# Air Toxics Health Risk Assessment for Anaplex Corporation (SCAQMD Facility ID No. 016951)

Approved on October 9, 2018

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Supporting electronic modeling files are available upon request. Please contact SCAQMD AB 2588 staff by email at: <u>AB2588@aqmd.gov</u> or by phone at (909) 396-3610.

#### Attachment

Anaplex's Alternate Revised HRA (submitted on September 26, 2018) – provided for informational purposes only, not approved as part of this approved HRA.

#### Definitions

Acute Health Impacts: non-cancer health impacts for short-term, one-hour peak exposures to potential Facility emissions. Acute Reference Exposure Levels (RELs), which are used to calculate acute non-cancer hazards, are developed so as to represent an exposure that is not likely to cause adverse health effects in a human population, included sensitive subgroups, exposed to that concentration for the specified exposure duration on an intermittent basis.

**Chronic Health Impacts:** non-cancer health impacts from long-term exposure to potential Facility emissions. Chronic RELs, which are used to calculate chronic non-cancer hazards, are developed so as to represent the level at or below which no adverse health effects are anticipated following long-term exposure. Long-term exposure for these purposes has been defined as 12% of a lifetime, or about eight years for humans.

**8-Hour Health Impacts:** non-cancer health impacts for exposures that occur on a recurrent basis, but only during a portion of each day. The 8-hour RELs are designed to protect against periodic exposure that could occur as often as daily and may share characteristics of both acute and chronic exposure. These RELs were developed because of concerns that applying the chronic REL in some scenarios was overly conservative. By definition, an 8-hour REL is an exposure that is not likely to cause adverse health effects in a human population, including sensitive subgroups, exposed to that concentration for an 8-hour exposure duration on a regular (including daily) basis.

**Cancer Health Impacts:** carcinogenic risks estimated as the incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to carcinogens potentially present in Facility emissions. Cancer inhalation and oral potency factors, which are used to calculate cancer risk, are expressed as the upper bound of probability of developing cancer assuming continuous lifetime exposure to a substance at a dose of one milligram per kilogram of body weight. It is assumed in cancer risk assessments that risk is directly proportional to dose and that there is no threshold for carcinogenesis. The derivation of carcinogenic inhalation and oral cancer potency factors takes into account the available information on pharmacokinetics and on the mechanism of carcinogenic action. These values are generally the 95% upper confidence limit (UCL) on the dose-response slope.

## Acronyms and Abbreviations

**AB:** Assembly Bill AERMOD: American Meteorological Society/Environmental Protection Agency regulatory air dispersion model ATIR: Air Toxics Inventory Report Cal/EPA: California Environmental Protection Agency CARB: California Air Resources Board **CPF: Cancer Potency Factor** GLC: Ground-Level Concentration HARP: Hotspots Analysis and Reporting Program HI: Hazard Index HQ: Hazard Quotient HRA: Health Risk Assessment MEIR: Maximally Exposed Individual Resident MEIW: Maximally Exposed Individual Worker MEISR: Maximally Exposed Individual Sensitive Receptor MICR: Maximum Individual Cancer Risk MSDS: Material Safety Data Sheet NED: National Elevation Dataset **NWS:** National Weather Service **OEHHA: Office of Environmental Health Hazard Assessment** PMI: Point of Maximum Impact **REL:** Reference Exposure Levels **RRP:** Risk Reduction Plan SCAQMD: South Coast Air Quality Management District TAC: Toxic Air Contaminant U.S. EPA: United States Environmental Protection Agency **USGS: United States Geological Survey** UTM: Universal Transverse Mercator

### List of Units

μg: microgram g: gram hr: hour L: liter Kg: kilogram km: kilometer m: meter m3: cubic meter mg: milligram s: second yr: year

#### **1** Executive Summary

On December 14, 2016, the South Coast Air Quality Management District (SCAQMD) sent a letter to Anaplex Corporation (Anaplex, SCAQMD Facility ID No. 016951) identifying it as a Potentially High Risk Level facility under Rule 1402. Anaplex is a metal finishing facility located at 15547 Garfield Avenue in the City of Paramount. Anaplex performs metal finishing operations (electroplating and anodizing) primarily for the aerospace industry. Metals finished at this location include aluminum, stainless steel, steel, copper, brass, titanium, and magnesium. Potential onsite sources of emissions include the anodizing and plating tanks, curing and drying ovens, paint spray booths, and miscellaneous natural gas sources such as boilers.

Per Rule 1402, Anaplex was required to prepare an Air Toxics Inventory Report (ATIR), Health Risk Assessment (HRA), and Risk Reduction Plan (RRP) using the facility emissions in 2016. The 2016 ATIR emissions can be found in Table ES-1 and Appendix A, which include the emitted air toxics with the maximum one hour and annual emissions in units of lbs/hr and lbs/yr. Table ES-2 lists the exposure pathway and target organ systems for the air toxics.

SCAQMD staff received the ATIR on May 15, 2017 and the HRA and RRP on June 13, 2017. On December 8, 2017, SCAQMD staff provided Anaplex with comments and recommendations for revisions on the submitted ATIR, HRA, and RRP, and requested revision and resubmittal of respective documents. After multiple discussions with Anaplex representatives, SCAQMD staff received the Revised ATIR on May 1, 2018 and the Revised HRA and Revised RRP on May 17, 2018. SCAQMD staff had no further comments on the Revised ATIR and this HRA is based on those emissions estimates.

After further discussions with SCAQMD staff, Anaplex resubmitted another Revised HRA and Revised RRP on September 26, 2018. However, the resubmitted Revised HRA contained alternate HRA scenarios in the main HRA report, which is not consistent with SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup> dated November 2016. In the interest of time and pursuant to Rule 1402 (e)(2)(D), SCAQMD staff modified the Revised HRA resubmitted on September 26, 2018 to follow Appendix B of SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup>. This HRA is the modified HRA. SCAQMD staff is currently reviewing the Revised RRP.

This HRA relies upon results of one of the scenarios contained in Anaplex's resubmitted Revised HRA, but presents the information consistent with SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup>. Anaplex's Revised HRA resubmitted on September 26, 2018 can be found as an attachment to this HRA for informational purposes only and is not approved by SCAQMD.

The HRA was conducted in four steps:

• The first step, called "hazard identification" was to identify the toxic air contaminants (TACs or air toxics) of concern, sources of those contaminants, and to estimate the emissions from each source.

 $<sup>^1</sup>$  Available at SCAQMD's website at http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588

- The second step, called "exposure assessment," was to quantify the amount of TACs that people are exposed to during a specific time period, as well as the total number of people exposed. The United States Environmental Protection Agency's (U.S. EPA) American Meteorological Society/Environmental Protection Agency regulatory air dispersion model version 18081 (AERMOD) was used to perform the air dispersion modeling to estimate the ground level air concentrations of the air toxics.
- The third step is called "dose-response assessment." Dose is the amount of a chemical that enters the human body (or reaches a target organ); response is the resulting health effect from the level of the dose. The California Air Resources Board's (CARB) Hot Spots Analysis and Reporting Program (HARP2) software was used to perform the calculations for this step as well as for the last step. Exposure pathways evaluated in the HRA include inhalation, dermal absorption, soil ingestion, homegrown produce, and mother's milk for the residential scenario and inhalation, dermal absorption, and soil ingestion for the worker scenario.
- The last step is called "risk characterization." Risk characterization ties together the above three processes to describe the type and magnitude of any increased health risks as a result of the exposure to the air toxic emissions from a facility.

#### 1.1 Summary of HRA Results

To calculate population exposure and cancer burden, separate dispersion modeling runs were performed at receptors located at the centroid of census tracts whose centroid was located within the modeling domain. The HARP2 model contains the census tract centroid UTM coordinates and population values from the 2010 census; this data was exported from HARP2 to create the census tract centroid receptor grid. A total of 31,358 census tract centroid receptors were modeled; Figures ES-1a to 1d show these receptor locations.

The HRA summary results are listed in Table ES-3. The estimated incremental cancer risk for the maximally exposed individual resident (MEIR) is 931 in a million, and for the maximally exposed individual worker (MEIW) is 2,836 in a million. Figure ES-2 shows the residential cancer risk. The maximally exposed sensitive receptor is Wesley Gaines Elementary School located at 7340 E. Jackson Street, Paramount, CA 90723; this receptor has an estimated cancer risk of 114 in one million, based on a 30-year residential exposure assumption. Strontium chromate (which contains hexavalent chromium) from the paint spray booth is the primary contributor to the cancer risk. Detailed discussions on the locations of the Maximum Impact (PMI), MEIR, MEIW, and maximally exposed individual sensitive receptor (MEISR) for cancer and non-cancer risks and 30-year one-in-a-million cancer risk "zone of impact" are included in Section 6. However, Figures ES-3 to 6 show the locations of these receptors. The excess cancer burden for the total population within the zone of impact is 9.7.

The chronic hazard index (HI) is 0.06 at the MEIR, and is 2.02 at the MEIW as listed in Table ES-3. The highest chronic HI among the sensitive receptors is 0.009 at Wesley Gaines Elementary School. Sulfuric acid is the primary contributor to the chronic HI, accounting for approximately 60%. The respiratory system is the primary target organ. Table ES-3 identifies the highest chronic HI based on 8-hour exposure which is 0.51. Methylene diphenyl diisocyanate (MDI) is the primary contributor and the respiratory system is the primary target organ. The maximum acute HI is 23.8 as listed in Table ES-3. The highest acute HI for sensitive receptors is 0.01 at Wesley Gaines Elementary School. Methyl ethyl ketone is the primary contributor and the respiratory system is the primary target organ.

The SCAQMD's public notification thresholds are as follows:

- $\geq$  10 in a million maximum individual (lifetime) cancer risk (MICR), or
- > 1.0 acute HI, or
- > 1.0 chronic HI

SCAQMD Rule 1402 action risk levels, which require a RRP are as follows:

- MICR: 25 in one million, or
- Cancer burden: 0.5, or
- Acute HI: 3.0, or
- Chronic HI: 3.0.

SCAQMD Rule 1402 also establishes significant risk levels as follows:

- MICR of 100 in one million (1.0 x 10-4), or
- Acute HI or chronic HI of five (5.0) for any target organ system at any receptor location.

As shown in Table ES-3, the cancer risk of 2,836 in one million at the MEIW, 931 in one million at the MEIR, and the acute HI of 24 at the MEIW exceed the SCAQMD Rule 1402 significant risk levels of 100 and 5.0, respectively. The cancer burden (9.7) exceeds the SCAQMD action risk level of one half (0.5). Therefore, a RRP is required for Anaplex, as well as expedited actions based on exceedance of the significant risk level. Anaplex has already submitted (on March 13, 2017) and implemented an Early Action Reduction Plan, per the Rule 1402 requirements for potentially High Risk Level facilities.

#### Table ES-1: TAC Emission Rates by Source

Source Type	Modeled Source	Source Description	CAS Number	Chemical Name	Annual Emissions (lbs/yr)	Annual Emissions (g/s)	Maximum Hourly Emissions (lbs/hr)	Maximum Hourly Emissions (g/s)
Volume	ANODZEVP	Anodizing Tank Evaporation	1101	Fluorides and Compounds	3.65E-02	5.25E-07	4.17E-06	5.25E-07
Volume	ANODZEVP	Anodizing Tank Evaporation	112345	Diethylene Glycol Monobutyl Ether	6.99E-01	1.01E-05	7.98E-05	1.01E-05
Volume	ANODZEVP	Anodizing Tank Evaporation	7664393	Hydrofluoric Acid	3.00E+01	4.32E-04	3.43E-03	4.32E-04
Volume	ANODZEVP	Anodizing Tank Evaporation	7697372	Nitric Acid	1.06E+01	1.52E-04	1.21E-03	1.52E-04
Volume	ANODZEVP	Anodizing Tank Evaporation	7664382	Phosphoric Acid	6.01E+00	8.64E-05	6.86E-04	8.64E-05
Volume	ANODZEVP	Anodizing Tank Evaporation	7664939	Sulfuric Acid	2.80E-04	4.03E-09	3.20E-08	4.03E-09
Volume	ANODZEVP	Anodizing Tank Evaporation	108883	Toluene	4.38E-01	6.30E-06	5.00E-05	6.30E-06
Volume	ANODZEVP	Anodizing Tank Evaporation	1330207	Xylene	2.65E-01	3.81E-06	3.02E-05	3.81E-06
Volume	ANODZPSH	Anodizing Tank	7440473	Chromium & Compounds (Other Than Hexavalent)	2.99E-03	4.31E-08	5.41E-06	6.82E-07
Volume	ANODZPSH	Anodizing Tank	57125	Cyanide Compounds	3.63E-03	5.21E-08	2.42E-06	3.04E-07
Volume	ANODZPSH	Anodizing Tank	1101	Fluorides and Compounds	1.30E-01	1.87E-06	1.51E-03	1.91E-04
Volume	ANODZPSH	Anodizing Tank	18540299	Hexavalent Chromium Compounds (Other)	4.51E-03	6.49E-08	3.01E-06	3.79E-07
Volume	ANODZPSH	Anodizing Tank	7439965	Manganese & Compounds	1.96E-05	2.81E-10	3.76E-06	4.73E-07
Volume	ANODZPSH	Anodizing Tank	7440020	Nickel & Compounds	1.23E-01	1.77E-06	7.70E-05	9.71E-06
Volume	ANODZPSH	Anodizing Tank	1333820	Chromium Trioxide	7.73E-02	1.11E-06	4.71E-04	5.94E-05
Volume	ANODZPSH	Anodizing Tank	112345	Diethylene Glycol Monobutyl Ether	4.19E-02	6.02E-07	4.69E-05	5.91E-06
Volume	ANODZPSH	Anodizing Tank	373024	Nickel Acetate	1.64E-02	2.36E-07	1.03E-05	1.29E-06
Volume	ANODZPSH	Anodizing Tank	7664382	Phosphoric Acid	2.36E-02	3.39E-07	2.85E-04	3.59E-05
Volume	ANODZPSH	Anodizing Tank	10588019	Sodium Dichromate	4.30E-01	6.19E-06	8.04E-04	1.01E-04
Volume	ANODZPSH	Anodizing Tank	1310732	Sodium Hydroxide	5.60E-01	8.05E-06	4.45E-04	5.61E-05
Volume	ANODZPSH	Anodizing Tank	7664939	Sulfuric Acid	1.32E+02	1.90E-03	1.20E-01	1.51E-02
Volume	ANODZPSH	Anodizing Tank	108883	Toluene	1.39E-05	2.00E-10	6.97E-08	8.78E-09
Volume	ANODZPSH	Anodizing Tank	1330207	Xylene	2.84E-05	4.08E-10	1.42E-07	1.79E-08
Volume	ANODZPSH	Anodizing Tank	1314132	Zinc Oxide	1.48E-03	2.13E-08	7.40E-06	9.33E-07
Volume	PLATEEVP	Plating Tank Evaporation	112345	Diethylene Glycol Monobutyl Ether	5.85E-02	8.42E-07	6.68E-06	8.42E-07
Volume	PLATEEVP	Plating Tank Evaporation	111762	Ethylene Glycol Monobutyl Ether	7.23E-01	1.04E-05	8.25E-05	1.04E-05
Volume	PLATEEVP	Plating Tank Evaporation	7647010	Hydrochloric Acid	1.70E+02	2.45E-03	1.94E-02	2.45E-03
Volume	PLATEEVP	Plating Tank Evaporation	7664393	Hydrofluoric Acid	2.92E+01	4.20E-04	3.34E-03	4.20E-04
Volume	PLATEEVP	Plating Tank Evaporation	7697372	Nitric Acid	2.13E+02	3.06E-03	2.43E-02	3.06E-03
Volume	PLATEEVP	Plating Tank Evaporation	7664382	Phosphoric Acid	6.14E+01	8.84E-04	7.01E-03	8.84E-04
Volume	PLATEEVP	Plating Tank Evaporation	7664939	Sulfuric Acid	5.36E-03	7.70E-08	6.11E-07	7.70E-08
Volume	PLATEEVP	Plating Tank Evaporation	127184	Tetrachloroethylene	1.26E+01	1.82E-04	1.44E-03	1.82E-04
Volume	PLATEPSH	Plating Tank	7440439	Cadmium & Compounds	3.54E-02	5.09E-07	1.28E-03	1.62E-04
Volume	PLATEPSH	Plating Tank	7440508	Copper & Compounds	1.28E+00	1.84E-05	1.22E-03	1.53E-04
Volume	PLATEPSH	Plating Tank	57125	Cyanide Compounds	2.69E+00	3.87E-05	9.78E-03	1.23E-03
Volume	PLATEPSH	Plating Tank	1128	Lead Compounds	1.21E-05	1.74E-10	2.33E-07	2.93E-08
Volume	PLATEPSH	Plating Tank	7439965	Manganese & Compounds	3.33E-03	4.79E-08	3.47E-05	4.37E-06
Volume	PLATEPSH	Plating Tank	7440020	Nickel & Compounds	2.54E-01	3.66E-06	9.02E-04	1.14E-04
Volume	PLATEPSH	Plating Tank	7440224	Silver & Compounds	6.67E-03	9.59E-08	3.32E-05	4.19E-06
Volume	PLATEPSH	Plating Tank	7440666	Zinc & Compounds	1.76E-02	2.53E-07	1.84E-04	2.31E-05
Volume	PLATEPSH	Plating Tank	6484522	Ammonium Nitrate	7.40E-03	1.06E-07	3.70E-05	4.66E-06
Volume	PLATEPSH	Plating Tank	1333820	Chromium Trioxide	5.24E-04	7.53E-09	7.56E-07	9.53E-08
Volume	PLATEPSH	Plating Tank	112345	Diethylene Glycol Monobutyl Ether	3.36E-03	4.83E-08	4.20E-06	5.29E-07

