the ultimate outcome of any of the aforementioned litigations will have a material adverse effect on its consolidated financial position and future results of operations and cash flows. However, there can be no assurance that future legal and factual developments will not result in a material adverse impact on our financial condition and future results of operations.

The Company is subject to other claims and litigation in the ordinary course of business, but does not believe that any such claim or litigation will have a material adverse effect on the Company's financial position or results of operations.

15. Related Parties

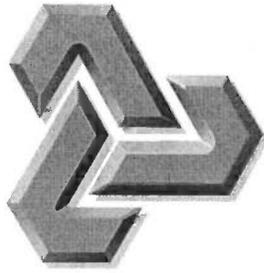
Metaldyne Corporation

Prior to June 6, 2002, the Company was wholly-owned by Metaldyne and participated in joint activities including employee benefits programs, legal, treasury, information technology and other general corporate activities.

TRIMAS CORPORATION NOTES TO FINANCIAL STATEMENTS (Continued)

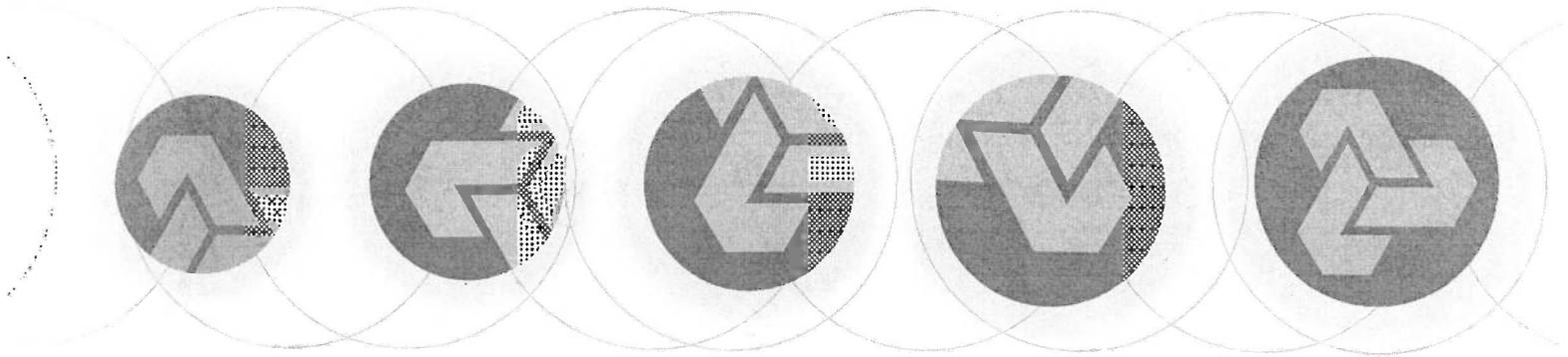
In connection with the common stock issuance and related financing transactions, TriMas assumed approximately \$37.0 million of liabilities and obligations of Metaldyne, mainly comprised of contractual obligations to former TriMas employees, tax related matters, benefit plan liabilities and reimbursements to Metaldyne for normal course payments to be made on TriMas' behalf. Payments made with respect to these obligations approximated \$6.4 million and \$15.1 million in 2003 and 2002, respectively. During 2003, the Company also settled a net amount of approximately \$4.1 million of the assumed contractual obligations. The remaining assumed liabilities of approximately \$11.4 million are payable at various dates in the future and are reported as Due to Metaldyne in the accompanying balance sheet at December 31, 2003.

Subject to certain limited exceptions, Metaldyne, on the one hand, and we, on the other hand, retained the liabilities associated with our respective businesses. Accordingly, we will indemnify and hold harmless Metaldyne from all liabilities associated with us and our subsidiaries and our respective operations and assets, whenever conducted, and Metaldyne will indemnify and hold Heartland and us harmless from all liabilities associated with Metaldyne and its subsidiaries (excluding us and our subsidiaries) and their respective operations and assets, whenever conducted. In addition, we agreed with Metaldyne to indemnify one another for our allocated share (42.01%) of liabilities not readily associated with either business, or otherwise addressed