Source Type	Modeled Source	Source Description	CAS Number	Chemical Name	Annual Emissions (lbs/yr)	Annual Emissions (g/s)	Maximum Hourly Emissions (lbs/hr)	Maximum Hourly Emissions (g/s)
Volume	PLATEPSH	Plating Tank	7647010	Hydrochloric Acid	8.40E-02	1.21E-06	3.23E-04	4.07E-05
Volume	PLATEPSH	Plating Tank	7664393	Hydrofluoric Acid	5.83E-04	8.38E-09	6.07E-06	7.65E-07
Volume	PLATEPSH	Plating Tank	7439921	Lead	6.78E-05	9.75E-10	1.17E-07	1.48E-08
Volume	PLATEPSH	Plating Tank	7697372	Nitric Acid	3.20E-01	4.60E-06	1.76E-03	2.21E-04
Volume	PLATEPSH	Plating Tank	7664382	Phosphoric Acid	1.26E+01	1.81E-04	6.22E-02	7.84E-03
Volume	PLATEPSH	Plating Tank	10588019	Sodium Dichromate	2.30E-02	3.31E-07	5.74E-05	7.24E-06
Volume	PLATEPSH	Plating Tank	1310732	Sodium Hydroxide	4.35E+00	6.26E-05	5.81E-03	7.32E-04
Volume	PLATEPSH	Plating Tank	7664939	Sulfuric Acid	3.57E+00	5.14E-05	1.78E-02	2.24E-03
Volume	PLATEPSH	Plating Tank	1314132	Zinc Oxide	1.87E-03	2.69E-08	1.95E-05	2.46E-06
Capped Point	SPRYBTH2	Paint Booth #2	95636	1,2,4-Trimethylbenzene	9.58E-01	1.38E-05	4.79E-04	6.03E-05
Capped Point	SPRYBTH2	Paint Booth #2	80057	4,4'-Isopropylidenediphenol	1.08E+00	1.55E-05	5.39E-04	6.80E-05
Capped Point	SPRYBTH2	Paint Booth #2	7429905	Aluminum	1.26E-02	1.81E-07	6.30E-06	7.94E-07
Capped Point	SPRYBTH2	Paint Booth #2	1309644	Antimony Trioxide	9.86E-02	1.42E-06	4.93E-05	6.21E-06
Capped Point	SPRYBTH2	Paint Booth #2	10294403	Barium Chromate	2.64E-01	3.79E-06	1.32E-04	1.66E-05
Capped Point	SPRYBTH2	Paint Booth #2	7440393	Barium & Compounds	2.17E-01	3.12E-06	1.08E-04	1.37E-05
Capped Point	SPRYBTH2	Paint Booth #2	18540299	Hexavalent Chromium Compounds (Other)	2.96E-02	4.26E-07	1.48E-05	1.87E-06
Capped Point	SPRYBTH2	Paint Booth #2	7440484	Cobalt & Compounds	1.32E-05	1.89E-10	6.59E-09	8.30E-10
Capped Point	SPRYBTH2	Paint Booth #2	7440508	Copper & Compounds	3.74E-01	5.38E-06	1.87E-04	2.36E-05
Capped Point	SPRYBTH2	Paint Booth #2	98828	Cumene	1.92E-01	2.76E-06	9.58E-05	1.21E-05
Capped Point	SPRYBTH2	Paint Booth #2	34590948	Dipropylene Glycol Monomethyl Ether	2.56E-03	3.68E-08	1.28E-06	1.61E-07
Capped Point	SPRYBTH2	Paint Booth #2	1091	Epoxy Resins	1.31E+01	1.89E-04	6.57E-03	8.28E-04
Capped Point	SPRYBTH2	Paint Booth #2	100414	Ethyl Benzene	9.38E+01	1.35E-03	4.69E-02	5.91E-03
Capped Point	SPRYBTH2	Paint Booth #2	111762	Ethylene Glycol Monobutyl Ether	1.61E+02	2.31E-03	8.03E-02	1.01E-02
Capped Point	SPRYBTH2	Paint Booth #2	2807309	Ethylene Glycol Monopropyl Ether	2.17E+00	3.12E-05	1.08E-03	1.36E-04
Capped Point	SPRYBTH2	Paint Booth #2	1101	Fluorides and Compounds	3.78E+00	5.44E-05	1.89E-03	2.38E-04
Capped Point	SPRYBTH2	Paint Booth #2	50000	Formaldehyde	1.14E+01	1.64E-04	5.69E-03	7.17E-04
Capped Point	SPRYBTH2	Paint Booth #2	822060	Hexamethylene Diisocyanate Monomer	8.55E-02	1.23E-06	4.28E-05	5.39E-06
Capped Point	SPRYBTH2	Paint Booth #2	123319	Hydroguinone	1.17E+00	1.69E-05	5.87E-04	7.40E-05
Capped Point	SPRYBTH2	Paint Booth #2	67630	IPA	3.79E+02	5.45E-03	1.89E-01	2.39E-02
Capped Point	SPRYBTH2	Paint Booth #2	1125	Isocyanates	1.20E+01	1.73E-04	6.02E-03	7.59E-04
Capped Point	SPRYBTH2	Paint Booth #2	1128	Lead Compounds	5.51E-02	7.92E-07	2.75E-05	3.47E-06
Capped Point	SPRYBTH2	Paint Booth #2	78933	MEK	5.75E+02	8.27E-03	2.88E-01	3.62E-02
Capped Point	SPRYBTH2	Paint Booth #2	67561	Methanol	4.81E+01	6.91E-04	2.40E-02	3.03E-03
Capped Point	SPRYBTH2	Paint Booth #2	75092	Methylene Chloride	8.63E+01	1.24E-03	4.31E-02	5.44E-03
Capped Point	SPRYBTH2	Paint Booth #2	101688	Methylene Diphenyl Diisocyanate	1.18E+00	1.69E-05	5.88E-04	7.41E-05
Capped Point	SPRYBTH2	Paint Booth #2	108101	МІВК	3.18E+02	4.57E-03	1.59E-01	2.00E-02
Capped Point	SPRYBTH2	Paint Booth #2	71363	n-Butanol	8.20E+00	1.18E-04	4.10E-03	5.17E-04
Capped Point	SPRYBTH2	Paint Booth #2	108952	Phenol	1.32E+01	1.90E-04	6.62E-03	8.34E-04
Capped Point	SPRYBTH2	Paint Booth #2	7664382	Phosphoric Acid	7.93E-02	1.14E-06	3.96E-05	4.99E-06
Capped Point	SPRYBTH2	Paint Booth #2	107982	Propylene Glycol Monomethyl Ether	1.03E+02	1.48E-03	5.15E-02	6.49E-03
Capped Point	SPRYBTH2	Paint Booth #2	108656	Propylene Glycol Monomethyl Ether Acetate	5.12E-02	7.37E-07	2.56E-05	3.23E-06
Capped Point	SPRYBTH2	Paint Booth #2	78922	Sec-Butyl Alcohol	3.92E+01	5.65E-04	1.96E-02	2.47E-03
Capped Point	SPRYBTH2	Paint Booth #2	1175	Silica	1.07E+01	1.54E-04	5.36E-03	6.75E-04

Source Type	Modeled Source ID	Source Description	CAS Number	Chemical Name	Annual Emissions (lbs/yr)	Annual Emissions (g/s)	Maximum Hourly Emissions (lbs/hr)	Maximum Hourly Emissions (g/s)
Capped Point	SPRYBTH2	Paint Booth #2	7789062	Strontium Chromate	2.49E+01	3.58E-04	1.25E-02	1.57E-03
Capped Point	SPRYBTH2	Paint Booth #2	540885	Tert-Butyl Acetate	2.18E+00	3.14E-05	1.09E-03	1.38E-04
Capped Point	SPRYBTH2	Paint Booth #2	108883	Toluene	5.97E+02	8.59E-03	2.98E-01	3.76E-02
Capped Point	SPRYBTH2	Paint Booth #2	1330207	Xylene	4.60E+02	6.62E-03	2.30E-01	2.90E-02
Capped Point	SPRYBTH2	Paint Booth #2	7440666	Zinc & Compounds	1.49E-01	2.15E-06	7.47E-05	9.41E-06
Capped Point	SPRYBTH3	Paint Booth #3	95636	1,2,4-Trimethylbenzene	3.22E+00	4.64E-05	1.61E-03	2.03E-04
Capped Point	SPRYBTH3	Paint Booth #3	80057	4.4'-Isopropylidenediphenol	6.88E-01	9.90E-06	3.44E-04	4.34E-05
Capped Point	SPRYBTH3	Paint Booth #3	7429905	Aluminum	6.24E-02	8.98E-07	3.12E-05	3.93E-06
Capped Point	SPRYBTH3	Paint Booth #3	7440393	Barium & Compounds	9.26E-03	1.33E+07	4.63E-06	5.83E-07
Capped Point	SPRYBTH3	Paint Booth #3	7440473	Chromium & Compounds (Other Than Hexavalent)	2.93E-02	4.22E-07	1.47E-05	1.85E-06
Capped Point	SPRYBTH3	Paint Booth #3	7440484	Cobalt & Compounds	9.20E-03	1.32E-07	4.60E-06	5.79E-07
Capped Point	SPRYBTH3	Paint Booth #3	100414	Ethyl Benzene	1.09E+01	1.57E-04	5.45E-03	6.87E-04
Capped Point	SPRYBTH3	Paint Booth #3	111762	Ethylene Glycol Monobutyl Ether	1.32E+00	1.89E-05	6.58E-04	8.29E-05
Capped Point	SPRYBTH3	Paint Booth #3	1101	Fluorides and Compounds	6.84E-01	9.85E-06	3.42E-04	4.31E-05
Capped Point	SPRYBTH3	Paint Booth #3	822060	Hexamethylene Diisocyanate Monomer	2.04E-01	2.94E-06	1.02E-04	1.29E-05
Capped Point	SPRYBTH3	Paint Booth #3	67630	IPA	1.10E+00	1.588-05	5.50E-04	6.94E-05
Capped Point	SPRYBTH3	Paint Booth #3	1125	Isocyanates	3.28E+01	4.71E-04	1.64E-02	2.06E-03
Capped Point	SPRYBTH3	Paint Booth #3	78933	MEK	3.19E+02	4.59E-03	1.60E-01	2.01E-02
Capped Point	SPRYBTH3	Paint Booth #3	101688	Methylene Diphenyl Diisocyanate	3.93E-02	5.65E-07	1.96E-05	2.47E-06
Capped Point	SPRYBTH3	Paint Booth #3	108101	МІВК	5.63E+01	8.09E-04	2.81E-02	3.54E-03
Capped Point	SPRYBTH3	Paint Booth #3	71363	n-Butanol	1.24E+01	1.79E-04	6.21E-03	7.83E-04
Capped Point	SPRYBTH3	Paint Booth #3	107982	Propylene Glycol Monomethyl Ether	1.22E+02	1.76E-03	6.11E-02	7.69E-03
Capped Point	SPRYBTH3	Paint Booth #3	108656	Propylene Glycol Monomethyl Ether Acetate	3.47E+00	5.00E-05	1.74E-03	2.19E-04
Capped Point	SPRYBTH3	Paint Booth #3	1175	Silica	1.07E+00	1.54E-05	5.34E-04	6.73E-05
Capped Point	SPRYBTH3	Paint Booth #3	540885	Tert-Butvi Acetate	1.47E+00	2.12E-05	7.37E-04	9.29E-05
Capped Point	SPRYBTH3	Paint Booth #3	108883	Toluene	7.73E+01	1.11E-03	3.87E-02	4.87E-03
Capped Point	SPRYBTH3	Paint Booth #3	1330207	Xvlene	4.73E+01	6.81E-04	2.37E-02	2.98E-03
Capped Point	SPRYBTH4	Paint Booth #4	95636	1,2,4-Trimethylbenzene	4.26E+00	6.13E-05	2.13E-03	2.69E-04
Capped Point	SPRYBTH4	Paint Booth #4	80057	4,4'-Isopropylidenediphenol	6.88E-01	9.90E-06	3.44E-04	4.34E-05
Capped Point	SPRYBTH4	Paint Booth #4	7429905	Aluminum	6.24E-02	8.98E-07	3.12E-05	3.93E-06
Capped Point	SPRYBTH4	Paint Booth #4	7440393	Barium & Compounds	9.26E-03	1.33E-07	4.63E-06	5.83E-07
Capped Point	SPRYBTH4	Paint Booth #4	7440473	Chromium & Compounds (Other Than Hexavalent)	2.93E-02	4.22E-07	1.47E-05	1.85E-06
Capped Point	SPRYBTH4	Paint Booth #4	7440484	Cobalt & Compounds	9.20E-03	1.32E-07	4.60E-06	5.79E-07
Capped Point	SPRYBTH4	Paint Booth #4	100414	Ethyl Benzene	1.70E+01	2.44E-04	8,49E-03	1.07E-03
Capped Point	SPRYBTH4	Paint Booth #4	111762	Ethylene Glycol Monobutyl Ether	1.32E+00	1.89E-05	6.58E-04	8.29E-05
Capped Point	SPRYBTH4	Paint Booth #4	1101	Fluorides and Compounds	6.84E-01	9.85E-06	3.42E-04	4.31E-05
Capped Point	SPRYBTH4	Paint Booth #4	822060	Hexamethylene Diisocyanate Monomer	2.04E-01	2.94E-06	1.02E-04	1.29E-05
Capped Point	SPRYBTH4	Paint Booth #4	67630	IPA	1.10E+00	1.58E-05	5.50E-04	6.94E-05
Capped Point	SPRYBTH4	Paint Booth #4	1125	Isocyanates	3.28E+01	4.71E-04	1.64E-02	2.06E-03
Capped Point	SPRYBTH4	Paint Booth #4	78933	MEK	3.19E+02	4,59E-03	1.60E-01	2.01E-02
Capped Point	SPRYBTH4	Paint Booth #4	101633	Methylene Diphenyl Diisocyanate	3.93E-02	5.65E-07	1.96E-05	2.47E-06
Capped Point	SPRYBTH4	Paint Booth #4	101000	MIBK	5.63E+01	8,09E-04	2.81E-02	3.54E-03
Capped Point	SPRYBTH4	Paint Booth #4	91203	Naphthalene	1.48E+00	2.13E-05	7.42E-04	9.34E-05

Source Type	Modeled Source	Source Description	CAS Number	Chemical Name	Annual Emissions (lbs/yr)	Annual Emissions (g/s)	Maximum Hourly Emissions (lbs/hr)	Maximum Hourly Emissions (g/s)
Capped Point	SPRYBTH4	Paint Booth #4	71363	n-Butanol	1.24E+01	1.79E-04	6.21E-03	7.83E-04
Capped Point	SPRYBTH4	Paint Booth #4	107982	Propylene Glycol Monomethyl Ether	1.22E+02	1.76E-03	6.11E-02	7.69E-03
Capped Point	SPRYBTH4	Paint Booth #4	108656	Propylene Glycol Monomethyl Ether Acetate	3.47E+00	5.00E-05	1.74E-03	2.19E-04
Capped Point	SPRYBTH4	Paint Booth #4	1175	Silica	1.07E+00	1.54E-05	5.34E-04	6.73E-05
Capped Point	SPRYBTH4	Paint Booth #4	540885	Tert-Butyl Acetate	1.47E+00	2.12E-05	7.37E-04	9.29E-05
Capped Point	SPRYBTH4	Paint Booth #4	108883	Toluene	7.73E+01	1.11E-03	3.87E-02	4.87E-03
Capped Point	SPRYBTH4	Paint Booth #4	1330207	Xylene	7.14E+01	1.03E-03	3.57E-02	4.50E-03
Volume	MASKING	Masking Area - Paint and Solvent Use	67630	IPA	5.28E+00	7.59E-05	2.64E-03	3.33E-04
Volume	MASKING	Masking Area - Paint and Solvent Use	78933	MEK	1.52E+02	2.19E-03	7.61E-02	9.58E-03
Volume	MASKING	Masking Area - Paint and Solvent Use	75092	Methylene Chloride	4.49E+02	6.45E-03	2.24E-01	2.83E-02
Volume	MASKING	Masking Area - Paint and Solvent Use	91203	Naphthalene	1.54E+01	2.21E-04	7.70E-03	9.70E-04
Volume	MASKING	Masking Area - Paint and Solvent Use	108952	Phenol	1.06E+02	1.52E-03	5.28E-02	6.65E-03
Volume	MASKING	Masking Area - Paint and Solvent Use	108656	Propylene Glycol Monomethyl Ether Acetate	1.54E+01	2.21E-04	7.70E-03	9.70E-04
Volume	MASKING	Masking Area - Paint and Solvent Use	75569	Propylene Oxide	1.52E+01	2.19E-04	7.61E-03	9.58E-04
Volume	MASKING	Masking Area - Paint and Solvent Use	108883	Toluene	6.14E+02	8.84E-03	3.07E-01	3.87E-02
Area	SLVNTBTH	Solvent Degreaser (Manual)	78933	MEK	3.44E+04	4.95E-01	1.72E+01	2.17E+00
Horizontal Point	DGRSR	Vapor Degreaser	67561	Methanol	5.44E+01	7.83E-04	2.72E-02	3.43E-03
Horizontal Point	DGRSR	Vapor Degreaser	79016	Trichloroethylene	5.44E-01	7.83E-06	2.72E-04	3.43E-05
Capped Point	222BLR1	Boiler 1	71432	Benzene	1.54E-02	2.22E-07	1.55E-05	1.95E-06
Capped Point	222BLR1	Boiler 1	50000	Formaldehyde	3.28E-02	4.72E-07	3.29E-05	4.14E-06
Capped Point	222BLR1	Boiler 1	1151	PAH	1.93E-04	2.78E-09	1.93E-07	2.44E-08
Capped Point	222BLR1	Boiler 1	91203	Naphthalene	5.79E-04	8.33E-09	5.80E-07	7.31E-08
Capped Point	222BLR1	Boiler 1	75070	Acetaldehyde	8.30E-03	1.19E-07	8.31E-06	1.05E-06
Capped Point	222BLR1	Boiler 1	107028	Acrolein	5.21E-03	7.49E-08	5.22E-06	6.58E-07
Capped Point	222BLR1	Boiler 1	7664417	Ammonia	6.18E+00	8.88E-05	6.19E-03	7.79E-04
Capped Point	222BLR1	Boiler 1	100414	Ethyl Benzene	1.83E-02	2.64E-07	1.84E-05	2.31E-06
Capped Point	222BLR1	Boiler 1	110543	Hexane	1.22E-02	1.75E-07	1.22E-05	1.53E-06
Capped Point	222BLR1	Boiler 1	115071	Propylene	1.41E+00	2.03E-05	1.41E-03	1.78E-04
Capped Point	222BLR1	Boiler 1	108883	Toluene	7.06E-02	1.02E-06	7.07E-05	8.91E-06
Capped Point	222BLR1	Boiler 1	1330207	Xylene	5.25E-02	7.55E-07	5.26E-05	6.62E-06
Capped Point	222BLR2	Boiler 2	71432	Benzene	1.54E-02	2.22E-07	1.55E-05	1.95E-06
Capped Point	222BLR2	Boiler 2	50000	Formaldehyde	3.28E-02	4.72E-07	3.29E-05	4.14E-06
Capped Point	222BLR2	Boiler 2	1151	PAH	1.93E-04	2.78E-09	1.93E-07	2.44E-08
Capped Point	222BLR2	Boiler 2	91203	Naphthalene	5.79E-04	8.33E-09	5.80E-07	7.31E-08
Capped Point	222BLR2	Boiler 2	75070	Acetaldehyde	8.30E-03	1.19E-07	8.31E-06	1.05E-06
Capped Point	222BLR2	Boiler 2	107028	Acrolein	5.21E-03	7.49E-08	5.22E-06	6.58E-07
Capped Point	222BLR2	Boiler 2	7664417	Ammonia	6.18E+00	8.88E-05	6.19E-03	7.79E-04
Capped Point	222BLR2	Boiler 2	100414	Ethyl Benzene	1.83E-02	2.64E-07	1.84E-05	2.31E-06
Capped Point	222BLR2	Boiler 2	110543	Hexane	1.22E-02	1.75E-07	1.22E-05	1.53E-06
Capped Point	222BLR2	Boiler 2	115071	Propylene	1.41E+00	2.03E-05	1.41E-03	1.78E-04
Capped Point	222BLR2	Boiler 2	108883	Toluene	7.06E-02	1.02E-06	7.07E-05	8.91E-06
Capped Point	222BLR2	Boiler 2	1330207	Xylene	5.25E-02	7.55E-07	5.26E-05	6.62E-06
Capped Point	DGRBLR	Degreaser Boiler	71432	Benzene	3.07E-03	4.42E-08	3.08E-06	3.88E-07

Source Type	Modeled Source	Source Description C	CAS Number	Chemical Name	Annual Emissions (lbs/yr)	Annual Emissions (g/s)	Maximum Hourly Emissions (lbs/hr)	Maximum Hourly Emissions (g/s)
Capped Point	DGRBLR	Degreaser Boiler	50000	Formaldehyde	6.53E-03	9.39E-08	6.54E-06	8.24E-07
Capped Point	DGRBLR	Degreaser Boiler	1151	РАН	3.84E-05	5.52E-10	3.85E-08	4.85E-09
Capped Point	DGRBLR	Degreaser Boiler	91203	Naphthalene	1.15E-04	1.66E-09	1.15E-07	1.45E-08
Capped Point	DGRBLR	Degreaser Boiler	75070	Acetaldehyde	1.65E-03	2.38E-08	1.65E-06	2.08E-07
Capped Point	DGRBLR	Degreaser Boiler	107028	Acrolein	1.04E-03	1.49E-08	1.04E-06	1.31E-07
Capped Point	DGRBLR	Degreaser Boiler	7664417	Ammonia	1.23E+00	1.77E-05	1.23E-03	1.55E-04
Capped Point	DGRBLR	Degreaser Boiler	100414	Ethyl Benzene	3.65E-03	5.25E-08	3.65E-06	4.60E-07
Capped Point	DGRBLR	Degreaser Boiler	110543	Hexane	2.42E-03	3.48E-08	2.42E-06	3.05E-07
Capped Point	DGRBLR	Degreaser Boiler	115071	Propylene	2.81E-01	4.04E-06	2.81E-04	3.54E-05
Capped Point	DGRBLR	Degreaser Boiler	108883	Toluene	1.41E-02	2.02E-07	1.41E-05	1.77E-06
Capped Point	DGRBLR	Degreaser Boiler	1330207	Xylene	1.04E-02	1.50E-07	1.05E-05	1.32E-06
Capped Point	DRYER3	Dryer #3	71432	Benzene	6.18E-03	8.88E-08	6.19E-06	7.79E-07
Capped Point	DRYER3	Dryer #3	50000	Formaldehyde	1.31E-02	1.89E-07	1.31E-05	1.66E-06
Capped Point	DRYER3	Dryer #3	1151	PAH	7.72E-05	1.11E-09	7.73E-08	9.74E-09
Capped Point	DRYER3	Dryer #3	91203	Naphthalene	2.32E-04	3.33E-09	2.32E-07	2.92E-08
Capped Point	DRYER3	Dryer #3	75070	Acetaldehyde	3.32E-03	4.77E-08	3.32E-06	4.19E-07
Capped Point	DRYER3	Dryer #3	107028	Acrolein	2.08E-03	3.00E-08	2.09E-06	2.63E-07
Capped Point	DRYER3	Dryer #3	7664417	Ammonia	2.47E+00	3.55E-05	2.47E-03	3.12E-04
Capped Point	DRYER3	Dryer #3	100414	Ethyl Benzene	7.33E-03	1.05E-07	7.35E-06	9.26E-07
Capped Point	DRYER3	Dryer #3	110543	Hexane	4.86E-03	6.99E-08	4.87E-06	6.14E-07
Capped Point	DRYER3	Dryer #3	115071	Propylene	5.64E-01	8.12E-06	5.65E-04	7.12E-05
Capped Point	DRYER3	Dryer #3	108883	Toluene	2.83E-02	4.06E-07	2.83E-05	3.57E-06
Capped Point	DRYER3	Dryer #3	1330207	Xylene	2.10E-02	3.02E-07	2.10E-05	2.65E-06
Capped Point	DRYER4	Dryer #4	71432	Benzene	6.18E-03	8.88E-08	6.19E-06	7.79E-07
Capped Point	DRYER4	Dryer #4	50000	Formaldehyde	1.31E-02	1.89E-07	1.31E-05	1.66E-06
Capped Point	DRYER4	Dryer #4	1151	PAH	7.72E-05	1.11E-09	7.73E-08	9.74E-09
Capped Point	DRYER4	Dryer #4	91203	Naphthalene	2.32E-04	3.33E-09	2.32E-07	2.92E-08
Capped Point	DRYER4	Dryer #4	75070	Acetaldehyde	3.32E-03	4.77E-08	3.32E-06	4.19E-07
Capped Point	DRYER4	Dryer #4	107028	Acrolein	2.08E-03	3.00E-08	2.09E-06	2.63E-07
Capped Point	DRYER4	Dryer #4	7664417	Ammonia	2.47E+00	3.55E-05	2.47E-03	3.12E-04
Capped Point	DRYER4	Dryer #4	100414	Ethyl Benzene	7.33E-03	1.05E-07	7.35E-06	9.26E-07
Capped Point	DRYER4	Dryer #4	110543	Hexane	4.86E-03	6.99E-08	4.87E-06	6.14E-07
Capped Point	DRYER4	Dryer #4	115071	Propylene	5.64E-01	8.12E-06	5.65E-04	7.12E-05
Capped Point	DRYER4	Dryer #4	108883	Toluene	2.83E-02	4.06E-07	2.83E-05	3.57E-06
Capped Point	DRYER4	Dryer #4	1330207	Xylene	2.10E-02	3.02E-07	2.10E-05	2.65E-06
Volume	ABRBLST	Abrasive Blasting	7429905	Aluminum	5.56E-02	8.00E-07	3.05E-05	3.85E-06
Volume	ABRBLST	Abrasive Blasting	7440417	Beryllium & Compounds	7.15E-05	1.03E-09	3.93E-08	4.95E-09
Volume	ABRBLST	Abrasive Blasting	7440439	Cadmium & Compounds	3.97E-05	5.71E-10	2.18E-08	2.75E-09
Volume	ABRBLST	Abrasive Blasting	7440484	Cobalt & Compounds	1.75E-04	2.51E-09	9.60E-08	1.21E-08
Volume	ABRBLST	Abrasive Blasting	7440473	Chromium & Compounds (Other Than Hexavalent)	6.75E-03	9.71E-08	3.71E-06	4.67E-07
Volume	ABRBLST	Abrasive Blasting	7440508	Copper & Compounds	2.22E-02	3.20E-07	1.22E-05	1.54E-06
Volume	ABRBLST	Abrasive Blasting	18540299	Hexavalent Chromium Compounds (Other)	1.43E-03	2.06E-08	7.85E-07	9.90E-08
Volume	ABRBLST	Abrasive Blasting	7439965	Manganese & Compounds	2.22E-03	3.20E-08	1.22E-06	1.54E-07

#### AB 2588 HRA for Anaplex Corporation

Source Type	Modeled Source	Source Description	CAS Number	Chemical Name	Annual Emissions (lbs/yr)	Annual Emissions (g/s)	Maximum Hourly Emissions (lbs/hr)	Maximum Hourly Emissions (g/s)
Volume	ABRBLST	Abrasive Blasting	7440020	Nickel & Compounds	4.77E-03	6.85E-08	2.62E-06	3.30E-07
Volume	ABRBLST	Abrasive Blasting	7439921	Lead	3.97E-05	5.71E-10	2.18E-08	2.75E-09
Volume	ABRBLST	Abrasive Blasting	7782492	Selenium & Compounds	5.96E-04	8.57E-09	3.27E-07	4.12E-08
Volume	ABRBLST	Abrasive Blasting	7440622	Vanadium (Fume or Dust)	2.98E-04	4.28E-09	1.64E-07	2.06E-08

#### Abbreviations:

g/s = grams per second lbs/hr = pounds per hour lbs/yr = pounds per year TAC = toxic air contaminant

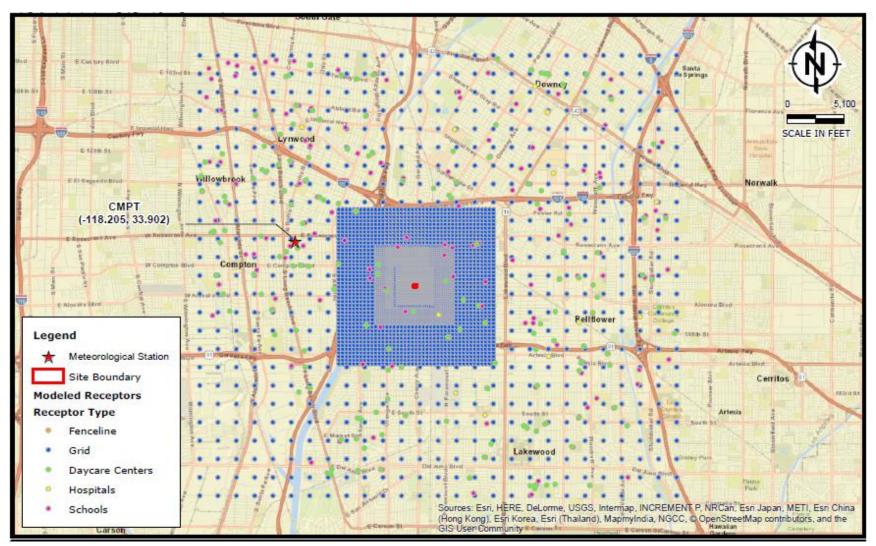
#### Table ES-2: Exposure Pathway and Target Organ by TAC

					Factor	Factor				Pi	athy	way		Та		cute t Or		5			Та		roni t Or	ic gan	5		0	8-He Chro Tare	nic
	CAS	Annual Emissions	Maximum Hourly Emissions	ulti-pathway	Inhalation Cancer Slope Fa	Oral Gancer Slope Fa	Acute REL	Inhalation Chronic REL	Oral Chronic REL	Inhalation	Soil ingestion	T	's milk	CNS				BLOOD	,	CNS	Τ	Π	REPRO_DEVEL	Τ	BONE_TEETH	ENDO		NUMMI	
Chemical Name	Number	(lbs/yr)	(lbs/hr)	2	H0	00	<	A0	00		5 03	Ξ	Σΰ	Ū	<u> </u>	<u>د مر</u>	5	<u>0</u>	5			U	<u>a</u> a	<u>ت ا</u>				P	<u>× @</u>
1,2,4-Trimethylbenzene	95636	8.45E+00	4.22E-03	H						x	+	+	+	++	+	+	$\vdash$	+	⊢	$\vdash$	+	+	+	+	H	+	+	H	++
4,4'-Isopropylidenediphenol	80057	2.46E+00	1.23E-03	+	1 005 00		4 705 102	1 405 400		x	+	+	+	+	+	x	H		+	$\mathbb{H}$	+	+	-,	_	H	+	+	H	+
Acetaldehyde	75070	2.49E-02	2.49E-05	H	1.00E-02		4.70E+02	1.40E+02		x	+	+	+	++	+	X	H	X	+	$\mathbb{H}$	+	+	- )	-	H	+	+	+ +	x x
Acrolein	107028	1.56E-02	1.57E-05	+			2.50E+00	3.50E-01			+	+	+	++	+	×	H	×	⊢	$\vdash$	+	++	- 1	×	H	+	+	H	×
Aluminum	7429905	1.93E-01	9.93E-05	+						х	+	+	+	++	+	-	H	-	⊢	$\vdash$	+	+	-	+	H	+	+	H	+
Ammonia	7664417	1.85E+01	1.86E-02	$\square$			3.20E+03	2.00E+02		х	+	$\square$	+	$\square$	+	X	$\square$	x	+	$\square$	+	$\square$		×	$\square$	+	+	$\square$	+
Ammonium Nitrate	6484522	7.40E-03	3.70E-05	$\square$						х	+	$\square$	+	$\square$	+	+	$\square$	+	+	$\square$	+	$\square$	+	+	Н	+	+	$\square$	+
Antimony Trioxide	1309644	9.86E-02	4.93E-05	$\square$						х	+	$\square$	+	$\square$	$\rightarrow$	+	Ц	+	1	Ц	+	$\square$	$\rightarrow$	+	Ц	$\downarrow$	+	Ц	$\downarrow$
Barium & Compounds	7440393	2.35E-01	1.18E-04	$\square$						х	$\perp$	$\square$	$\perp$	$\square$	+	$\perp$	Ц	$\perp$	$\perp$	$\square$	$\perp$	$\square$		$\perp$	Щ	+	+	Ц	$\square$
Barium Chromate	10294403	2.64E-01	1.32E-04	х	5.10E+02	5.00E-01		2.00E-01	2.00E-02	<b>X</b> :	×х	X		Ц			Ц			Ц		$\square$	)	×	Ц	7	٢.	Ц	$\square$
Benzene	71432	4.63E-02	4.64E-05		1.00E-01		2.70E+01	3.00E+00		х	$\perp$	$\square$		Ц	X)	<	Ц	X	:	Ц	$\perp$	Ц			Ц	>	(	Ц	X
Beryllium & Compounds	7440417	7.15E-05	3.93E-08	х	8.40E+00			7.00E-03	2.00E-03	X :	хx	X									x	X	)	×	$\square$			$\square$	
Cadmium & Compounds	7440439	3.55E-02	1.28E-03	х	1.50E+01			2.00E-02	5.00E-04	X	x x	x									X		)	×					
Chromium Compound	7440473	6.84E-02	3.84E-05							х				Π			Π			Π					$\square$			$\square$	
Chromium Trioxide	1333820	7.78E-02	4.72E-04	х	5.10E+02	5.00E-01		2.00E-03	2.00E-02	X	хх	x		П	Т	Т	П	Τ	Γ	Π	Т	П	)	ĸ	Π	>	<	Π	
Cobalt & Compounds	7440484	1.86E-02	9.30E-06	Π						х	Т	Π		П	Т	Т	П		Γ	Π	Т	П		Т	Π	T	Т	Π	
Copper & Compounds	7440508	1.67E+00	1.42E-03	Π			1.00E+02			х	Τ	Π		П		X	П			П		П			Π	Τ	Т	Π	
Cumene	98828	1.92E-01	9.58E-05	П						х		Π		П			П			Π		П			Π	T	Т	Π	
Cyanide Compounds	57125	2.70E+00	9.78E-03	Π			3.40E+02	9.00E+00		х		Π		x			П		×	x		П			Π	х	T	Π	
Diethylene Glycol Monobutyl Ether	112345	8.03E-01	1.38E-04	П						х		Π		П			П		$\top$	П		П			Π	T	T	Π	
Dipropylene Glycol Monomethyl Ether	34590948	2.56E-03	1.28E-06	Н						х	+	Ħ	+	Ħ	+	+	Ħ	+	$\vdash$	Ħ	+	Ħ	+	+	Ħ	+	+	Η	+
Epoxy Resins	1091	1.31E+01	6.57E-03	Н						x	+	Ħ	+	Ħ	+	+	Ħ	+	$\top$	Ħ	+	Ħ		+	Ħ	+	+	Ħ	+
Ethyl Benzene	100414	1.22E+02	6.09E-02	Ħ	8.70E-03			2.00E+03		x	+	Ħ	+	Ħ	+	+	Ħ	+	+	Ħ	×	x	x	+	Ħ	x	+	Ħ	++
Ethylene Glycol Monobutyl Ether	111762	1.64E+02	8.17E-02	Н			1.40E+04			x	+	$\square$	+	Ħ	+	x	H	x	+	H	1	H	-	+	Ħ	-	+	Ħ	+
Ethylene Glycol Monopropyl Ether	2807309	2.17E+00	1.08E-03	Ħ						x	+	Ħ	+	Ħ	+		H		+	H	+	Ħ	+	+	H	+	+	Ħ	++
Fluorides and Compounds	1101	5.32E+00	4.09E-03	x			2.40E+02	1.30E+01	4.00E-02	x	+	Ħ	+	Ħ	+	×	Ħ	x	+	Ħ	+	Ħ	5	x	x	+	+	Ħ	++
Formaldehyde	50000	1.15E+01	5.79E-03		2.10E-02		5.50E+01	9.00E+00		x	+	$\square$	+	Ħ	+	1	H	x	+	H	+	Ħ	5	x	Ħ	+	+	Ħ	x
Hexamethylene Diisocyanate Monomer	822060	4.94E-01	2.47E-04	H						x	+	Ħ	+	Ħ	+	+	H		+	H	+	Ħ	-	+	H	+	+	H	++
Hexane	110543	3.65E-02	3.65E-05	Ħ				7.00E+03		x	+	Ħ	+	Ħ	+	+	H	+	+	x	+	Ħ	+	+	H	+	+	Ħ	++
Hexavalent Chromium Compounds (Other)	18540299	3.56E-02	1.86E-05	x	5.10E+02	5.00E-01		2.00E-01	2.00E-02	x	x x	x	+	H	+	+	H	+	+	H	+	H	-	×	H	-	+	H	++
Hydrochloric Acid	7647010	1.70E+02	1.98E-02	f"			2.10E+03	9.00E+00		x	Ť		+	H	+	×	H	x	+	H	+	H	5		H	ť	+	H	+
Hydrofluoric Acid	7664393	5.92E+01	6.77E-03	x			2.40E+02	1.40E+01	4.00E-02	x	+	+	+	⊢	+	x	H	x	+	H	+	+	5	_	x	+	+	H	++
Hydroquinone	123319	1.17E+00	5.87E-04	f			21102102			x	+	+	+	Ħ	+	ŕ	H		+	H	+	+	ť	-	Ħ	+	+	H	++
IPA	67630	3.86E+02	1.93E-01	H			3.20E+03	7.00E+03		x	+	+	+	+	+	x	H	×	+	H	×	+	x	+	H	+	+	H	+
		7.76E+01	3.88E-02	H						x	+	+	+	⊢	+	+^	H		+	H	Ť	+	-	+	H	+	+	H	+
Isocyanates Lead	7439921	7.76E+01 1.08E-04	3.88E-02 1.39E-07	x	4.20E-02	8.50E-03				-	x x	x	×	+	+	+	+	+	+	H	+	+	+	+	H	+	+	H	++
				Ŷ	4.20E-02	8.50E-03				X	_		~	+	+	+	+	+	+	+	+	+	+	+	H	+	+	H	+
Lead Compounds	1128	5.51E-02	2.78E-05	ŕ	4.202-02	0.002-03		9.00E-02		X	<u> </u>	1	^	+	+	+	+	+	╀	L.	+	+	+	+	H	+	+	$\mathbb{H}$	+
Manganese & Compounds	7439965	5.57E-03	3.97E-05					9.00E-02		~									1	^		1			ш		×	ш	

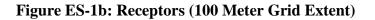
					Factor	Factor				P	othy	way		,		Acuti		ns	Τ		Та		roni t Or	c gans		Т	Chr	lour ronic rget	]
Chemical Name	CAS Number	Annual Emissions (Ibs/yr)	Maximum Hourly Emissions (lbs/hr)	Multi-pathway	Inhalation Cancer Slope Fa	Oral Cancer Slope Fa	Acute REL	Inhalation Chronic REL	Oral Chronic REL	Inhalation	Soil indestion	T		CNS		0_DEVEL	z		CV	CNS	z à	_	REPRO_DEVEL		BONE_TEETH ENDO	BLOOD		RESP	
MEK	78933	3.58E+04	1.79E+01	П			1.30E+04			X	Т	Г	П	Т	TT	X		x	Т	П	T	П		T	T	П	Т		1
Methanol	67561	1.02E+02	5.12E-02	Н			2.80E+04	4.00E+03		x	$^{+}$	$\square$	H	>			Н	H	+	Ħ	+	Н	х	Π	-	Ħ	+	H	1
Methylene Chloride	75092	5.35E+02	2.67E-01	П	3.50E-03		1.40E+04	4.00E+02		x	T	$\square$		х×			П		×	x	$\top$	П		Π	T	Ħ	$\top$	H	1
Methylene Diphenyl Diisocyanate	101688	1.25E+00	6.27E-04	П			1.20E+01	8.00E-02		x	$^{+}$		H	$\top$	П	x		H	$\top$	Ħ	$\top$	П	)	(	-	Ħ	+	x	1
мівк	108101	4.30E+02	2.15E-01	Н						x	$^{+}$	$\square$	H	╈	Н		Н	H	$\top$	Ħ	+	П	$\top$	Н	-	Ħ	+	H	1
Naphthalene	91203	1.69E+01	8.44E-03	П	1.20E-01			9.00E+00		x	T	$\square$	Π		П		Π		T	Π	T	П		(	T	H	T	H	1
n-Butanol	71363	3.30E+01	1.65E-02	Π						x	T	$\square$	H		Π		Π		$\top$	Ħ	+	Π		$\square$	T	Ħ	$\top$	$\square$	1
Nickel & Compounds	7440020	3.82E-01	9.82E-04	x	9.10E-01		2.00E-01	1.40E-02	1.10E-02	x	< x	x	H	╈	x		Н	T	$\top$	Π	$\top$	П	x)	(	T	x	x	x	1
Nickel Acetate	373024	1.64E-02	1.03E-05	x	9.10E-01		2.00E-01	1.40E-02	1.10E-02	x	< x	x	H	+	x	+	Ħ	H	+	Ħ	+	Ħ	x)	(	$\pm$	x	×	x	1
Nitric Acid	7697372	2.24E+02	2.73E-02	Ħ			8.60E+01			x	$^{+}$	$\square$	H	╈	Н	x		H	+	Ħ	+	Ħ	+	Η	$\pm$	Ħ	+	Ħ	1
PAH	1151	5.79E-04	5,80E-07	×	3.90E+00	1.20E+01				x :	< x	x	x	+	Ħ	+	Ħ	H	+	Ħ	+	Ħ	+	Ħ	+	Ħ	$^{+}$	Ħ	1
Phenol	108952	1.19E+02	5.94E-02	П			5.80E+03	2.00E+02		x	$^{+}$		H		Н	x		х	x	x	x	x		Н	-	Ħ	+	H	1
Phosphoric Acid	7664382	8.01E+01	7.02E-02	П				7.00E+00		x	Т		П	T	П		П		Т	Π	T	П		(	T	Π	Т	T	1
Propylene	115071	4.23E+00	4.24E-03	П				3.00E+03		x					П					Π		П	)	(	T	П		$\square$	1
Propylene Glycol Monomethyl Ether	107982	3.47E+02	1.74E-01	П				7.00E+03		x	Т		Π		П		Π		Τ	Π		x			T	Π	Т	T	1
Propylene Glycol Monomethyl Ether Acetate	108656	2.24E+01	1.12E-02	П						x	T				П					Π		П			T	Π	T	$\square$	1
Propylene Oxide	75569	1.52E+01	7.61E-03	П	1.30E-02		3.10E+03	3.00E+01		x	Т				П	хх		х	Τ	Π		П	)	(	T	П	Т	П	T
Sec-Butyl Alcohol	78922	3.92E+01	1.96E-02	П						х	Т				Π					Π		Π			T	Π	T	$\square$	1
Selenium & Compounds	7782492	5.96E-04	3.27E-07					2.00E+01	5.00E-03	х	Τ								X	x		х			T				Τ
Silica	1175	1.29E+01	6.43E-03					3.00E+00		х					Π					Π		Π		(		$\square$			Τ
Silver & Compounds	7440224	6.67E-03	3.32E-05	Π						х	Т				Π					$\square$		Π			T				Τ
Sodium Dichromate	10588019	4.53E-01	8.62E-04	х	5.10E+02	5.00E-01		2.00E-01	2.00E-02	x	x x	x												(		х			Ι
Sodium Hydroxide	1310732	4.91E+00	6.26E-03	Π			8.00E+00			x	Т			Т	Π	X	x	х	Т	Π	T	Π			T	$\square$	T		Τ.
Strontium Chromate	7789062	2.49E+01	1.25E-02	x	5.10E+02	5.00E-01		2.00E-01	2.00E-02	X :	< X	x			Π					Π		Π	)	(	T	x			Τ
Sulfuric Acid	7664939	1.36E+02	1.38E-01				1.20E+02	1.00E+00		х						X	(			Π		Π	)	(					Τ
Tert-Butyl Acetate	540885	5.13E+00	2.57E-03								T			T						$\square$						Π			1
Tetrachloroethylene	127184	1.26E+01	1.44E-03		2.10E-02		2.00E+04	3.50E+01		х						X		х			X	x							
Toluene	108883	1.37E+03	6.83E-01				3.70E+04	3.00E+02		х				>	(	хх	(	х		х			x	(					1
Trichloroethylene	79016	5.44E-01	2.72E-04		7.00E-03			6.00E+02		х										х				X					
Vanadium (Fume or Dust)	7440622	2.98E-04	1.64E-07				3.00E+01			х						Х	:	х											1
Xylene	1330207	5.80E+02	2.90E-01				2.20E+04	7.00E+02		x	T			>	(	X	1	x		x				x					1
Zinc & Compounds	7440666	1.67E-01	2.58E-04							х																			1
Zinc Oxide	1314132	3.35E-03	2.69E-05							х	T															П			1