TRIMAS

C O R P O R A T I O N



Applied Technology

Diversified

Customer Focused

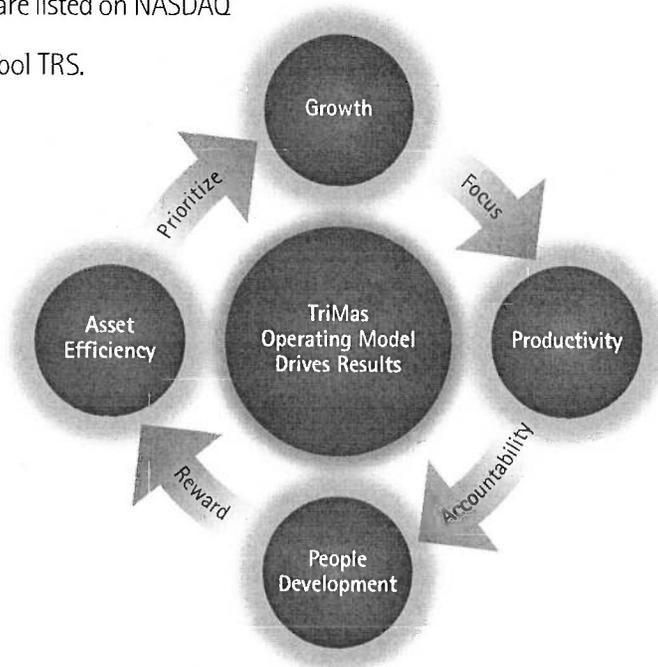
TriMas Corporation is a diversified manufacturer of engineered and applied products that serve a variety of industrial, commercial and consumer end markets worldwide. We are principally engaged in five reportable segments: Packaging, Energy, Aerospace & Defense, Engineered Components and Cequent. TriMas has been providing its customers with outstanding products and services that reflect the Company's commitment to market leadership, innovation and operational excellence. With headquarters in Bloomfield Hills, Michigan, TriMas has approximately 3,900 employees at more than 60 different facilities in 11 countries. TriMas Corporation's shares are listed on NASDAQ under the ticker symbol TRS.

TriMas is committed to enhancing enterprise value.

The TriMas Operating Model is the framework around which we are building a better Company, enabling each of our businesses to reach higher levels of performance through:

- Disciplined and prioritized growth and capital deployment
- Company-wide efficiency via lean and cycle-time initiatives
- Talented and high-performing teams with clear goals and empowerment

...All building a culture of continuous improvement.



of competing suppliers. In addition to raw materials, we purchase a variety of components and finished products from low-cost sources in China, Taiwan and India.

Steel is purchased primarily from steel mills and service centers with pricing contracts principally in the three to six month time frame. Changing global dynamics for steel production and supply will continue to present a challenge to our business. Polyethylene is generally a commodity resin with multiple suppliers capable of providing product. While both steel and polyethylene are readily available from a variety of competing suppliers, our business has experienced, and we believe will continue to experience, volatility in the costs of these raw materials

Employees and Labor Relations

As of December 31, 2009, we employed approximately 3,900 people, of which approximately 27% were unionized and approximately 48% were located outside the U.S. We currently have collective bargaining agreements covering eight facilities worldwide for our continuing operations, five of which are in the U.S. In the fourth quarter of 2009, we concluded negotiations on two union collective bargaining agreements in our Cequent segment that were set to expire. Negotiations were concluded prior to the expiration dates of the collective bargaining agreements without work stoppages or strikes. There have been six contracts renegotiated in 2009 without any strikes, work stoppages or slowdowns. Employee relations have generally been satisfactory.

Seasonality and Backlog

There is some seasonality in our Cequent segment. Sales of towing and trailer products within these business segments are generally stronger in the second and third quarters as trailer OEMs, distributors and retailers acquire product for the spring and summer selling seasons. No other operating segment experiences significant seasonal fluctuation in its business. We do not consider sales order backlog to be a material factor in our business.

Environmental Matters

Our operations are subject to federal, state, local and foreign laws and regulations pertaining to pollution and protection of the environment, health and safety, governing among other things, emissions to air, discharge to waters and the generation, handling, storage, treatment and disposal of waste and other materials, and remediation of contaminated sites. We have been named as a potentially responsible party under CERCLA, the federal Superfund law, or similar state laws at several sites requiring clean-up related to the disposal of wastes we generate. These laws generally impose liability for costs to investigate and remediate contamination without regard to fault and under certain circumstances liability may be joint and several resulting in one responsible party being held responsible for the entire obligation. Liability may also include damages to natural resources. We have entered into consent decrees relating to two sites in California along with the many other co-defendants in these matters. We have incurred substantial expenses for these sites over a number of years, a portion of which has been covered by insurance. In addition to the foregoing, our businesses have incurred and likely will continue to incur expenses to investigate and clean up existing and former company-owned or leased property, including those properties made the subject of sale-leaseback transactions for which we have provided environmental indemnities to the lessors.