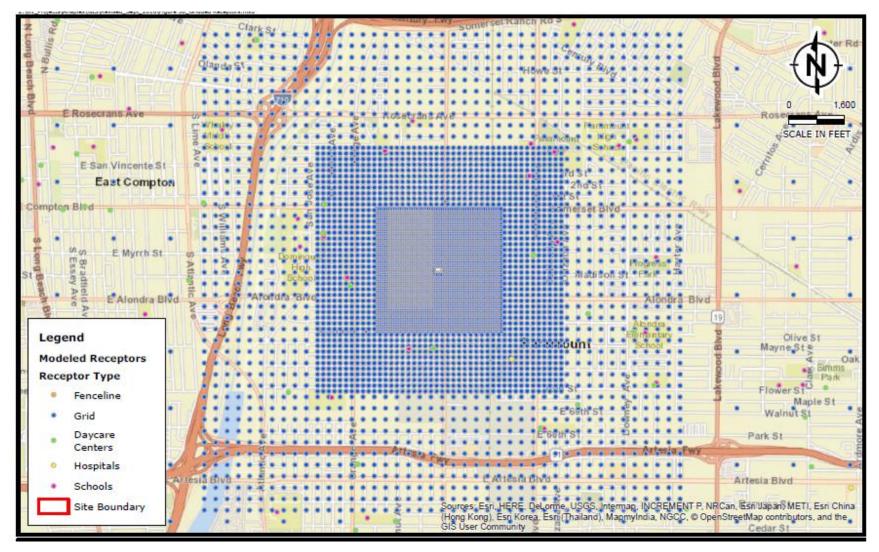
Table ES-5: TIKA Summary of Health Kisks	
Cancer Risk (per million exposed)	
Point of Maximum Impact (PMI)	161,320
Maximally Exposed Individual Resident (MEIR)	931
Maximally Exposed Individual Worker (MEIW)	2,836
Maximally Exposed Individual Sensitive Receptor (MEISR)	114
Chronic Hazard Index	
Maximally Exposed Individual Resident (MEIR)	0.06
Maximally Exposed Individual Worker (MEIW)	2.02
8-Hour Chronic Hazard Index	
Point of Maximum Impact (PMI)	0.51
Acute Hazard Index	
Point of Maximum Impact (PMI)	24

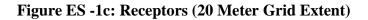
**Table ES-3: HRA Summary of Health Risks** 

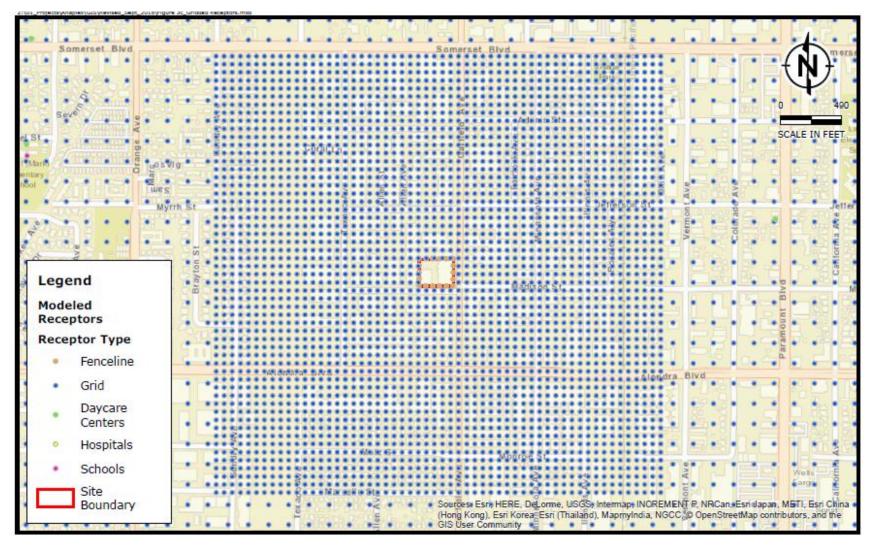


#### Figure ES-1a: Receptors (500 Meter Grid Extent) and Meteorological Station

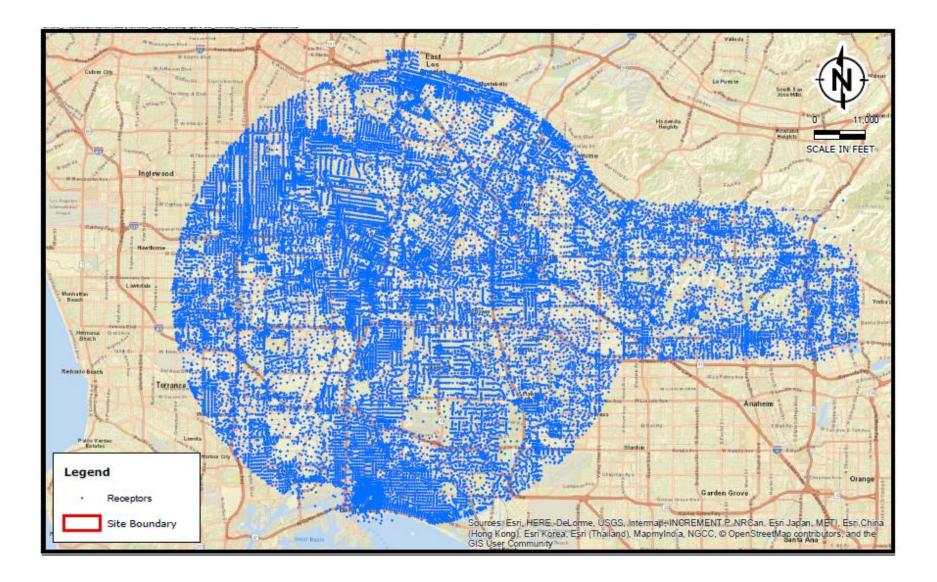






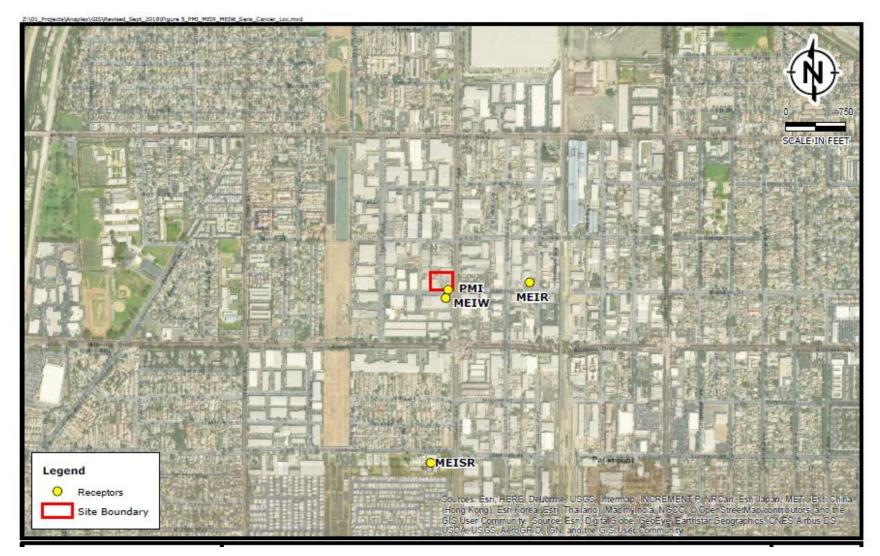


#### Figure ES-1d: Census Tract Centroid Receptors

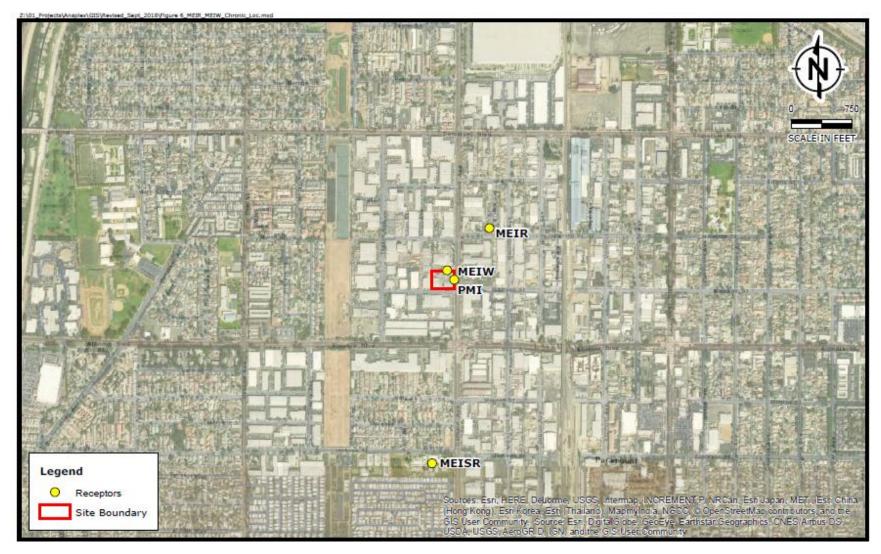




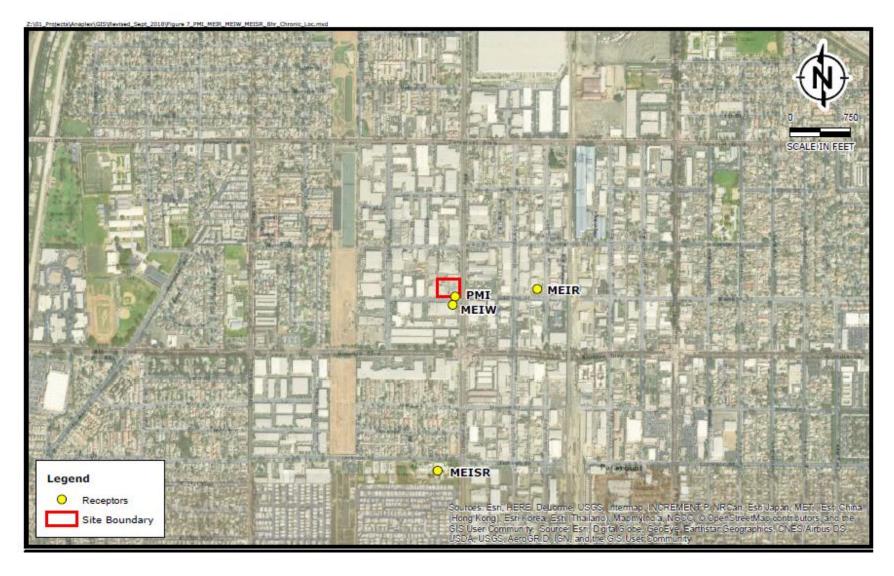
#### Figure ES-2: Residential Cancer Risk Contour (10 in a million)



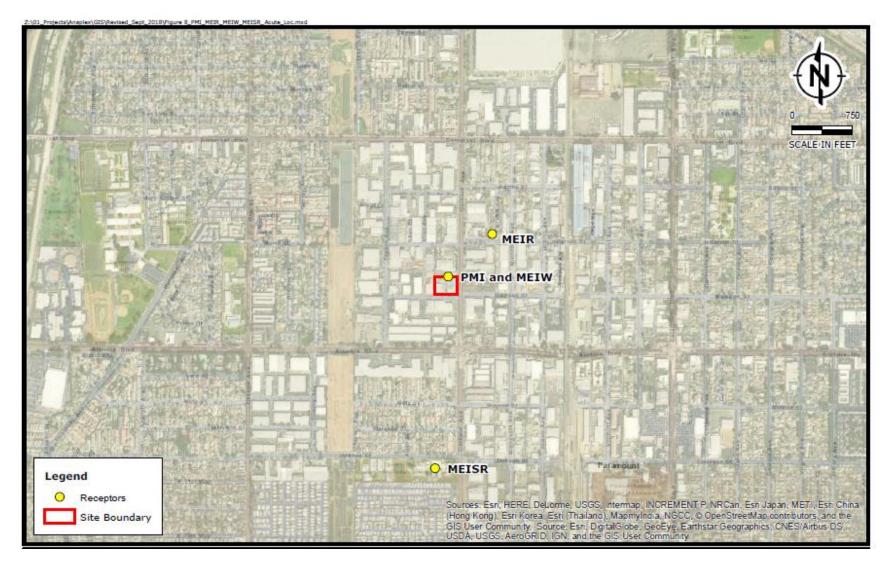
#### Figure ES-3: Locations of MEIR, MEIW, PMI, and MEISR for Cancer Risk



#### Figure ES-4: Locations of MEIR, MEIW, PMI, and MEISR for Chronic Hazard Index



#### Figure ES-5: Locations of MEIR, MEIW, PMI, and MEISR for 8-hr Chronic Hazard Index



#### Figure ES-6: Locations of MEIR, MEIW, PMI, and MEISR for Acute Hazard Index

AQMD (909) 39	opley Drive	, Diamond B	ar, CA 91765	nt District	
				MARY FORM	
Facility Name :		rporation (ID: 0	16951)		
Facility Address:		ld Ave. Paramo	-		
Type of Business:	Metal Platin				
Inventory Year :	2016 Revise	ed HRA (9/17/	2018 Submittal -	Recompiled Ramboll	's Summary)
A. Cancer Risk			ans ane chance in a hemical aver a perio		rom being constantly exposed to
1. Maximum Cancer	Risk to Rece	ptors :	(Offsite and reside	ence = 30-year exposure, v	vorker = 25-year exposure)
a. Offsite	161,320 i				91889.3E, 3750691.1N)
b. Residence c. Worker		n a million n a million (WAF)			0720N, NW of Madison & Ilinois) 0660N, 30 m South Facility)
2. Substances Accou				Strontium Chromate (	
Processes Accour	-			Spray Booth #2	fe 1
3. Estimated Popula	-				
5. Maximum Dista B. Hazard Indio	es (	Long Term Effects ( non-carcinagenic in	chronic) and Short Te npacts are estimated	erm Effects (acute)) I by comparing calculated	ancentration to identified
1. Maximum Chroni			revers, and expressin	g this comparison in term:	soja nazara index j
2	0.056	Location:	#2115 (392040)	E, 3750920 N, NE of Jeff	erson & Garfield)
a. Residence HI:	2.022	Location:	#1659 (391880)	E, 3750760 N, North Bus	
a. Residence HI: b. Worker HI:					toxicological endpoint: Respiratory
<ul> <li>b. WorkerHI:</li> <li>2. Substances Account</li> </ul>			l:	Sulfuric Acid (60%), Cl Chromate (6%), HCl (4	
<ol> <li>b. Worker H1:</li> <li>Substances Accounts</li> <li>Maximum 8-hour</li> </ol>	Chronic Haz	ard Index:		Chromate (6%), HCl (4	496), MDI (396)
b. Worker H1: 2. Substances Accou 3. Maximum 8-hour 8-Hr Chronic HI:	Chronic Haz	ard Index: Location:	#6 South Fencel	Chromate (6%), HCl (4	196), MDI (396) toxicological endpoint: Respiratory
<ol> <li>b. Worker H1:</li> <li>Substances Accou</li> <li>Maximum 8-hour</li> <li>8-Hr Chronic HI:</li> <li>Substances Accou</li> </ol>	Chronic Haz 0.509 Inting for 909	ard Index: Location: % of 8-hr Chroi	#6 South Fencel	Chromate (6%), HCl (4	toxicological endpoint: Respiratory
<ol> <li>b. Worker H1:</li> <li>Substances Account</li> <li>Maximum 8-hour 8-hr Chronic HI:</li> <li>Substances Account</li> <li>Maximum Acute</li> </ol>	Chronic Haz 0.509 Inting for 909 Hazard Index	ard Index: Location: % of 8-hr Chrol :	#6 South Fencel nic HI:	Chromate (6%), HCl (4 ine MDI (67%), Ni (13%),	196), MDI (396) toxicological endpoint: Respiratory HCHO (1196)
<ol> <li>b. Worker H1:</li> <li>Substances Accou</li> <li>Maximum 8-hour 8-Hr Chronic HI:</li> <li>Substances Accou</li> <li>Maximum Acute PMI:</li> </ol>	Chronic Haz 0.509 Inting for 909 Hazard Index 23.837	ard Index: Location: % of 8-hr Chroi : Location:	#6 South Fencel nic HI:	Chromate (6%), HCl (4	196), MDI (396) toxicological endpoint: Respiratory HCHO (1196)
<ol> <li>b. Worker H1:</li> <li>Substances Account</li> <li>Maximum 8-hour 8-hr Chronic HI:</li> <li>Substances Account</li> <li>Maximum Acute</li> </ol>	Chronic Haz 0.509 Inting for 909 Hazard Index 23.837	ard Index: Location: % of 8-hr Chroi : Location:	#6 South Fencel nic HI:	Chromate (6%), HCl (4 ine MDI (67%), Ni (13%),	196), MDI (396) toxicological endpoint: Respiratory HCHO (1196)
<ol> <li>b. Worker H1:</li> <li>Substances Accou</li> <li>Maximum 8-hour 8-Hr Chronic HI:</li> <li>Substances Accou</li> <li>Maximum Acute PMI:</li> </ol>	Chronic Haz 0.509 Inting for 909 Hazard Index 23.837 Inting for 909	ard Index: Location: % of 8-hr Chron : Location: % of Acute HI:	#6 South Fencel nic HI: #17 North Fence	Chromate (6%), HCl (4 line MDI (67%), Ni (13%), eline (391872.7 E, 3750	4%), MDI (3%) toxicological endpoint: Respiratory HCHO (11%) 758.4N)
<ol> <li>b. Worker H1:</li> <li>Substances Accou</li> <li>Maximum 8-hour 8-Hr Chronic HI:</li> <li>Substances Accou</li> <li>Maximum Acute PMI:</li> <li>Substances Accou</li> </ol>	Chronic Haz 0.509 Inting for 909 Hazard Index 23.837 Inting for 909	ard Index: Location: & of 8-hr Chrol : Location: & of Acute HI: Risk Reduct	<u>#6 South Fencel</u> nic HI: <u>#17 North Fence</u> <b>tion</b>	Chromate (6%), HCl (4 line MDI (67%), Ni (13%), eline (391872.7 E, 3750	4%), MDI (3%) toxicological endpoint: Respiratory HCHO (11%) 758.4N)
<ol> <li>b. WorkerH1:</li> <li>Substances Accou</li> <li>Maximum 8-hour 8-Hr Chronic HI:</li> <li>Substances Accou</li> <li>Maximum Acute PMI:</li> <li>Substances Accou</li> <li>C. Public Notified</li> </ol>	Chronic Haz 0.509 Inting for 909 Hazard Index 23.837 Inting for 909 Ication and n Required?	ard Index: Location: 6 of 8-hr Chrol Location: 6 of Acute HI: <b>Risk Reduct</b> _X_Yes	#6 South Fencel nic HI: #17 North Fence <b>ion</b> No	Chromate (6%), HCl (4 line MDI (67%), Ni (13%), eline (391872.7 E, 3750	4%), MDI (3%) toxicological endpoint: Respiratory HCHO (11%) 758.4N)

#### 2 Introduction

On December 14, 2016, South Coast Air Quality Management District (SCAQMD) sent a letter to Anaplex Corporation (Anaplex, SCAQMD Facility ID No.: 016951) identifying it as a Potentially High Risk Level facility under Rule 1402. Anaplex is located at 15547 Garfield Avenue in the City of Paramount. Per Rule 1402, Anaplex was required to prepare an Air Toxics Inventory Report (ATIR), Health Risk Assessment (HRA), and Risk Reduction Plan (RRP) using its facility emissions from 2016. SCAQMD staff received the ATIR on May 15, 2017 and the HRA and RRP on June 13, 2017. On December 8, 2017, SCAQMD staff provided Anaplex with comments and recommendations for revisions on the submitted ATIR, HRA, and RRP, and requested revision and resubmittal of respective documents. After multiple discussions with Anaplex representatives, SCAQMD staff received the Revised ATIR on May 1, 2018 and the Revised HRA and Revised RRP on May 17, 2018. SCAQMD staff had no further comments on the Revised ATIR and this HRA is based on those emissions estimates.

Anaplex resubmitted another Revised HRA and Revised RRP on September 26, 2018. However, the resubmitted Revised HRA contained alternate HRA scenarios in the main HRA report, which is not consistent with SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup>. In the interest of time and pursuant to Rule 1402 (e)(2)(D), SCAQMD staff modified the Revised HRA resubmitted on September 26, 2018 to follow Appendix B of SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup> dated November 2016. This HRA is the modified HRA. SCAQMD staff is currently reviewing the Revised RRP.

This HRA relies upon results of one of the scenarios contained in Anaplex's Revised HRA, but presents the information consistent with SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup>.

#### 2.1 Health Risk Assessment Definitions

The acute, chronic, and cancer health impacts are defined as follows:

- Acute risks are non-cancer adverse health impacts, commonly associated with exposures to relatively high concentrations of toxic air contaminants (TAC or air toxics) over short periods of time, from minutes to hours. Acute exposure typically results in headaches, dizziness, nausea, eye/nose/throat irritation, and/or skin rash. Each toxic chemical may affect the body through different mechanisms. Target organs for each TAC have been identified by California's Office of Environmental Health Hazard Assessment (OEHHA) in its Risk Assessment Guidelines document<sup>2</sup>.
- Chronic risks are non-cancer adverse health impacts, commonly associated with exposures to relatively low concentrations of air toxics over long periods of time, as in several years. Typical symptoms of chronic exposure include persistent respiratory or digestive problems, chronic cough, chest pains, numbness or tingling, loss of smell or taste, etc. As with acute risks, the target organs due to chronic risks that will be analyzed in the HRA may affect the body through different mechanisms and have been identified by OEHHA.
- Chronic 8-hour non-cancer health impacts are for exposures that occur on a recurrent basis, but only during a portion of each day. The 8-hour reference exposure levels (REL) are

 $<sup>^2\</sup> Available\ on\ OEHHA's\ website\ at\ https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0$ 

designed to protect against periodic exposure that could occur as often as daily and may share characteristics of both acute and chronic exposure. These RELs were developed because of concerns that applying the chronic REL in some scenarios was overly conservative. By definition, an 8-hour REL is an exposure that is not likely to cause adverse health effects in a human population, including sensitive subgroups, exposed to that concentration for an 8-hour exposure duration on a regular (including daily) basis.

• Cancer is defined as the abnormal or irregular growth of cells or tissues. There are many triggers that may cause or increase the risk of cancer, including exposure to certain chemicals or air toxics. The increased risk of cancer from exposure to a chemical means the additional risk of getting cancer from continuous exposure (i.e., 30 years and 365 days per year) to potentially cancer-causing compounds. Cancer risk is usually expressed as a probability (e.g., ten excess chances of contracting cancer in one million exposed individuals).

In general, the HRA provides conservative estimates of the probabilities for contracting adverse health effects. A "conservative" estimate assumes that the worst-case exposure conditions exist so that the health effects are not underestimated.

#### 2.2 Significance Criteria and Notification Levels

Under AB 2588, the operator of a facility must provide notices to all exposed persons if the facility's HRA indicates that there is a significant health risk associated with the air toxic emissions from the facility.

The SCAQMD's public notification thresholds are as follows:

- Greater than or equal to MICR of 10,
- Greater than 1.0 acute HI, or
- Greater than 1.0 chronic HI.

The operator is also required to implement risk reduction measures if the emissions from the facility cause an exceedance of any of the following action risk levels in SCAQMD Rule 1402:

- MICR of twenty-five (25) in one million,
- Cancer burden of 0.5, or
- Total acute HI or chronic HI of three (3.0) for any target organ system at any receptor location.

SCAQMD Rule 1402 also establishes significant risk levels; facilities above these levels are required to submit a risk reduction plan, as well as expedited actions to implement the Risk Reduction Plan:

- MICR of 100 in one million, or
- Total acute HI or chronic HI of five (5.0) for any target organ system at any receptor location.

#### 2.3 Objectives

Consistent with AB 2588 requirements, the objective of the HRA is to estimate potential risks to human populations in the vicinity of Anaplex that may be exposed to potential operational emissions in 2016.

As described in the OEHHA HRA Guidance<sup>2</sup>, the Hotspots Analysis and Reporting Program (HARP2) model was used to estimate the potential impacts to human health in the vicinity of Anaplex. Dispersion of potential emissions attributable to Anaplex was modeled using AERMOD. The results from AERMOD were imported into the Risk Analysis module of HARP2, to calculate the potential cancer risk, potential chronic non-cancer hazard index, and potential acute hazard index at receptors in the vicinity of the facility.

#### **3** Hazard Identification

#### 3.1 Facility Location and Process Description

Anaplex (SCAQMD Facility ID No. 016951), is a metal finishing facility located in the City of Paramount at 15547 Garfield Avenue. The land use in the immediate vicinity of the facility is primarily industrial or commercial urban area with the nearest residential neighborhood approximately 200 meters to the northeast. The topography around the facility is generally flat. As recommended in the SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup> and the SCAQMD Modeling Guidance for AERMOD<sup>3</sup>, the urban dispersion option was used with a population of 9,818,605, based on the population of Los Angeles County.

Due to its location in an urbanized area with no drinking water reservoirs within the zone of influence, exposure to air toxics from Anaplex was estimated for the inhalation, dermal, soil ingestion, home-grown produce, and mother's milk pathways.

Anaplex performs metal finishing operations (electroplating and anodizing) primarily for the aerospace industry. Metals finished at this location include aluminum, stainless steel, steel, copper, brass, titanium, and magnesium. Potential onsite sources of emissions include the anodizing and plating tanks, curing and drying ovens, paint spray booths, and miscellaneous natural gas sources such as boilers.

#### **3.2** Substances Emitted and Evaluated

The list of potentially emitted substances considered in preparation of the HRA is from Appendix A-I of the CARB Emission Inventory Criteria and Guidelines for the Air Toxics "Hot Spots" Program<sup>4</sup> and the OEHHA Risk Assessment Guidelines<sup>2</sup>. The AB 2588 air toxics potentially emitted from Anaplex are shown in Table 1. Table 2 includes identification of the compounds that are evaluated for cancer risk, non-cancer chronic, or non-cancer acute impacts, as well as the compounds that have non-inhalation routes of exposure.

For carcinogens, cancer potency factors (CPF) were used for computing cancer risk. For noncancer health effects, Reference Exposure Levels (RELs) were used. The non-carcinogenic hazard indices were computed for chronic and acute exposures with their respective toxicological endpoints shown. For multi-pathway pollutants, oral doses, oral CPFs, and/or non-inhalation RELs

 $<sup>^3\</sup> http://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/modeling-guidance#AERMOD$ 

<sup>&</sup>lt;sup>4</sup> <u>https://www.arb.ca.gov/ab2588/2588guid.htm</u>

were used as appropriate. All factors used were from the CARB/OEHHA consolidated table<sup>5</sup> of values, incorporated into HARP2.

#### **3.3** Quantification of Emissions

The emission sources of air toxics at Anaplex were identified and quantified using emissions from 2016. These emissions are included in the ATIR, which is included as Appendix A.

Annual and maximum hourly emissions for TACs were reported from sixteen source groups as shown in Table 1.

#### **3.4** Paint Spray Booth Emissions

Anaplex operates four paint spray booths with SCAQMD Permits to Operate (P/O) G41700, G41701, G41704, and G41705 with permit condition number 7 which states "*Materials used in this equipment shall not contain any chromium*". Per Rule 1469.1, paint spray booths using hexavalent chromium containing coatings must be controlled by high efficiency filters, i.e. HEPA or ULPA.

However, SCAQMD staff found evidence of overspray of hexavalent chromium paints found in all four paint spray booths based on samples taken at Anaplex. Samples taken at Anaplex on March 7, 2016 tested positive for hexavalent chromium in paint spray booths #1 and #2. As a result, Anaplex received a Notice of Violation (NOV) P64514 on April 8, 2016 for violations of Rule 203(b) and Rule 1469.1(d)(3) for using chromium containing materials in paint spray booths #1 and #2 against permit condition number 7, and not demonstrating compliance with Rule 1469.1. Additional samples were taken at Anaplex on December 9, 2016 which also tested positive for hexavalent chromium in all four paint spray booths.

The paint spray booths at Anaplex are equipped with a single stage floor filtration system as a control device. SCAQMD staff determined a default control efficiency of 90% for single stage floor filter systems. Although Anaplex provided SCAQMD staff with the certification of the National Emission Standards for Hazardous Air Pollutants (NESHAP) compliance filter and a test result stating over 98% of particulate removal efficiency from the filter manufacturer, SCAQMD staff reiterated that unless a source test from the equipment in question is provided, the default filter efficiencies must be used in order not to under estimate health risks. Therefore, the HRA uses a default filter efficiency of 90%.

According to Anaplex, three paint spray booths (#2, #3, and #4) were used to apply paint in 2016, and only spray booth #2 was used to spray chromium containing paints. Although SCAQMD staff found evidence of overspray in all four paint spray booths, the HRA only modeled chromium containing paint emissions coming from paint spray booth #2. All three paint spray booths are located in the east building, and emissions from each paint spray booth were directed to stacks on the building roof. The air toxics emissions were estimated using the maximum value of the specification range. Paint spray booth emissions were calculated by multiplying the paint usage by the maximum of toxic chemical weight fraction.

<sup>&</sup>lt;sup>5</sup> Available on CARB's website at https://www.arb.ca.gov/toxics/healthval/contable.pdf

Paint spray booth particulate emissions were calculated following the SCAQMD guidelines based on the total paint quantity purchased in 2016 multiplied by the maximum of the toxic chemical weight fraction, an SCAQMD default 65% solids transfer efficiency, and PM control efficiency of filters. Without evidence or reports showing the actual usage of paints, the HRA conservatively used the actual purchase records to estimate emissions.

#### **3.5** Anodizing and Plating Tank Emissions

A total of 31 and 47 tanks in the anodizing and plating area, respectively, contained toxic chemicals in 2016. Similar to the paints used in the spray booth, the TAC emissions from anodizing and plating tanks were estimated by using the maximum value of the specification range for the tank solution. Emissions resulted from evaporation, plating, sparging, and heating operations. Emissions from these tanks were modeled as multiple adjacent volume sources representing the release occurring in the east building where the anodizing and plating tanks are located. It was assumed that evaporation emissions (Source IDs = ANODZEVP and PLATEEVP) occurred continuously (24 hours per day, 7 days per week) while plating, sparging, and heating emissions (Source IDs = ANODZPSH and PLATEPSH) occurred only during operating hours.

Anodizing and plating tank emissions were calculated using a methodology taking into account metal plating efficiencies, material densities and toxic chemical weight fractions (taken from manufacturer safety data sheets), toxic chemical vapor pressures, and tank operational data such as tank dimensions, solution temperature, number of heating cycles, air sparge rates, air sparge hours, rectifier amp ratings, and rectifier amp hours. Emissions from the anodizing and plating tanks in 2016 were generally uncontrolled, with the exception of Tank 19 which used a fume suppressant that controlled particulate emissions. The plating emissions from Tank 19 were calculated using the emission limit of 0.01 mg Cr6+/amp-hr (0.000022 lb/1000 amp-hr). Tank 4 emissions were calculated using 1.45 x 10-4 lb Cr6+/hr from the results of Anaplex's source test on April 10-12, 2017 in calculating the heating and sparging emissions for Dow 7 tank (Tank 4). Lastly, Tank 22 emissions were calculated using the emission factor of 1.29 x 10-4 lb Cr6+/hr calculated based on 1.07 x 10-6 lb Cr6+/(hr-ft2 tank surface area-% sodium dichromate in solution) multiplied by Tank 22's surface area of 24 ft2, and the percent sodium dichromate in solution of 5.01.

#### **3.6 Other Emission Sources**

A description of these other sources modeled and emission calculation methodology is provided in Table 3. Emission files used in the HRA are provided electronically.

### 4 EXPOSURE ASSESSMENT

#### 4.1 Air Dispersion Modeling

U.S. EPA's AERMOD (version 18081) model was used to estimate ambient concentrations for Anaplex. The air dispersion analysis was performed in accordance with OEHHA Risk Assessment Guidelines<sup>2</sup>, the SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup>, and SCAQMD's Modeling Guidance for AERMOD<sup>6</sup>. The results of the air dispersion analysis were used in

<sup>&</sup>lt;sup>6</sup> Available on SCAQMD's website at http://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/modeling-guidance

conjunction with the chemical-specific emissions rates discussed above to estimate potential ambient air concentrations of each compound using Air Dispersion Modeling and Risk Tool (ADMRT) module in HARP2 developed by CARB.

The air dispersion analysis requires the following: identification of source parameters and operating schedules, evaluation of building downwash effects, preparation of meteorological data, evaluation of potential terrain considerations, selection of appropriate dispersion coefficients based on land use, selection of receptor locations, and selection of appropriate averaging time periods. The following sections describe each of these steps.

#### 4.2 Source Characterization

AERMOD requires source-specific parameters such as stack height, stack inside diameter, exit velocity, and stack gas temperature. Table 4 presents the source parameters used in the AERMOD model for each modeled air toxic emission source. Three different representations of emission sources are used in the air dispersion model:

- Point sources;
- Area sources; and
- Volume sources.

Point sources are used to represent those emissions that have single identifiable points of release. A typical point source will have a stack with a defined location. Other sources, however, do not have a single, discrete point of release. Sources that can be reasonably represented as emitting at a uniform rate over a two-dimensional surface are modeled as area sources. Sources that can be reasonably represented as emitting at a uniform rate from a three-dimensional space are modeled as volume sources.

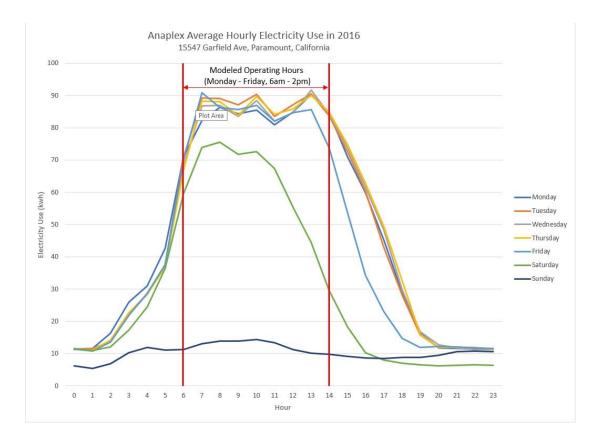
The emission sources at Anaplex were divided into three groups based on the source configuration (e.g., point, volume, or area source) used in the air dispersion model.

- 1. Point sources
  - Paint spray booths #2, #3, #4 (Note that although three paint spray booths (#2, #3, and #4) were used to apply paint in 2016, Anaplex stated that only paint spray booth #2 was used to spray chromium containing paints. Although SCAQMD staff found evidence of overspray in all four paint spray booths, the HRA only modeled chromium containing paint emissions coming from paint spray booth #2).
  - Three boilers
  - One vapor degreaser vented to a carbon canister
  - Two drying ovens
- 2. Volume sources
  - Anodizing tanks
  - Plating tanks
  - Paint and solvent usage in masking areas
  - Abrasive blasting
- 3. Area sources
  - Two solvent baths

#### 4.3 Source Parameters and Operating Schedules

To account for the emissions escaping from the building through doors and windows, anodizing and plating emissions, solvent usage emissions in masking areas, and abrasive blasting emissions were modeled as volume sources with a release height of one-half of the building height, as presented in Table 4. The locations of potential onsite sources and nearby buildings are included as Figure 1. Routine sources were modeled according to the operating schedule (15 - 19 hours per day, and 6 days per week) supported by Anaplex's electricity bills described below, while evaporative emissions from anodizing and plating tanks, and solvent bath emissions were modeled assuming continuous operation.

SCAQMD's default assumption is to use an operational schedule of 24 hours per day, 7 days per week to model a facility's emissions, unless there is a permit condition limiting the hours of operation or the facility can provide evidence in the form of logs or other records, which can be verified by SCAQMD staff for each piece of equipment. Anaplex stated that they only operate one shift between the hours of 6 am and 2 pm and that equipment specific records are neither required nor possible for historical Anaplex operations, which generally involve tank-based plating and anodizing and/or spray painting of parts. Anaplex provided Southern California Edison (SCE) records of the average hourly electricity usage in 2016. Based on SCAQMD staff's review of the electricity records, electricity usage on weekdays start to increase at 1 am, reaching a peak level at approximately 6 am, then decline starting at 1 pm until the background levels are reached at approximately 8 pm.



Without equipment logs, it is not possible for SCAQMD staff to determine what equipment is being operated which results in the increase in electricity consumption. As noted previously, Anaplex operates various heated tanks and other equipment which rely on electricity to operate and it is possible that these are turned on prior to the start of the work day so that they can be at their optimum temperatures when workers arrive, thus resulting in emissions during those hours. Therefore, SCAQMD staff recommended the use of the following operating schedule:

- Monday through Thursday:1 am to 8 pm (19 hours per day)
- Friday: 1 am to 7 pm (18 hours per day)
- Saturday: 1 am to 4 pm (15 hours per day)
- Sunday: no operation

# 4.4 Building Downwash

All the point sources at the facility are located on or near the buildings. Consistent with SCAQMD Modeling Guidance for AERMOD<sup>3</sup>, the U.S. EPA-approved Building Profile Input Program PRIME (BPIPPRIME) was used to simulate the building downwash, which is the effect of nearby structures on the flow of the plumes from their respective emission sources.

# 4.5 Dispersion Parameters

Per the SCAQMD Modeling Guidance for AERMOD<sup>3</sup>, the urban dispersion option was used, with a population of 9,818,605, based on the population of Los Angeles County. AERMOD was run using the regulatory default option, using SCAQMD's Compton meteorological station as the most representative surface station for the facility based on the technical discussion with SCAQMD

staff. As noted on the SCAQMD's website, Compton station only has three years of the processed meteorological data available but can be used for modeling upon request and approval of use. Three years of Compton meteorological data with ADJ\_U\* option was used for the air dispersion modeling in the HRA. A wind rose for the Compton data in 2012, 2015, and 2016 is provided in Figure 2.

### 4.6 Terrain

Terrain data were obtained from the United States Geological Survey (USGS), with 1/3 arcsecond (~10 meter) National Elevation Dataset (NED) data downloaded. Elevations and hill heights were calculated for all sources, buildings, and receptors, using AERMOD terrain preprocessor, AERMAP.

### 4.7 Receptor Locations

Health effect indices such as cancer risk, chronic HI, and acute HI were calculated for a variety of receptor locations. Receptors of primary interest are those at residential locations, at sensitive population locations, and at offsite worker locations. However, in order to get a more complete picture of the patterns of exposure, concentrations and risk are also calculated at regularly spaced grid points throughout the modeling domain.

Receptor networks were constructed for the dispersion analysis based on SCAQMD modeling guidance, including along the property boundary line and out to 500 meters from the facility boundary with a spacing of 20 meters, a fine grid containing receptors spaced 50 meters apart out to a 1,000-meter radius from Anaplex, a medium coarse grid containing receptors spaced 100 meters apart out to a 2-km radius from Anaplex, and a coarse grid containing receptors spaced 500 meters apart out to 5,500 m from the facility boundary. The grid receptor locations inside of the facility boundary are disregarded in the health risk analysis. All receptors were run with a height of 0.0 meters, so that ground-level concentrations are modeled. Sensitive receptor locations (schools, day care facilities, and hospitals) as included in Table 5 were obtained via an internet search and the Google Maps database. A total of 6,506 fenceline and grid receptors were included in the analysis, plus an additional 341 sensitive receptors, for a total of 6,847 receptors.