At our currently owned property located in Vernon, California, we expect to incur expenses to investigate the environmental conditions associated with historical operations of N.I. Industries and/or its tenants. Preliminary site assessment information indicates that further investigation will be necessary in order to determine whether remediation or controls will be required beyond those that had been previously approved by the governing regulatory authority, and if so, to develop an estimate of the likely costs thereof.

awards and settlements paid. We also may incur significant litigation costs in defending these matters in the future. We may be required to incur additional defense costs and pay damage awards or settlements or become subject to equitable remedies that could adversely affect our businesses.

Our business may be materially and adversely affected by compliance obligations and liabilities under environmental laws and regulations.

We are subject to federal, state, local and foreign environmental laws and regulations which impose limitations on the discharge of pollutants into the ground, air and water and establish standards for the generation, treatment, use, storage and disposal of solid and hazardous wastes, and remediation of contaminated sites. We may be legally or contractually responsible or alleged to be responsible for the investigation and remediation of contamination at various sites, and for personal injury or property damages, if any, associated with such contamination. We have been named as potentially responsible parties under CERCLA (the federal Superfund law) or similar state laws in several sites requiring clean-up related to disposal of wastes we generated. These laws generally impose liability for costs to investigate and remediate contamination without regard to fault and under certain circumstances liability may be joint and several resulting in one responsible party being held responsible for the entire obligation. Liability may also include damages to natural resources. We have entered into consent decrees relating to two sites in California along with the many other co-defendants in these matters. We have incurred substantial expenses for each of these sites over a number of years, a portion of which has been covered by insurance. In addition to the foregoing, our businesses have incurred and likely will continue to incur expenses to investigate and clean up existing and former company-owned or leased property, including those properties made the subject of sale-leaseback transactions for which we have provided environmental indemnities to the lessors. Additional sites may be identified at which we are a potentially responsible party under the federal Superfund law or similar state laws. We must also comply with various health and safety regulations in the U.S. and abroad in connection with our operations.

We believe that our business, operations and facilities are being operated in compliance in all material respects with applicable environmental and health and safety laws and regulations, many of which provide for substantial fines and criminal sanctions for violations. Based on information presently known to us and accrued environmental reserves, we do not expect environmental costs or contingencies to have a material adverse effect on us. The operation of manufacturing plants entails risks in these areas, however, and we may incur material costs or liabilities in the future that could adversely affect us. There can be no assurance that we have been or will be at all times in substantial compliance with environmental health and safety laws. Failure to comply with any of these laws could result in civil, criminal, monetary and non-monetary penalties and damage to our reputation. In addition, potentially material expenditures could be required in the future. For example, we may be required to comply with evolving environmental and health and safety laws, regulations or requirements that may be adopted or imposed in the future or to address newly discovered information or conditions that require a response.

Our growth strategy includes the impact of acquisitions. If we are unable to identify attractive acquisition candidates, successfully integrate acquired operations or realize the intended benefits of our acquisitions, we may be adversely affected.

One of our principal growth strategies is to pursue strategic acquisition opportunities. Since our separation from Metaldyne in June 2002, we have completed eleven acquisitions. Each of these acquisitions required integration expense and actions that negatively impacted our results of operations and that could not have been fully anticipated beforehand. In addition, attractive acquisition candidates may not be identified and acquired in the future, financing for acquisitions may be unavailable on satisfactory terms and we may be unable to accomplish our strategic objectives in effecting a particular acquisition. We may encounter various risks in acquiring other companies, including the possible inability to integrate an acquired business into our operations, diversion of management's attention and

EXHIBIT 3.G-2

CITY OF ALHAMBRA
BUILDING DEPARTMENT

BUILDING
APPLICATION FOR PERMIT

PERMIT NO. <i>A 29178</i>	PLAN NO. <i>Attached</i>	P. C. NO.	GROUP	TYPE	USE ZONE
DATE ISSUED <i>5-23-63</i>	READY FOR INSPECTION	FIRE ZONE	SET BACK FOR ST. WIDENING	SET BACK FOR USE ZONE	
JOB ADDRESS <i>715 S. Raymond</i>			DESCRIPTION OF WORK		
LOT <i>13414</i> BLOCK <i>5</i> TRACT <i>#1 Dodge</i>			USE OF BUILDING <i>Test Lab. Added inside of bldg</i>		
SIZE OF LOT			CORRECTIONS		
OWNER	NAME <i>Norris Thymader Mfg Co</i>		FOUNDATION:		
	ADDRESS <i>52nd & District</i>				
	CITY <i>Vernon</i> PHONE <i>Pu 38831</i>		ROUGH FRAME:		
CONTRACTOR	NAME <i>Maintenance</i>		FINAL:		
	ADDRESS				
	CITY				
	STATE LICENSE NO. PHONE		APPROVALS		
ARCHITECT OR ENGINEER	NAME		TOILET		
	ADDRESS		FOUNDATION AND MAT'L		
	CITY		CHIMNEY		
	STATE LICENSE NO. PHONE		ROUGH FRAME <i>5-20-63</i> <i>DE</i>		
			FINAL		
NEW	NO. OF FAMILIES				
ALTERATION	NO. OF ROOMS				
ADDITION <input checked="" type="checkbox"/>	SIZE OF BLDG. <i>11' x 21'</i>				
REPAIR	STORIES <i>1</i>				
MOVE	EXTERIOR WALL COVERING <i>-</i>				
DEMOLISH	ROOF COVERING <i>-</i>				
I HEREBY CERTIFY THAT ALL WORK WILL BE BUILT TO CONFORM TO ALHAMBRA ORDINANCES AND CALIFORNIA STATE LAWS APPLICABLE THERETO: THAT I HAVE CAREFULLY EXAMINED THE ABOVE APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT.					
SIGNATURE OF OWNER OR AUTHORIZED AGENT <i>Edu. J. Barthelemy</i>					
VALUATION \$ <i>\$150</i>	PERMIT FEE \$				

FORM 221

CITY OF ALHAMBRA
BUILDING DEPARTMENT

BUILDING
APPLICATION FOR PERMIT

PERMIT NO. <i>A6978</i>	PLAN NO. <i>8921</i>	P. C. NO. <i>A6978</i>	GROUP	TYPE	USE ZONE
DATE ISSUED <i>8-21-58</i>		READY FOR INSPECTION	FIRE ZONE	SET BACK FOR ST. WIDENING	SET BACK FOR USE ZONE
JOB ADDRESS <i>715 So RAYMOND</i>			DESCRIPTION OF WORK <i>Paint - Booth</i> <i>Regress pit</i>		
LOT <i>13</i> BLOCK <i>5</i> TRACT <i>Adly #1</i>					
SIZE OF LOT			CORRECTIONS		
OWNER	NAME <i>THERMADOR ELEC 1976</i>				
	ADDRESS <i>715 So RAYMOND</i>				
CONTRACTOR	CITY <i>ALHAMBRA</i> PHONE <i>CU 38831</i>				
	NAME <i>OWNER</i>				
	ADDRESS				
	CITY				
ARCHITECT OR ENGINEER	STATE LICENSE NO.				
	PHONE				
	NAME				
	ADDRESS				
CITY		ROUGH FRAME:			
STATE LICENSE NO.					
PHONE					
NAME					
ADDRESS		FINAL:			
CITY					
STATE LICENSE NO.					
PHONE					
NEW	NO. OF FAMILIES		APPROVALS		
ALTERATION	NO. OF ROOMS				
ADDITION	SIZE OF BLDG.				
REPAIR	STORIES				
MOVE	EXTERIOR WALL COVERING				
DEMOLISH	ROOF COVERING				
I HEREBY CERTIFY THAT ALL WORK WILL BE BUILT TO CONFORM TO ALHAMBRA ORDINANCES AND CALIFORNIA STATE LAWS APPLICABLE THERETO; THAT I HAVE CAREFULLY EXAMINED THE ABOVE APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT.					
SIGNATURE OF OWNER OR AUTHORIZED AGENT <i>Thermador Elec Corp</i> <i>John R. Angleton</i>			TOILET <i>PAINT Booth 9-25-58</i> <i>AS</i>	FOUNDATION AND MAT'L <i>Found 8-22-58</i> <i>SM</i>	
VALUATION \$ <i>2100.00</i>			CHIMNEY	ROUGH FRAME	
PERMIT FEE \$			ROUGH FRAME	FINAL <i>9-25-58</i> <i>SM</i>	