Additionally, to calculate population exposure and cancer burden, separate dispersion modeling runs were performed at receptors located at the centroid of census tracts whose centroid was located within the modeling domain. The HARP2 model contains the census tract centroid UTM coordinates and population values from the 2010 census; this data was exported from HARP2 to create the census tract centroid receptor grid. A total of 31,358 census tract centroid receptors were modeled; Figures 3a - 3d show these receptor locations.

### 4.8 Coordinate System

The Universal Transverse Mercator (UTM) system of coordinates and the North American Datum (NAD 83) for identifying the UTM coordinates of the various modeling objects (sources, buildings, receptors etc.) was used.

### 4.9 Averaging Times

Calculation of chemical concentrations for use in exposure analysis requires the selection of appropriate concentration averaging times. Multiple dispersion averaging times are used in this

analysis and are discussed below. The AERMOD model input and output files used to estimate long- and short-term dispersion factors were provided electronically.

#### 4.10 Long Term

Average concentrations over the three-year span of the Compton meteorological data were calculated for each compound for use in estimating potential residential cancer risks and chronic non-cancer health effects.

#### 4.11 Short Term

Maximum short-term concentrations (one-hour averages) of the three-year period modeled were calculated using maximum hourly emission rates to estimate acute non-cancer health effects. One-hour maximum source-specific concentrations were summed regardless of time of occurrence (*i.e.*, hour of year), which can differ by source, thereby conservatively overestimating the true one-hour maximum at any one time.

#### 4.12 Dispersion Factors

Both point and area source emissions were modeled using the X/Q ("chi over q") method, such that emission source groups are input to the model with unit average annual emission rates (*i.e.*, 1 gram per second [g/s]), and the model estimates 1-hour maximum or annual average dispersion factors (with units of  $[\mu g/m3]/[g/s]$ ). To calculate annual average ambient air concentrations, the period average dispersion factors were multiplied by the annual emission rates. To calculate 1-hr maximum ambient air concentrations, the 1-hr maximum dispersion factors were multiplied by the maximum hourly emission rates.

#### 4.13 Ground-Level Concentrations

Ground-level concentrations (GLCs) in the ambient air at each of the modeled Point of Maximum Impact (PMI), Maximally Exposed Individual Resident (MEIR), Maximally Exposed Individual Worker (MEIW), and maximally exposed individual sensitive receptor (MEISR) for both the longand short-term scenarios are shown in Tables 6 and 7.

### **5 RISK ASSESSMENT PROCEDURES**

Modeled health risks were estimated for Anaplex based on methods and tools outlined in the OEHHA Risk Assessment Guidelines<sup>2</sup>. Potential Anaplex emissions and air dispersion results, using the HARP2 ADMRT tool, were input into HARP2, the OEHHA-recommended program for completing an HRA.

#### 5.1 Identification of Potentially Exposed Populations

The potentially exposed populations considered include current residents, off-site workers, and sensitive receptors located within the grid of receptors. Locations of each potentially exposed population were identified based on review of aerial photographs using Google Earth. The nearest residential property identified is located at the residential property near the intersection of Madison Street and Illinois Avenue approximately 300 meters east of Anaplex. Since Anaplex is located in the industrial/commercial zone, when evaluating the MEIR, receptors within the industrial zone were excluded.

Health risks were estimated at the location of the MEIR and the location of the MEIW. The MEIR and MEIW are defined as the off-site receptor locations where individuals may reside or work, respectively, with the potential highest cancer risk, non-cancer acute HI or chronic HI. In addition, the point of PMI was identified for acute non-cancer hazards.

### 5.2 Estimation of Exposure Point Concentrations

Exposure point concentrations are the concentrations of each chemical to which an individual may be exposed at a given receptor location. Chemical concentrations in air at each receptor location were estimated based on the air dispersion modeling described in Section 4. The exposure point concentrations used to estimate carcinogenic risks and chronic non-cancer HIs are the annual average concentrations of each chemical. The exposure point concentrations used to estimate acute non-cancer HIs are the one-hour maximum concentrations of each chemical. These concentrations at the 2016 operations modeled PMI, MEIR, MEIW, and the MEISR are presented in Tables 6 and 7.

### 5.3 Exposure Pathways

The exposure pathways evaluated in the HRA were selected in accordance with the SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup>. The inhalation pathway must be evaluated for all chemicals. In addition, SCAQMD also requires the evaluation of non-inhalation exposure pathways, referred to as a multi-pathway analysis, for specific chemicals.

Selection of the additional pathways for a multi-pathway analysis is specific to the chemical and land use in the area surrounding Anaplex. As discussed previously, HARP2, which complements the OEHHA Risk Assessment Guidelines<sup>2</sup> with respect to exposure pathway selection, was used in the HRA to estimate potential cancer risks and potential non-cancer hazards. The sections below discuss the exposure pathways considered for each potentially exposed population identified in the vicinity of Anaplex.

# 5.3.1 Residents

It was assumed that residents may be exposed to Anaplex emissions via inhalation, dermal absorption, incidental ingestion of soil, ingestion of homegrown produce, and mother's milk. A deposition rate of 0.02 meters per second (m/s) was used, per SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup>.

Since Anaplex is located in an urban area with no agricultural areas (e.g., cattle grazing areas or dairy farms) in the vicinity, the HRA does not include an evaluation of potential exposures via ingestion of meat, dairy, or eggs. However, potential exposures to chemicals in homegrown produce were evaluated for a resident in the HRA because it is possible that residents in the area may have small vegetable gardens exclusively for personal use. The default home-grown produce parameters for urban settings were used in HARP2. Nearby drinking water reservoirs were not identified within the modeled zone of impact; therefore, the drinking water pathway was not included.

#### 5.3.2 Off-Site Workers

Off-site workers are assumed to be potentially exposed to facility emissions via inhalation, dermal absorption, and incidental ingestion of soil. Similar to residents, a deposition rate of 0.02 meters per second (m/s) was used, per SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines.

#### 5.3.3 Sensitive Receptors

The sensitive populations include schools, hospitals, nursing homes, and daycare centers as identified in Table 5. However, HARP2 does not include methods for evaluating these specific populations differently than residential populations. Thus, as a conservative screening approach, sensitive receptor locations were evaluated assuming the exposure pathways utilized for evaluating the residential population noted above.

#### 5.3.4 Exposure Assumptions

For all pathways, default exposure assumptions built into HARP2 were used in the risk calculations. However, the specific exposure assumptions applied to calculate risks are dependent on the exposure analysis method selected to calculate risks.

#### 5.4 HARP2 Exposure Analysis Methods

HARP2 allows a user to select from a series of exposure analysis methods. Each method in HARP2 utilizes exposure assumptions differently, depending on the requirements of a specific regulation (e.g., compliance with CARB's Air Toxics Hot Spots Program) or project need (e.g., provide point estimates for risk management decisions). That is, HARP2 will select the dominant pathway(s) and assign exposure assumptions depending on the exposure analysis method identified by the user. For the HRA, each exposure analysis method selected was based on the type of receptor as presented in Table 8 and is described below.

#### 5.4.1 Resident

Potential cancer risks for residential populations were calculated based on RMP using Derived (OEHHA) Analysis Method. This method applies conservative exposure assumptions to the two dominant exposure pathways for each chemical. The remaining pathways are evaluated using average exposure assumptions. If inhalation is one of the two dominant exposure pathways, then it is evaluated using the 80<sup>th</sup> percentile breathing rate.

It was assumed that a resident may be exposed to Anaplex emissions for 30 years. Cancer risks estimated assuming a residential exposure duration of 30 years are used by State and local agencies for risk management and public notification purposes, even though it could be conservative and might not be representative of actual exposure scenarios.

As discussed previously, it was assumed that individuals residing in the vicinity of Anaplex may ingest produce obtained from vegetable gardens grown at their homes. Ingestion of homegrown produce is estimated by applying a default parameter of 13.7 percent of produce ingested by individuals in an urban setting that is homegrown and is comprised of four categories including exposed, leafy, protected, and root vegetables. This is the default setting in HARP2 and is recommended in the SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup>. The Derived (OEHHA) Analysis method was used to calculate chronic non-cancer HIs for the resident. This

method utilizes high-end exposure assumptions to evaluate the two dominant pathways for each chemical. The remaining pathways are evaluated using average exposure assumptions.

#### 5.4.2 Off-Site Workers

The Point Estimate Analysis method was used to calculate carcinogenic risks and chronic noncancer HIs associated with off-site worker exposure to Anaplex emissions. This method utilizes the standard exposure assumptions for worker populations.

Since potential cancer risks are driven by route emission sources (i.e., spray booths) which are assumed to be emitted average 18 hours a day, 6 days a week, an adjustment factor of 1.54 for offsite worker ground-level concentrations are used, consistent with what is shown in Table 11 of SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines<sup>1</sup> for continuous operation. This is consistent with the OEHHA Risk Assessment Guidelines<sup>2</sup> which recommends using the average concentration that the worker breathes over their work day, which, for continuous operation, is equivalent to the annual average air concentration calculated in AERMOD.

### 5.4.3 Sensitive Receptors

The RMP using Derived Analysis method described previously was used to calculate risks for the MEISR. Potential exposures of the MEISR were evaluated using a continuous 30-year exposure duration, consistent with the residential exposure duration.

#### 5.5 Dose-Response Assessment

The dose-response assessment (also referred to as the toxicity assessment) examines the potential for a chemical to cause adverse health effects in exposed individuals (as modeled). Toxicity values that are used to estimate the likelihood of adverse effects occurring in humans are identified in this component of the risk assessment process. Toxicity factors in the latest HARP2 Health Database, integrated into the HARP2 program were used in the HRA. The HARP2 program contains the most up-to-date listing of available inhalation and oral CPFs, chronic inhalation and oral RELs, and acute RELs approved by California Environmental Protection Agency (Cal/EPA) for use in AB 2588 Air Toxics Hot Spots Program health risk assessments.

### 5.6 Risk Characterization Methodology

This section describes the methods used to estimate potential adverse effects associated with offsite exposures to chemicals emitted from the Anaplex. HARP2 was used to estimate carcinogenic risks and non-cancer HIs associated with potential exposures to potential emissions from Anaplex.

### 5.7 Carcinogenic Risks

Carcinogenic risks were estimated as the incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to carcinogens potentially present in Facility emissions. The estimated risk is expressed as a unitless probability. For carcinogenic chemicals, both inhalation and non-inhalation pathways must be considered, using the CPFs in HARP2. Total risk is the sum of risks attributable to each chemical considered by each pathway. The equation used to calculate the potential excess cancer risk from inhalation for each carcinogenic chemical is:

 $Risk_i = Inhalation Dose x Cancer Potency Factor$ 

Where:

 $Risk_i = Lifetime$  excess cancer risk from exposure to chemical i Inhalation Dose = Inhalation dose of chemical i (mg/kg-day)  $CPF_i = Inhalation CPF$  for chemical i (mg/kg-day)-1

A similar equation, using oral dose and the oral CPF, is used to calculate risks from oral exposure. In the HRA, oral cancer risks include dermal absorption, incidental ingestion of soil, ingestion of homegrown produce, and mother's milk. HARP2 default exposure parameters were used.

For worker cancer calculations, by default HARP2 assumes that emissions occur continuously, and the worker is exposed to the average concentration 40 hours per week. When emission sources are not continuous, a portion of the hours during the year have zero emissions and therefore would have zero exposure. If those zero hours occur when a worker is not present, worker risk would be underestimated. Thus, a "worker adjustment factor" (WAF) needs to be applied to scale the exposure to account for worker and source emission schedule overlap. The WAF is calculated as follows:

WAF = Hresidential/Hsource x Dresidential/Dsource

Where:

Hresidential= the number of hours per day the long-term residential concentration is based on (always 24 hours) Hsource = the number of hours the source operates per day Dresidential = the number of days per week the long-term residential concentration is based on (always 7 days) Dsource= the number of days the source operates per week

For this project, it was assumed that the worker schedule overlapped with the SCAQMD operating schedule for the non-continuous sources. Therefore, the WAF input into HARP2 to calculate worker cancer risk was  $24/18 \times 7/6 = 1.54$ .

#### 5.8 Chronic Non-Cancer Hazards

When evaluating chronic non-cancer effects due to chemical exposures, a hazard quotient (HQ) is established for each constituent. The equation used to calculate an inhalation HQ is:

$$HQ_i = \frac{C_i}{REL_i}$$

Where:

HQi = Chronic hazard quotient for chemical iCi = Annual average air concentration of chemical i (µg/m3)RELi = Chronic REL for chemical i (µg/m3)

To evaluate the potential for adverse non-cancer health effects from simultaneous exposure to multiple chemicals, the HQs for all chemicals that affect the same target organ are summed yielding a HI. The HI is thus estimated as follows:

HI (eyes) = 
$$\sum HQ_{substance1(eyes)} + HQ_{substance2(eyes)}$$

Estimation of non-inhalation chronic health effects uses a similar method, but the annual average air concentration is replaced by the dose calculated by HARP2 using the exposure parameters mentioned above, and the appropriate non-inhalation REL is used.

Estimation of an HI for each target organ (also referred to as a segregation of HI by target organ analysis) is recommended by OEHHA because the non-cancer effects of chemicals with different target organs are generally not additive. For the HRA, a segregation of hazard indices analysis was performed for the modeled PMI, MEIR, MEIW, and the MEISR.

# 5.9 Acute Non-Cancer Hazards

The potential for acute effects was evaluated by comparing the one-hour maximum concentrations with the acute RELs within the HARP2 program. Acute HQs were estimated for those chemicals for which an REL was available. The equation used to calculate acute HQs is as follows:

$$HQ_i = \frac{C_i}{REL_i}$$

Where:

HQi = Acute hazard quotient for chemical iCi = One-hour maximum air concentration for chemical i (µg/m3)RELi = Acute non-cancer reference exposure level for chemical i (µg/m3)

Ramboll summed the HQs to obtain a target organ-specific HI as follows:

HI (eyes) = 
$$\sum HQ_{substance1(eyes)} + HQ_{substance2(eyes)}$$

# 5.10 Non-cancer Evaluation of Lead

Given that there is no chronic or acute REL for lead, the HRA did not evaluate non-carcinogenic impacts from lead using the standard Hazard Index approach as described above. Per SCAQMD Rule 1402, the Lead National Ambient Air Quality Standard (NAAQS) of 0.15  $\mu$ g/m3 was compared, conservatively, to the modeled maximum 1-hour lead concentration to evaluate the non-cancer effects of lead in the HRA.

# 6 RISK CHARACTERIZATION FOR AB 2588

Table 9 shows the results of the HRA at the modeled PMI, the modeled MEIR, and the modeled MEIW. Sensitive receptors with a cancer risk at or above 10 in one million are listed in Table 10. Non-cancer health hazard index for all sensitive receptors is below 0.5. Table 11 shows the cancer burden results based on 70-year exposure. Figures 4 through 7 show the locations of these receptors. Figure 8 shows the location of sensitive receptors with risk greater or equal to 1 in a million. Figure 9 shows the modeled 30-year lifetime cancer risk zone of impact, which represents receptor locations where the multi-pathway lifetime cancer risk is greater than 1 in one million. It is important to note that the zone of impact (i.e., 1 in one million cancer risk contour) presented in Figure 9 conservatively assumes all receptors are residential, along with the modeled 10, 25, and 100 in one million cancer risk contours. Figure 10 shows the modeled 25-year lifetime cancer risk based on the worker exposure scenario. Figure 11 shows the modeled chronic HI isopleths.

Acute HI contours at levels of 0.5, 1.0, 3.0, and 5.0 are shown in Figure 12. Since the cancer burden is greater than 0.5, 1 in one million risk contour based on a 70-year lifetime residential exposure is also presented in Figure 13.

The results presented in the HRA are based on Anaplex's 2016 emissions and modeled using the operating schedule supported by Anaplex's electricity records. The results are not indicative of the operations and procedures currently occurring at Anaplex.

### 6.1 Carcinogens

HARP2 calculates cancer risk based on annual average concentrations. HARP2 was run separately for continuous and non-continuous sources for worker cancer risk given that WAF of 1.54 was only applied to the non-continuous sources. The cancer risk calculated at each receptor for the continuous sources was added to the cancer risk calculated at each receptor for the non-continuous sources in a spreadsheet to get the total cancer risk at each receptor. The spreadsheets were provided electronically.

# 6.2 Point of Maximum Impact (PMI)

The cancer risk at the point of maximum impact is 161,320 per million, at a fenceline receptor (#6) on the southern boundary of the facility. Over 97% of the risk is due to hexavalent chromium containing compounds, primarily strontium chromate, but also sodium dichromate, barium chromate, chromium trioxide, and other hexavalent chromium compounds. Paint spray booth #2 is responsible for 97% of the risk due to its emissions of chromium compounds and also its proximity to receptor #6. The remainder of the cancer risk is due primarily to emissions from the anodizing and plating tanks. Complete breakdowns of cancer risk by source at the PMI are provided in Table 12. Cancer risk at the PMI is broken down by substance and pathway in Table 13. Figure 4 shows the location of the PMI for cancer risk.

# 6.3 Resident (MEIR)

The highest cancer risk at a residential receptor (#1567) is a cancer risk value of 931 in one million. The receptor is located about 300 meters east of Anaplex near the intersection of Madison Street and Illinois Avenue. Similar to the PMI, nearly all of the risk is due to chromium compounds from paint spray booth #2, the anodizing tanks, and the plating tanks (98%, 1.8%, and 0.1%, respectively). A complete breakdown of cancer risk by source at the MEIR is provided in Table 12. Cancer risk at the MEIR is broken down by substance and pathway in Table 14. Figure 5 in shows the location of the MEIR for cancer risk. A contour map showing the 30-yr residential cancer risk is included as Figure 9.

# 6.4 Off-Site Worker (MEIW)

The highest risk calculated for offsite worker exposure cancer risk is located directly south of Anaplex, across Madison Street about 30 meters from the plant boundary (receptor #1391). The worst case worker cancer risk at this receptor is 2,836 per million. Hexavalent chromium containing compounds again contribute to more than 99% of the risk, with strontium chromate responsible for 98%, and sodium dichromate, barium chromate, chromium trioxide, and other hexavalent chromium compounds responsible for most of the remainder. The primary source of the worker cancer risk is paint spray booth #2, accounting for more than 99% of the risk. Complete breakdowns of cancer risk by source at the MEIW are provided in Table 12. Cancer risk at the

MEIW is broken down by substance and pathway in Table 15. A contour map showing the 25-yr worker cancer risk is included as Figure 10.

### 6.5 Maximally Exposed Individual Sensitive Receptor (MEISR)

The highest calculated cancer risk at a sensitive receptor is 114 per million, at Gaines Elementary School Child Daycare Center (receptor #6728) located about 660 meters south of Anaplex. The Wesley Gaines Elementary School and the Gaines State Preschool daycare center are also located at/near this receptor. Cancer risk at each of these receptors is primarily due to exposure to hexavalent chromium containing compounds, mainly strontium chromate (96%) and sodium dichromate (2%). Over 99% of the cancer risk at this sensitive receptor is from paint spray booth #2 (96.8%), and the anodizing tanks (3%). Complete breakdowns of cancer risk by source at the maximum exposed sensitive receptor are provided in Table 12. Cancer risk at the maximum exposed sensitive receptor. Table 10 provides a list of all sensitive receptors with a cancer risk above 10 per million. Figure 8 shows the locations of sensitive receptors with cancer risk greater than one in a million.

### 6.6 Population Exposure & Cancer Burden

Along with potential cancer risk, potential population exposure was analyzed, and potential cancer burden was calculated within the modeled zone of impact. Census block receptors were extracted from HARP2 within an approximate 15-km radius, including additional receptors up to 30 km from the Facility, and were modeled in AERMOD. To determine population exposure, modeling was performed at receptors located at the centroid of all census tracts whose centroid was located within the modeling domain. Both AERMOD and HARP2 were run in the manner as was done previously, except with the census tract centroid receptors instead of fenceline, grid, and sensitive receptors. 70-yr residential cancer risk was calculated at each of these receptors. For any receptor with a cancer risk greater than one per million, the population of the census tract represented by that receptor was summed to determine the total exposure to various levels of cancer risk. The results of these calculations are provided in Table 11. Additionally, cancer burden was calculated based on the total population exposed to 70-yr cancer risk above one per million. The population of each census tract was multiplied by the 70-yr cancer risk calculated at the representative receptor. These products were summed, and the cancer burden was determined to be 9.7. A contour map showing the one per million cancer risk based on 70-yr exposure is included as Figure 13.

### 6.7 Non-Carcinogens

The non-cancer health impacts are characterized through a HI. When more than one chemical is considered, it is assumed that the effects are additive provided the associated chemicals are expected to have an adverse impact on the same target organ system (respiratory system, liver, etc.). Thus, chemical-specific hazard indices are summed to arrive at a hazard index for each target organ. For any organ system, a total hazard index exceeding 1.0 indicates a potential health effect. Although the assumption of additivity of exposure to multiple chemicals ignores possible antagonistic or synergistic interactions, this approach has been accepted by regulatory agencies as generally conservative.

### 6.8 Chronic HI

The chronic HI calculations are based on annual average concentrations. The chronic HI at the point of maximum impact is 8.4, at receptor #3 located on the eastern boundary of the facility. The primary chemical contributing to the chronic HI is sulfuric acid (55%). Chromic trioxide, nickel & compounds, strontium chromate, methylene diphenyl diisocyanate (MDI), phosphoric acid, hydrofluoric acid, hydrochloric acid, and toluene combined also contributed more than 42% of the maximum chronic risk. The associated target organ is the respiratory system. Over 98% of the chronic risk is a result of emissions from the anodizing tanks (67.2%), the plating tanks (22.8%), and paint spray booth #2 (8.4%).

The maximum chronic risk at a worker receptor is a hazard index of 2.02, at receptor #1659 located on the northern boundary of the facility where there is a common wall with a neighboring business. The primary chemical contributing to the chronic HI is sulfuric acid (60%). Chromic trioxide, nickel & compounds, strontium chromate, MDI, phosphoric acid, hydrochloric acid, hydrofluoric acid, and toluene combined also contributed to more than 35% of the maximum chronic risk. The associated target organ is the respiratory system. Over 96% of the chronic risk is a result of emissions from the anodizing tanks (74.1%), the plating tanks (11.7%), and paint spray booth #2 (10.6%).

The maximum chronic risk at a residential receptor is a chronic HI of 0.06, at receptor #2115 located about 200 meters northeast of Anaplex. The primary chemical contributing to the chronic HI is sulfuric acid (48%). Nickel & compounds, chromium trioxide, strontium chromate, MDI, hydrochloric acid, hydrofluoric acid, phosphoric acid, and toluene also contributed between 2% and 11% to the highest chronic risk. The associated target organ is the respiratory system. Over 97% of the chronic risk is a result of emissions from the anodizing tanks (58.6%), the plating tanks (19.6%), and paint spray booth #2 (19.3%).

The maximum chronic risk at a sensitive receptor is a chronic HI of 0.009 at receptor #6728 located about 660 meters south of Anaplex (Gaines Elementary School Child Daycare Center). The primary chemical contributing to the chronic HI is sulfuric acid (45%). Nickel & compounds, chromium trioxide, phosphoric acid, hydrofluoric acid, strontium chromate, MDI, hydrochloric acid, hydrofluoric acid, crystalline silica, and toluene also contributed between 2% and 12% to the highest chronic risk. The associated target organ is the respiratory system. About 97% of the chronic risk is a result of emissions from the anodizing tanks (55.1%), the plating tanks (21.8%), and paint spray booth #2 (20.5%).

Complete breakdowns of chronic risk by source at each of the maximum chronic HI receptors are provided in Table 17. Chronic HI is broken down by substance in Tables 18 - 21. Figure 5 shows the location of these receptors. A map showing the chronic HI contours is included as Figure 11.

### 6.9 8-Hour Chronic HI

The 8-hr chronic HI at the point of maximum impact is 0.51, at a fenceline receptor (#6) on the southern boundary of the facility. The primary chemical contributing to the 8-hr chronic HI is MDI (68.7%). Nickel & compounds (11.1%) and formaldehyde (11.2%) contribute nearly all of the remaining risk. The associated target organ is the respiratory system. The sources responsible for

over 96% of the 8-hr chronic risk are paint spray booth #2 (85.3%), the plating tanks (9.3%), and the anodizing tanks (1.9%).

The maximum 8-hr chronic risk at a residential receptor is a chronic HI of 0.0035, at receptor #1567 located about 300 meters east of Anaplex near the intersection of Madison Street and Illinois Avenue. The primary chemicals contributing to the 8-hr chronic HI are MDI (57.1%), nickel & compounds (25.9%), and formaldehyde (9.2%). The associated target organ is the respiratory system. Over 96% of the 8-hr chronic risk is a result of emissions from paint spray booth #2 (69.8%), the plating tanks (17.4%), and the anodizing tanks (8.7%).

The maximum 8-hr chronic risk at a worker receptor is a chronic HI of 0.11, at receptor #1391 located directly south of Anaplex, across Madison Street about 30 meters from the plant boundary. The primary chemicals contributing to the 8-hr chronic hazard index are MDI (67.4%), nickel & compounds (12.8%), and formaldehyde (11%). The associated target organ is the respiratory system. Over 97% of the 8-hr chronic risk is a result of emissions from paint spray booth #2 (83.6%), the plating tanks (9.7%), and the anodizing tanks (3%).

The maximum 8-hr chronic risk at a sensitive receptor is a chronic HI of 0.0005 at receptor #6728 located about 660 meters south of Anaplex (Gaines Elementary School Child Daycare Center). The primary chemicals contributing to the 8-hr chronic HI are nickel & compounds (37%), MDI (48.3%), and formaldehyde (7.9%). The associated target organ is the respiratory system. Over 95% of the 8-hr chronic risk is a result of emissions from the paint spray booth #2 (59.2%), plating tanks (25%), and the anodizing tanks (12.1%). Complete breakdowns of 8-hr chronic risk by source at each of the maximum receptors are provided Table 22. Chronic HI is broken down by substance in Tables 23 – 26. Figure 6 shows the location of these receptors.

### 6.10 Acute HI

The acute HI at the point of maximum impact is 24, at receptor #17 located on the northern boundary of the facility where there is a common wall with a neighboring business. The primary chemical contributing to the acute HI is methyl ethyl ketone (MEK) (98.1%). The associated target organ is the respiratory system. The MEK was used in the solvent baths at Anaplex in 2016 and solvent baths (modeled as a single area source) were responsible for 98% of the acute risk at the PMI. Since the PMI is along a shared wall with a neighboring facility (receptor #17), the PMI also represents maximum acute risk at a worker receptor or MEIW. Note that the facility switched from MEK to acetone in December 2016, the acute HI would be significantly lower at its current operation.

The maximum acute risk at a residential receptor is an acute HI of 0.07, at receptor #2115 located about 200 meters northeast of Anaplex. The primary chemical contributing to the acute HI is MEK (73.2%). Sulfuric acid (10.3%), sodium hydroxide (6.8%), nitric acid (2.7%), MDI (2%), and IPA (2%) also contributed more than 1% to the acute risk. The associated target organ is the respiratory system. Over 98% of the acute risk is a result of emissions from the solvent baths (71.2%), the anodizing tanks (9.8%), the plating tanks (10.5%), and paint spray booth #2 (6.6%).

The maximum acute risk at a sensitive receptor is an acute HI of 0.014 at receptor #6728 located about 660 meters south of Anaplex (Gaines Elementary School Child Daycare Center). The

primary chemical contributing to the acute hazard index is MEK (86.3%). The associated target organ is the immune system. Over 98% of the acute risk is a result of emissions from the solvent baths (86%), the anodizing tanks (5.8%), the plating tanks (6.7%), and paint spray booth #2 (1%).

Complete breakdowns of acute HI by source at each of the maximum receptors are provided in Table 27. Acute HI is broken down by substance in Tables 28 - 30. The MEI location for acute HI is shown in Figure 7. A map showing the acute HI contours is included as Figure 12.

### 6.11 Lead Evaluation

The maximum 1-hour lead concentration is approximately 0.02  $\mu$ g/m3, which was compared to the lead NAAQS and does not exceed lead NAAQS of 0.15  $\mu$ g/m3. As such, the maximum lead concentration in air at Anaplex boundary does not pose any significant adverse non-cancer effect for the residents.

# 7 CONCLUSIONS

The results of the HRA indicate that the public notification levels and action risk levels are exceeded based on 2016 emissions from Anaplex. The HRA results are summarized in Table 9. Based on these results, Anaplex is subject to the following Rule 1402 provisions:

# 7.1 Public Notification

As results of this HRA indicate that cancer risk, chronic HI, and acute HI are greater than or equal to the Notification Risk Level, Anaplex will be required to provide public notice, in accordance with the procedures in the most current version of "SCAQMD Public Notification Procedures for Facilities Under the Air Toxics 'Hot Spots' Information and Assessment Act (AB 2588) and Rule 1402.<sup>1</sup>"

### 7.2 Risk Reduction Plan (RRP)

As results of this HRA indicate that cancer risk, cancer burden, and acute HI are greater than or equal to the Action Risk Level, Anaplex is required to prepare a RRP. The purpose of the RRP is to perform risk reduction measures at the facility which will bring health risks below the Action Risk Levels. An Early Action Reduction Plan was submitted on March 13, 2017. The original RRP was submitted in June 13, 2017 and a Revised RRP was recently submitted on September 26, 2018 which is currently under SCAQMD staff review.

# 7.3 Current Mitigation Measures

Notably, the results of this HRA **do not** represent current risk levels as the following risk reduction measures have already been implemented at the facility:

- 1. Over 97% of the cancer risk evaluated by this HRA resulted from the use of chromium containing paints in spray booth #2. Anaplex has discontinued spraying paints containing chromium compounds until a high efficiency filtration system can be installed.
- 2. Methyl Ethyl Ketone emissions from solvent cleaning operations were the primary source of non-cancer acute hazard. Use of this chemical as a solvent cleaner has been discontinued.
- 3. The majority of chrome containing tanks at the facility employ covers when not in use.

- 4. Tank solutions for several tanks have been switched to non-chrome based solutions.
- 5. Several tanks have been permanently taken out of service.
- 6. Polyballs have been added to multiple chrome containing tanks.
- 7. The temperature has been reduced on Tank 22.
- 8. Anaplex has made and proposes to make additional reductions as discussed in the Original and Revised RRP which is submitted separately from this HRA.

Other risk reduction measures in the Revised RRP will further reduce health risks from Anaplex's operations.

# **Tables**

#### Table 1. TAC Emissions Rates by Source Anaplex Corporation Facility ID 016951 Paramount, California

	Modeled Source			Character Name	Annual Emissions	Annual Emissions	Maximum Hourly Emissions	Maximum Hourly Emissions
Source Type	ID	Source Description	CAS Number	Chemical Name	(lbs/yr)	(q/s)	(lbs/hr)	(q/s)
Volume	ANODZEVP	Anodizing Tank Evaporation	1101	Fluorides and Compounds	3.65E-02	5.25E-07 1.01E-05	4.17E-06	5.25E-07 1.01E-05
Volume	ANODZEVP	Anodizing Tank Evaporation	112345	Diethylene Glycol Monobutyl Ether	6.99E-01		7.98E-05	
Volume	ANODZEVP	Anodizing Tank Evaporation	7664393	Hydrofluoric Acid	3.00E+01	4.32E-04	3.43E-03	4.32E-04
Volume	ANODZEVP	Anodizing Tank Evaporation	7697372	Nitric Acid	1.06E+01	1.52E-04	1.21E-03	1.52E-04
Volume	ANODZEVP	Anodizing Tank Evaporation	7664382	Phosphoric Acid	6.01E+00	8.64E-05	6.86E-04	8.64E-05
Volume	ANODZEVP	Anodizing Tank Evaporation	7664939	Sulfuric Acid	2.80E-04	4.03E-09	3.20E-08	4.03E-09
Volume	ANODZEVP	Anodizing Tank Evaporation	108883	Toluene	4.38E-01	6.30E-06	5.00E-05	6.30E-06
Volume	ANODZEVP	Anodizing Tank Evaporation	1330207	Xylene	2.65E-01	3.81E-06	3.02E-05	3.81E-06
Volume	ANODZPSH	Anodizing Tank	7440473	Chromium & Compounds (Other Than Hexavalent)	2.99E-03	4.31E-08	5.41E-06	6.82E-07
Volume	ANODZPSH	Anodizing Tank	57125	Cyanide Compounds	3.63E-03	5.21E-08	2.42E-06	3.04E-07
Volume	ANODZPSH	Anodizing Tank	1101	Fluorides and Compounds	1.30E-01	1.87E-06	1.51E-03	1.91E-04
Volume	ANODZPSH	Anodizing Tank	18540299	Hexavalent Chromium Compounds (Other)	4.51E-03	6.49E-08	3.01E-06	3.79E-07
Volume	ANODZPSH	Anodizing Tank	7439965	Manganese & Compounds	1.96E-05	2.81E-10	3.76E-06	4.73E-07
Volume	ANODZPSH	Anodizing Tank	7440020	Nickel & Compounds	1.23E-01	1.77E-06	7.70E-05	9.71E-06
Volume	ANODZPSH	Anodizing Tank	1333820	Chromium Trioxide	7.73E-02	1.11E-06	4.71E-04	5.94E-05
Volume	ANODZPSH	Anodizing Tank	112345	Diethylene Glycol Monobutyl Ether	4.19E-02	6.02E-07	4.69E-05	5.91E-06
Volume	ANODZPSH	Anodizing Tank	373024	Nickel Acetate	1.64E-02	2.36E-07	1.03E-05	1.29E-06
Volume	ANODZPSH	Anodizing Tank	7664382	Phosphoric Acid	2.36E-02	3.39E-07	2.85E-04	3.59E-05
Volume			10588019	Sodium Dichromate	4.30E-01	6.19E-06	8.04E-04	1.01E-04
Volume	ANODZPSH	Anodizing Tank	1310732	Sodium Hydroxide	5.60E-01	8.05E-06	4.45E-04	5.61E-05
Volume	ANODZPSH	Anodizing Tank	7664939	Sulfuric Acid	1.32E+02	1.90E-03	1.20E-01	1.51E-02
Volume	ANODZPSH	Anodizing Tank	108883	Toluene	1.39E-05	2.00E-10	6.97E-08	8.78E-09
Volume	ANODZPSH	Anodizing Tank	1330207	Xylene	2.84E-05	4.08E-10	1.42E-07	1.79E-08
Volume	ANODZPSH	Anodizing Tank	1314132	Zinc Oxide	1.48E-03	2.13E-08	7.40E-06	9.33E-07
Volume	PLATEEVP	Plating Tank Evaporation	112345	Diethylene Glycol Monobutyl Ether	5.85E-02	8.42E-07	6.68E-06	8.42E-07
Volume	PLATEEVP	Plating Tank Evaporation	111762	Ethylene Glycol Monobutyl Ether	7.23E-01	1.04E-05	8.25E-05	1.04E-05
Volume	PLATEEVP	Plating Tank Evaporation	7647010	Hydrochloric Acid	1.70E+02	2.45E-03	1.94E-02	2.45E-03
Volume	PLATEEVP	Plating Tank Evaporation	7664393	Hydrofluoric Acid	2.92E+01	4.20E-04	3.34E-03	4.20E-04
Volume	PLATEEVP	Plating Tank Evaporation	7697372	Nitric Acid	2.13E+02	3.06E-03	2.43E-02	3.06E-03
Volume	PLATEEVP	Plating Tank Evaporation	7664382	Phosphoric Acid	6.14E+01	8.84E-04	7.01E-03	8.84E-04
Volume	PLATEEVP	Plating Tank Evaporation	7664939	Sulfuric Acid	5.36E-03	7.70E-08	6.11E-07	7.70E-08
Volume	PLATEEVP	Plating Tank Evaporation	127184	Tetrachloroethylene	1.26E+01	1.82E-04	1.44E-03	1.82E-04
Volume	PLATEPSH	Plating Tank	7440439	Cadmium & Compounds	3.54E-02	5.09E-07	1.28E-03	1.62E-04
Volume	PLATEPSH	Plating Tank	7440508	Copper & Compounds	1.28E+00	1.84E-05	1.22E-03	1.53E-04
Volume	PLATEPSH	Plating Tank	57125	Cvanide Compounds	2.69E+00	3.87E-05	9.78E-03	1.23E-03
Volume	PLATEPSH	Plating Tank	1128	Lead Compounds	1.21E-05	1.74E-10	2.33E-07	2.93E-08
Volume	PLATEPSH	Plating Tank	7439965	Manganese & Compounds	3.33E-03	4.79E-08	3.47E-05	4.37E-06
Volume	PLATEPSH	Plating Tank	7440020	Nickel & Compounds	2.54E-01	3.66E-06	9.02E-04	1.14E-04
Volume	PLATEPSH	Plating Tank	7440224	Silver & Compounds	6.67E-03	9.59E-08	3.32E-05	4.19E-06
Volume	PLATEPSH	Plating Tank	7440666	Zinc & Compounds	1.76E-02	2.53E-07	1.84E-04	2.31E-05
Volume	PLATEPSH	Plating Tank Plating Tank	6484522	Ammonium Nitrate	7.40E-02	1.06E-07	3.70E-05	4.66E-06
Volume	PLATEPSH	Plating Tank Plating Tank	1333820	Chromium Trioxide	5.24E-04	7.53E-09	7.56E-07	9.53E-08
Volume	PLATEPSH	Plating Tank Plating Tank	112345	Diethylene Glycol Monobutyl Ether	3.36E-03	4.83E-08	4.20E-06	5.29E-07