**CITY OF ALHAMBRA
BUILDING DEPARTMENT**

**BUILDING
APPLICATION FOR PERMIT**

PERMIT NO. <i>0-4807</i>	PLAN NO.	P. C. NO. <i>0-4807</i>	GROUP	TYPE	USE ZONE
DATE ISSUED <i>4-1-58</i>	READY FOR INSPECTION	FIRE ZONE	SET BACK FOR ST. WIDENING	SET BACK FOR USE ZONE	

JOB ADDRESS *715 RAYMOND AVE*

LOT BLOCK TRACT

SIZE OF LOT

OWNER
NAME *Thermador Elect Mfg*
ADDRESS *519 District Blvd.*
CITY *Los Angeles* PHONE *LU: 86131*

CONTRACTOR
NAME
ADDRESS
CITY
STATE LICENSE NO. PHONE

ARCHITECT OR ENGINEER
NAME
ADDRESS
CITY
STATE LICENSE NO. PHONE

NEW	NO. OF FAMILIES
ALTERATION <input checked="" type="checkbox"/>	NO. OF ROOMS
ADDITION	SIZE OF BLDG.
REPAIR	STORIES
MOVE	EXTERIOR WALL COVERING
DEMOLISH	ROOF COVERING

I HEREBY CERTIFY THAT ALL WORK WILL BE BUILT TO CONFORM TO ALHAMBRA ORDINANCES AND CALIFORNIA STATE LAWS APPLICABLE THERETO: THAT I HAVE CAREFULLY EXAMINED THE ABOVE APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT.

SIGNATURE OF OWNER OR AUTHORIZED AGENT *William E. Garra T.E.*

VALUATION *1250.00* PERMIT FEE \$ *8.00*

DESCRIPTION OF WORK
Pit for VACUUM TANKS

USE OF BUILDING

CORRECTIONS

FOUNDATION:

ROUGH FRAME:

FINAL:

APPROVALS

TOILET	
FOUNDATION AND MAT'L	
CHIMNEY	
ROUGH FRAME	<i>4-9-58</i>
FINAL	<i>5-8-58</i>

**CITY OF ALHAMBRA
BUILDING DEPARTMENT**

**BUILDING
APPLICATION FOR PERMIT**

PERMIT NO. <i>1681</i>	PLAN NO.	P. C. NO. <i>09681</i>	GROUP	TYPE	USE ZONE
DATE ISSUED <i>3-24-58</i>	READY FOR INSPECTION		FIRE ZONE	SET BACK FOR ST. WIDENING	SET BACK FOR USE ZONE

JOB ADDRESS *715 So Raymond*

LOT *13* BLOCK *5* TRACT *Deq 1*

SIZE OF LOT

OWNER
NAME *THERMADOR ELECT MFG. CO.*
ADDRESS *5119 DISTRICT BLVD*
CITY *LOS ANGELES* PHONE *LU 86131*

CONTRACTOR
NAME *KANGAS & KANGAS*
ADDRESS *11812 RIALTO ST.*
CITY *SUN VALLEY, CALIF.*
STATE LICENSE NO. *61379* PHONE *RD 71969*

ARCHITECT OR ENGINEER
NAME
ADDRESS
CITY
STATE LICENSE NO. PHONE

NEW	NO. OF FAMILIES
ALTERATION <input checked="" type="checkbox"/>	NO. OF ROOMS
ADDITION	SIZE OF BLDG.
REPAIR	STORIES
MOVE	EXTERIOR WALL COVERING
DEMOLISH	ROOF COVERING

DESCRIPTION OF WORK

USE OF BUILDING *One hour Paint spray Room*

CORRECTIONS

FOUNDATION:

ROUGH FRAME:

FINAL:

I HEREBY CERTIFY THAT ALL WORK WILL BE BUILT TO CONFORM TO ALHAMBRA ORDINANCES AND CALIFORNIA STATE LAWS APPLICABLE THERETO: THAT I HAVE CAREFULLY EXAMINED THE ABOVE APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT.

SIGNATURE OF OWNER OR AUTHORIZED AGENT *Eric N. Kangas*

VALUATION \$ *2000.00* PERMIT FEE \$

APPROVALS

TOILET		
FOUNDATION AND MAT'L		
CHIMNEY		
ROUGH FRAME	<i>3-31-58 JM</i>	
FINAL	<i>3-8-58</i>	

**CITY OF ALHAMBRA
BUILDING DEPARTMENT**

**BUILDING
APPLICATION FOR PERMIT**

PERMIT NO. 47979	PLAN NO.	P.C. NO. 5175	GROUP	TYPE	USE
DATE ISSUED 03-27-52	READY FOR INSPECTION		FIRE ZONE	SET BACK FOR ST. WIDENING	SET BACK FOR USE ZONE

JOB ADDRESS 715 So Raymond Ave

LOT 13+14 **BLOCK** 5 **TRACT** 1 Dolgevill

SIZE OF LOT 100 X 200'

OWNER
NAME Thermador Electrical Mfg Co
ADDRESS 5119 District Blvd
CITY Los Angeles **PHONE** Ki-6131

CONTRACTOR
NAME Charley C. Cooper
ADDRESS 1107 So 9th St
CITY Alhambra
STATE LICENSE NO. **PHONE** AT-9-3351

ARCHITECT OR ENGINEER
NAME Thermador
ADDRESS
CITY
STATE LICENSE NO. **PHONE** Ki-6131

NEW **NO. OF FAMILIES**

ALTERATION **NO. OF ROOMS**

ADDITION **SIZE OF BLDG.**

REPAIR **STORIES**

MOVE **EXTERIOR WALL COVERING**

DEMOLISH **ROOF COVERING**

I HEREBY CERTIFY THAT ALL WORK WILL BE BUILT TO CONFORM TO ALHAMBRA ORDINANCES AND CALIFORNIA STATE LAWS APPLICABLE THERETO; THAT I HAVE CAREFULLY EXAMINED THE ABOVE APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT.

SIGNATURE OF OWNER OR AUTHORIZED AGENT Thermador Electric
W B Smith

DESCRIPTION OF WORK
USE OF BUILDING lab. in factory

CORRECTIONS

FOUNDATION:

ROUGH FRAME:
Plywood finish

FINAL:

PRIVY APPROVALS

FOUNDATION AND MAT'L	
CHIMNEY	
ROUGH FRAME	<u>A-9-52</u>
FINAL	<u>A-9-52</u> <i>John</i>

VALUATION \$ 1775.00 **PERMIT FEE \$**

ALHAMBRA FIRE DEPARTMENT
FIRE PREVENTION BUREAU INSPECTION REPORT

ADDRESS 715 - 717 S. Raymond DATE 3/9/61 19

OCCUPANT ^{SPATRON-}Thermadore, Electronics Division. INSPECTOR Potter

RECHECK: Plant house keeping good. Welding bottles not chained in various parts of building. Extinguishers O.K. at this time. Auto-Matic CO2 System to be checked. Drum storage fair. All ovens clear of inflammables. Potter

11/7/61 Welding bottles were chained. Extinguishers O.K. at this time. One fire door was off track and would not close--Put on rack and retracked while I was there. Drum storage is fair--No refuse in area. Potter

1/17/62 Housekeeping good, flammable liquid storage could improve. P.Brodhag

7/3/62 OK PB

10/23/62 OK PB

1/7/63 OK pb

3/20/63 Pre-fire inspection with Eng. #3 & Tk. #2 pb

3/21/63 Pre-fire inspection with Eng. #3 & Tk. #2 pb

7/11/63 Housekeeping good, pb

10/25/63 OK, still trying to talk boss into building flammable liquid room. pb

2/20/64 OK TZ

4/7/64 Firm has changed its name to SPATRON INC. TZ

7/2/64--Housekeeping good--Need Flam. Liq. locker for Acetone--Removed comb. material on bake oven TZ

11/24/64--Need metal container for spray booth residue and paint strainers also a Flam. Liq. locker. TZ

2/8/65--Trash disposal boxes to be kept outside of building--Need metal container with cover for spray booth residue. TZ

4/19/65--To start program of servicing ~~own~~ exting.

4/20/65--Gave information of exting. maintenance. TZ

0-28-65 Routine inspection satisfactory. Plant very clean. Few dry leaves and papers on west side of property line. TZ

ALHAMBRA FIRE DEPARTMENT
FIRE PREVENTION BUREAU INSPECTION REPORT

9/81 Address change to
 2003 Chestnut

ADDRESS	OCCUPANT	DATE	INSPECTOR
715 - 717 S. Raymond	SPATRON	11-8-65	ZUNDEL
11-8-65	Not done. will do.		TZ
11-12-65	Not done		T
11-22-65	recheck. OK		T
2-1-66	Routine inspection satisfactory		TZ
10-31-66	Investigated fire #303. Smoke investigation, over-heated ballast on fluorescent light fixture. No loss		T
10-31-66	FireCall. Value Bldg. \$85,000 Contents \$100,000		DN
7-21-67	Made appointment for pre-fire survey		TZ
8-2-67	Pre fire survey. Eng. 3 and Truck 2		T
8-3-67	Pre-fire survey. Eng. 3 and Truck 2		T
1-26-68	Routine inspection satisfactory		T
6-6-68	Routine inspection satisfactory		
1-29-69	Routine inspection. ok		HI
6-27-69	Routine inspection. to service extinguishers		HI
11-19-69	Routine inspection OK. Verbal notice to relocate flammable liquids.		HI
5-14-70	Routine inspection OK. Business very slow.		HK XA
11-20-70	Routine inspection ok		H
4-27-71	Routine inspection OK		HK
10-15-71	routine inspection ok		H
7-17-74	Routine inspection: Extinguishers O.K. 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. Housekeeping good. Fixed extinguishing system has not been tested for a year. Ovens and drying rooms O.K....		
2-25-77	uh JS.		
9-83	Buildings gone - Replaced by new buildings with good block address on Chestnut		

EXHIBIT 3.G-4

467275

ARTICLES OF INCORPORATION
OF
SPATRON INCORPORATED

FILED

In the Office of the Secretary of State
of the State of California

MAR 13 1964

FRANK M. JORDAN, Secretary of State

By *[Signature]*
Deputy

Restrictive on our part
to amend articles
Yes

KNOW ALL MEN BY THESE PRESENTS: that we, the under-
signed, have this day voluntarily associated ourselves
together for the purpose of forming a corporation under the
laws of the State of California, AND WE DO HEREBY CERTIFY:

FIRST: The name of the corporation is SPATRON
INCORPORATED.

SECOND: The corporation's purposes are:

(a) Primarily to engage in the specific business
of electronics manufacture.

(b) To engage general / in the business of buying,
selling, manufacturing, using, leasing, and otherwise dealing
in electrical and electronics goods, wares, and products, and
in goods, wares, merchandise, and real and personal property
of all kinds.

(c) To engage in any business related or unrelated
to those described in clauses (a) and (b) of this Article
Second and from time to time authorized or approved by the
Board of Directors of this corporation.

(d) To acquire and pay for in cash, stock or bonds
of this corporation or otherwise, the goodwill, rights, assets
and property and to undertake or assume the whole or any part
of the obligations or liabilities of any person, firm,

THOMAS S. BUNN, JR.
WILEY D. BUNN
ATTORNEYS AT LAW
432 S. SPRING STREET
LOS ANGELES 13
MADISON 8-0263

association or corporation.

(e) To acquire, hold, use, sell, assign, lease, grant licences in respect of, mortgage or otherwise dispose of, letters patent of the United States or any foreign country, patent rights, licences and privileges, investments, improvements and processes, copyrights, trademarks and trade names, relating to or useful in connection with any business of this corporation.

(f) To acquire, subscribe for, hold, own, pledge or otherwise dispose of and vote shares of stock, bonds and securities of any other corporation, domestic or foreign.

(g) To enter into, make and perform contracts of every kind and description with any person, firm, association, corporation, municipality, county, state, body politic or government or colony or dependency thereof, conducive to the attainment of any of the objects or purposes of the corporation.

(h) To borrow money and issue bonds, debentures, notes and evidences of indebtedness and to secure the payment or performance of its obligations by mortgage, deed of trust, pledge or otherwise.

(i) To purchase, hold, sell and transfer the shares of its own capital stock so far as may be permitted by the laws of the State of California.

(j) To have one or more offices within or without the State of California, to carry on all or any of its operations and business and, without restrictions or limit as to amount, to purchase or otherwise acquire, hold, own,