#### Table 1. TAC Emissions Rates by Source

Source Type	Modeled Source	Source Description	CAS Number	Chemical Name	Annual Emissions	Annual Emissions	Maximum Hourly Emissions	Maximum Hourly Emissions
Volume	PLATEPSH	Plating Tank	7647010	Chemical Name Hydrochloric Acid	(lbs/yr) 8.40E-02	(g/s) 1.21E-06	(lbs/hr)	(g/s) 4.07E-05
						8.38E-09	3.23E-04	7.65E-07
Volume	PLATEPSH	Plating Tank	7664393	Hydrofluoric Acid	5.83E-04	9.75E-10	6.07E-06	1.48E-08
Volume	PLATEPSH	Plating Tank	7439921	Lead	6.78E-05	4.60E-06	1.17E-07	2.21E-04
Volume	PLATEPSH	Plating Tank	7697372	Nitric Acid	3.20E-01	4.60E-06	1.76E-03	7.84E-03
Volume	PLATEPSH	Plating Tank	7664382	Phosphoric Acid	1.26E+01	3.31E-07	6.22E-02	7.24E-06
Volume	PLATEPSH	Plating Tank	10588019	Sodium Dichromate	2.30E-02		5.74E-05	
Volume	PLATEPSH	Plating Tank	1310732	Sodium Hydroxide	4.35E+00	6.26E-05	5.81E-03	7.32E-04
Volume	PLATEPSH	Plating Tank	7664939	Sulfuric Acid	3.57E+00	5.14E-05	1.78E-02	2.24E-03
Volume	PLATEPSH	Plating Tank	1314132	Zinc Oxide	1.87E-03	2.69E-08	1.95E-05	2.46E-06
Capped Point	SPRYBTH2	Paint Booth #2	95636	1,2,4-Trimethylbenzene	9.58E-01	1.38E-05	4.79E-04	6.03E-05
Capped Point	SPRYBTH2	Paint Booth #2	80057	4,4'-Isopropylidenediphenol	1.08E+00	1.55E-05	5.39E-04	6.80E-05
Capped Point	SPRYBTH2	Paint Booth #2	7429905	Aluminum	1.26E-02	1.81E-07	6.30E-06	7.94E-07
Capped Point	SPRYBTH2	Paint Booth #2	1309644	Antimony Trioxide	9.86E-02	1.42E-06	4.93E-05	6.21E-06
Capped Point	SPRYBTH2	Paint Booth #2	10294403	Barium Chromate	2.64E-01	3.79E-06	1.32E-04	1.66E-05
Capped Point	SPRYBTH2	Paint Booth #2	7440393	Barium & Compounds	2.17E-01	3.12E-06	1.08E-04	1.37E-05
Capped Point	SPRYBTH2	Paint Booth #2	18540299	Hexavalent Chromium Compounds (Other)	2.96E-02	4.26E-07	1.48E-05	1.87E-06
Capped Point	SPRYBTH2	Paint Booth #2	7440484	Cobalt & Compounds	1.32E-05	1.89E-10	6.59E-09	8.30E-10
Capped Point	SPRYBTH2	Paint Booth #2	7440508	Copper & Compounds	3.74E-01	5.38E-06	1.87E-04	2.36E-05
Capped Point	SPRYBTH2	Paint Booth #2	98828	Cumene	1.92E-01	2.76E-06	9.58E-05	1.21E-05
Capped Point	SPRYBTH2	Paint Booth #2	34590948	Dipropylene Glycol Monomethyl Ether	2.56E-03	3.68E-08	1.28E-06	1.61E-07
Capped Point	SPRYBTH2	Paint Booth #2	1091	Epoxy Resins	1.31E+01	1.89E-04	6.57E-03	8.28E-04
Capped Point	SPRYBTH2	Paint Booth #2	100414	Ethyl Benzene	9.38E+01	1.35E-03	4.69E-02	5.91E-03
Capped Point	SPRYBTH2	Paint Booth #2	111762	Ethylene Glycol Monobutyl Ether	1.61E+02	2.31E-03	8.03E-02	1.01E-02
Capped Point	SPRYBTH2	Paint Booth #2	2807309	Ethylene Glycol Monopropyl Ether	2.17E+00	3.12E-05	1.08E-03	1.36E-04
Capped Point	SPRYBTH2	Paint Booth #2	1101	Fluorides and Compounds	3.78E+00	5.44E-05	1.89E-03	2.38E-04
Capped Point	SPRYBTH2	Paint Booth #2	50000	Formaldehyde	1.14E+01	1.64E-04	5.69E-03	7.17E-04
Capped Point	SPRYBTH2	Paint Booth #2	822060	Hexamethylene Diisocyanate Monomer	8.55E-02	1.23E-06	4.28E-05	5.39E-06
Capped Point	SPRYBTH2	Paint Booth #2	123319	Hydroquinone	1.17E+00	1.69E-05	5.87E-04	7.40E-05
Capped Point	SPRYBTH2	Paint Booth #2	67630	IPA	3.79E+02	5.45E-03	1.89E-01	2.39E-02
Capped Point	SPRYBTH2	Paint Booth #2	1125	Isocyanates	1.20E+01	1.73E-04	6.02E-03	7.59E-04
Capped Point	SPRYBTH2	Paint Booth #2	1128	Lead Compounds	5.51E-02	7.92E-07	2.75E-05	3.47E-06
Capped Point	SPRYBTH2	Paint Booth #2	78933	MEK	5.75E+02	8.27E-03	2.88E-01	3.62E-02
Capped Point	SPRYBTH2	Paint Booth #2	67561	Methanol	4.81E+01	6.91E-04	2.40E-02	3.03E-03
Capped Point	SPRYBTH2	Paint Booth #2	75092	Methylene Chloride	8.63E+01	1.24E-03	4.31E-02	5.44E-03
Capped Point	SPRYBTH2	Paint Booth #2	101688	Methylene Diphenyl Diisocyanate	1.18E+00	1.69E-05	5.88E-04	7.41E-05
Capped Point	SPRYBTH2	Paint Booth #2	108101	МІВК	3.18E+02	4.57E-03	1.59E-01	2.00E-02
Capped Point	SPRYBTH2	Paint Booth #2	71363	n-Butanol	8.20E+00	1.18E-04	4.10E-03	5.17E-04
Capped Point	SPRYBTH2	Paint Booth #2	108952	Phenol	1.32E+01	1.90E-04	6.62E-03	8.34E-04
Capped Point	SPRYBTH2	Paint Booth #2	7664382	Phosphoric Acid	7.93E-02	1.14E-06	3.96E-05	4.99E-06
Capped Point	SPRYBTH2	Paint Booth #2	107982	Propylene Glycol Monomethyl Ether	1.03E+02	1.48E-03	5.15E-02	6.49E-03
Capped Point	SPRYBTH2	Paint Booth #2	108656	Propylene Glycol Monomethyl Ether Acetate	5.12E-02	7.37E-07	2.56E-05	3.23E-06
Capped Point	SPRYBTH2	Paint Booth #2	78922	Sec-Butyl Alcohol	3.92E+01	5.65E-04	1.96E-02	2.47E-03
Capped Point	SPRYBTH2	Paint Booth #2	1175	Silica	1.07E+01	1.54E-04	5.36E-03	6.75E-04

#### Table 1. TAC Emissions Rates by Source Anaplex Corporation

	Modeled Source				Annual Emissions	Annual Emissions	Maximum Hourly Emissions	Maximum Hourly Emissions
Source Type	ID	Source Description	CAS Number		(lbs/yr)	(g/s)	(lbs/hr)	(g/s)
Capped Point	SPRYBTH2	Paint Booth #2	7789062	Strontium Chromate	2.49E+01	3.58E-04	1.25E-02	1.57E-03
Capped Point	SPRYBTH2	Paint Booth #2	540885	Tert-Butyl Acetate	2.18E+00	3.14E-05	1.09E-03	1.38E-04
Capped Point	SPRYBTH2	Paint Booth #2	108883	Toluene	5.97E+02	8.59E-03	2.98E-01	3.76E-02
Capped Point	SPRYBTH2	Paint Booth #2	1330207	Xylene	4.60E+02	6.62E-03	2.30E-01	2.90E-02
Capped Point	SPRYBTH2	Paint Booth #2	7440666	Zinc & Compounds	1.49E-01	2.15E-06	7.47E-05	9.41E-06
Capped Point	SPRYBTH3	Paint Booth #3	95636	1,2,4-Trimethylbenzene	3.22E+00	4.64E-05	1.61E-03	2.03E-04
Capped Point	SPRYBTH3	Paint Booth #3	80057	4,4'-Isopropylidenediphenol	6.88E-01	9.90E-06	3.44E-04	4.34E-05
Capped Point	SPRYBTH3	Paint Booth #3	7429905	Aluminum	6.24E-02	8.98E-07	3.12E-05	3.93E-06
Capped Point	SPRYBTH3	Paint Booth #3	7440393	Barium & Compounds	9.26E-03	1.33E-07	4.63E-06	5.83E-07
Capped Point	SPRYBTH3	Paint Booth #3	7440473	Chromium & Compounds (Other Than Hexavalent)	2.93E-02	4.22E-07	1.47E-05	1.85E-06
Capped Point	SPRYBTH3	Paint Booth #3	7440484	Cobalt & Compounds	9.20E-03	1.32E-07	4.60E-06	5.79E-07
Capped Point	SPRYBTH3	Paint Booth #3	100414	Ethyl Benzene	1.09E+01	1.57E-04	5.45E-03	6.87E-04
Capped Point	SPRYBTH3	Paint Booth #3	111762	Ethylene Glycol Monobutyl Ether	1.32E+00	1.89E-05	6.58E-04	8.29E-05
Capped Point	SPRYBTH3	Paint Booth #3	1101	Fluorides and Compounds	6.84E-01	9.85E-06	3.42E-04	4.31E-05
Capped Point	SPRYBTH3	Paint Booth #3	822060	Hexamethylene Diisocyanate Monomer	2.04E-01	2.94E-06	1.02E-04	1.29E-05
Capped Point	SPRYBTH3	Paint Booth #3	67630	IPA	1.10E+00	1.58E-05	5.50E-04	6.94E-05
Capped Point	SPRYBTH3	Paint Booth #3	1125	Isocyanates	3.28E+01	4.71E-04	1.64E-02	2.06E-03
Capped Point	SPRYBTH3	Paint Booth #3	78933	MEK	3.19E+02	4.59E-03	1.60E-01	2.01E-02
Capped Point	SPRYBTH3	Paint Booth #3	101688	Methylene Diphenyl Diisocyanate	3.93E-02	5.65E-07	1.96E-05	2.47E-06
Capped Point	SPRYBTH3	Paint Booth #3	108101	МІВК	5.63E+01	8.09E-04	2.81E-02	3.54E-03
Capped Point	SPRYBTH3	Paint Booth #3	71363	n-Butanol	1.24E+01	1.79E-04	6.21E-03	7.83E-04
Capped Point	SPRYBTH3	Paint Booth #3	107982	Propylene Glycol Monomethyl Ether	1.22E+02	1.76E-03	6.11E-02	7.69E-03
Capped Point	SPRYBTH3	Paint Booth #3	108656	Propylene Glycol Monomethyl Ether Acetate	3.47E+00	5.00E-05	1.74E-03	2.19E-04
Capped Point	SPRYBTH3	Paint Booth #3	1175	Silica	1.07E+00	1.54E-05	5.34E-04	6.73E-05
Capped Point	SPRYBTH3	Paint Booth #3	540885	Tert-Butyl Acetate	1.47E+00	2.12E-05	7.37E-04	9.29E-05
Capped Point	SPRYBTH3	Paint Booth #3	108883	Toluene	7.73E+01	1.11E-03	3.87E-02	4.87E-03
Capped Point	SPRYBTH3	Paint Booth #3	1330207	Xylene	4.73E+01	6.81E-04	2.37E-02	2.98E-03
Capped Point	SPRYBTH4	Paint Booth #4	95636	1,2,4-Trimethylbenzene	4.26E+00	6.13E-05	2.13E-03	2.69E-04
Capped Point	SPRYBTH4	Paint Booth #4	80057	4,4'-Isopropylidenediphenol	6.88E-01	9.90E-06	3.44E-04	4.34E-05
Capped Point	SPRYBTH4	Paint Booth #4	7429905	Aluminum	6.24E-02	8.98E-07	3.12E-05	3.93E-06
Capped Point	SPRYBTH4	Paint Booth #4	7440393	Barium & Compounds	9.26E-03	1.33E-07	4.63E-06	5.83E-07
Capped Point	SPRYBTH4	Paint Booth #4	7440473	Chromium & Compounds (Other Than Hexavalent)	2.93E-02	4.22E-07	1.47E-05	1.85E-06
Capped Point	SPRYBTH4	Paint Booth #4	7440484	Cobalt & Compounds	9.20E-03	1.32E-07	4.60E-06	5.79E-07
Capped Point	SPRYBTH4	Paint Booth #4	100414	Ethyl Benzene	1.70E+01	2.44E-04	8.49E-03	1.07E-03
Capped Point	SPRYBTH4	Paint Booth #4	111762	Ethylene Glycol Monobutyl Ether	1.32E+00	1.89E-05	6.58E-04	8.29E-05
Capped Point	SPRYBTH4	Paint Booth #4	1101	Fluorides and Compounds	6.84E-01	9.85E-06	3.42E-04	4.31E-05
Capped Point	SPRYBTH4	Paint Booth #4	822060	Hexamethylene Diisocyanate Monomer	2.04E-01	2.94E-06	1.02E-04	1.29E-05
Capped Point	SPRYBTH4	Paint Booth #4	67630	IPA	1.10E+00	1.58E-05	5.50E-04	6.94E-05
Capped Point	SPRYBTH4	Paint Booth #4	1125	Isocyanates	3.28E+01	4.71E-04	1.64E-02	2.06E-03
Capped Point	SPRYBTH4	Paint Booth #4	78933	MEK	3.19E+02	4.59E-03	1.60E-01	2.01E-02
Capped Point	SPRYBTH4	Paint Booth #4	101688	Methylene Diphenyl Diisocyanate	3.93E-02	5.65E-07	1.96E-05	2.47E-06
Capped Point	SPRYBTH4	Paint Booth #4	108101	MIBK	5.63E+01	8.09E-04	2.81E-02	3.54E-03
Capped Point	SPRYBTH4	Paint Booth #4	91203	Naphthalene	1.48E+00	2.13E-05	7.42E-04	9.34E-05

#### Table 1. TAC Emissions Rates by Source Anaplex Corporation

	Modeled Source				Annual Emissions	Annual Emissions	Maximum Hourly Emissions	Maximum Hourly Emissions
Source Type	ID	Source Description	CAS Number	Chemical Name	(lbs/yr)	(g/s)	(lbs/hr)	(g/s)
Capped Point	SPRYBTH4	Paint Booth #4	71363	n-Butanol	1.24E+01	1.79E-04	6.21E-03	7.83E-04
Capped Point	SPRYBTH4	Paint Booth #4	107982	Propylene Glycol Monomethyl Ether	1.22E+02	1.76E-03	6.11E-02	7.69E-03
Capped Point	SPRYBTH4	Paint Booth #4	108656	Propylene Glycol Monomethyl Ether Acetate	3.47E+00	5.00E-05	1.74E-03	2.19E-04
Capped Point	SPRYBTH4	Paint Booth #4	1175	Silica	1.07E+00	1.54E-05	5.34E-04	6.73E-05
Capped Point	SPRYBTH4	Paint Booth #4	540885	Tert-Butyl Acetate	1.47E+00	2.12E-05	7.37E-04	9.29E-05
Capped Point	SPRYBTH4	Paint Booth #4	108883	Toluene	7.73E+01	1.11E-03	3.87E-02	4.87E-03
Capped Point	SPRYBTH4	Paint Booth #4	1330207	Xylene	7.14E+01	1.03E-03	3.57E-02	4.50E-03
Volume	MASKING	Masking Area - Paint and Solvent Use	67630	IPA	5.28E+00	7.59E-05	2.64E-03	3.33E-04
Volume	MASKING	Masking Area - Paint and Solvent Use	78933	MEK	1.52E+02	2.19E-03	7.61E-02	9.58E-03
Volume	MASKING	Masking Area - Paint and Solvent Use	75092	Methylene Chloride	4.49E+02	6.45E-03	2.24E-01	2.83E-02
Volume	MASKING	Masking Area - Paint and Solvent Use	91203	Naphthalene	1.54E+01	2.21E-04	7.70E-03	9.70E-04
Volume	MASKING	Masking Area - Paint and Solvent Use	108952	Phenol	1.06E+02	1.52E-03	5.28E-02	6.65E-03
Volume	MASKING	Masking Area - Paint and Solvent Use	108656	Propylene Glycol Monomethyl Ether Acetate	1.54E+01	2.21E-04	7.70E-03	9.70E-04
Volume	MASKING	Masking Area - Paint and Solvent Use	75569	Propylene Oxide	1.52E+01	2.19E-04	7.61E-03	9.58E-04
Volume	MASKING	Masking Area - Paint and Solvent Use	108883	Toluene	6.14E+02	8.84E-03	3.07E-01	3.87E-02
Area	SLVNTBTH	Solvent Degreaser (Manual)	78933	MEK	3.44E+04	4.95E-01	1.72E+01	2.17E+00
Horizontal Point	DGRSR	Vapor Degreaser	67561	Methanol	5.44E+01	7.83E-04	2.72E-02	3.43E-03
Horizontal Point	DGRSR	Vapor Degreaser	79016	Trichloroethylene	5.44E-01	7.83E-06	2.72E-04	3.43E-05
Capped Point	222BLR1	Boiler 1	71432	Benzene	1.54E-02	2.22E-07	1.55E-05	1.95E-06
Capped Point	222BLR1	Boiler 1	50000	Formaldehyde	3.28E-02	4.72E-07	3.29E-05	4.14E-06
Capped Point	222BLR1	Boiler 1	1151	РАН	1.93E-04	2.78E-09	1.93E-07	2.44E-08
Capped Point	222BLR1	Boiler 1	91203	Naphthalene	5.79E-04	8.33E-09	5.80E-07	7.31E-08
Capped Point	222BLR1	Boiler 1	75070	Acetaldehyde	8.30E-03	1.19E-07	8.31E-06	1.05E-06
Capped Point	222BLR1	Boiler 1	107028	Acrolein	5.21E-03	7.49E-08	5.22E-06	6.58E-07
Capped Point	222BLR1	Boiler 1	7664417	Ammonia	6.18E+00	8.88E-05	6.19E-03	7.79E-04
Capped Point	222BLR1	Boiler 1	100414	Ethyl Benzene	1.83E-02	2.64E-07	1.84E-05	2.31E-06
Capped Point	222BLR1	Boiler 1	110543	Hexane	1.22E-02	1.75E-07	1.22E-05	1.53E-06
Capped Point	222BLR1	Boiler 1	115071	Propylene	1.41E+00	2.03E-05	1.41E-03	1.78E-04
Capped Point	222BLR1	Boiler 1	108883	Toluene	7.06E-02	1.02E-06	7.07E-05	8.91E-06
Capped Point	222BLR1	Boiler 1	1330207	Xylene	5.25E-02	7.55E-07	5.26E-05	6.62E-06
Capped Point	222BLR2	Boiler 2	71432	Benzene	1.54E-02	2.22E-07	1.55E-05	1.95E-06
Capped Point	222BLR2	Boiler 2	50000	Formaldehyde	3.28E-02	4.72E-07	3.29E-05	4.14E-06
Capped Point	222BLR2	Boiler 2	1151	PAH	1.93E-04	2.78E-09	1.93E-07	2.44E-08
Capped Point	222BLR2	Boiler 2	91203	Naphthalene	5.79E-04	8.33E-09	5.80E-07	7.31E-08
Capped Point	222BLR2	Boiler 2	75070	Acetaldehyde	8.30E-03	1.19E-07	8.31E-06	1.05E-06
Capped Point	222BLR2	Boiler 2	107028	Acrolein	5.21E-03	7.49E-08	5.22E-06	6.58E-07
Capped Point	222BLR2	Boiler 2	7664417	Ammonia	6.18E+00	8.88E-05	6.19E-03	7.79E-04
Capped Point	222BLR2	Boiler 2	100414	Ethyl Benzene	1.83E-02	2.64E-07	1.84E-05	2.31E-06
Capped Point	222BLR2	Boiler 2	110543	Hexane	1.22E-02	1.75E-07	1.22E-05	1.53E-06
Capped Point	222BLR2	Boiler 2	115071	Propylene	1.41E+00	2.03E-05	1.41E-03	1.78E-04
Capped Point	222BLR2	Boiler 2	108883	Toluene	7.06E-02	1.02E-06	7.07E-05	8.91E-06
Capped Point	222BLR2	Boiler 2	1330207	Xylene	5.25E-02	7.55E-07	5.26E-05	6.62E-06

#### Table 1. TAC Emissions Rates by Source Anaplex Corporation Facility ID 016951 Paramount, California

	Modeled Source ID	Source Description	CAS Number	Chemical Name	Annual Emissions (lbs/yr)	Annual Emissions (g/s)	Maximum Hourly Emissions (lbs/hr)	Maximum Hourly Emissions (g/s)
Source Type Capped Point	DGRBLR	Degreaser Boiler	50000	Formaldehyde	6.53E-03	9.39E-08	6.54E-06	8.24E-07
Capped Point	DGRBLR	Degreaser Boiler	1151	PAH	3.84E-05	5.52E-10	3.85E-08	4.85E-09
Capped Point	DGRBLR	Degreaser Boiler	91203	Naphthalene	1.15E-04	1.66E-09	1.15E-07	1.45E-08
Capped Point	DGRBLR	Degreaser Boiler	75070	Acetaldehyde	1.65E-03	2.38E-08	1.65E-06	2.08E-07
Capped Point	DGRBLR	Degreaser Boiler	107028	Acrolein	1.04E-03	1.49E-08	1.04E-06	1.31E-07
Capped Point	DGRBLR	Degreaser Boiler	7664417	Ammonia	1.23E+00	1.77E-05	1.23E-03	1.55E-04
Capped Point	DGRBLR	Degreaser Boiler	100414	Ethyl Benzene	3.65E-03	5.25E-08	3.65E-06	4.60E-07
Capped Point	DGRBLR	Degreaser Boiler	110543	Hexane	2.42E-03	3.48E-08	2.42E-06	3.05E-07
Capped Point	DGRBLR	Degreaser Boiler	115071	Propylene	2.81E-01	4.04E-06	2.81E-04	3.54E-05
Capped Point	DGRBLR	Degreaser Boiler	108883	Toluene	1.41E-02	2.02E-07	1.41E-05	1.77E-06
Capped Point	DGRBLR	Degreaser Boiler	1330207	Xylene	1.04E-02	1.50E-07	1.05E-05	1.32E-06
Capped Point	DRYER3	Drver #3	71432	Benzene	6.18E-03	8.88E-08	6.19E-06	7.79E-07
Capped Point	DRYER3	Dryer #3	50000	Formaldehyde	1.31E-02	1.89E-07	1.31E-05	1.66E-06
Capped Point	DRYER3	Dryer #3	1151	РАН	7.72E-05	1.11E-09	7.73E-08	9.74E-09
Capped Point	DRYER3	Dryer #3	91203	Naphthalene	2.32E-04	3.33E-09	2.32E-07	2.92E-08
Capped Point	DRYER3	Drver #3	75070	Acetaldehyde	3.32E-03	4.77E-08	3.32E-06	4.19E-07
Capped Point	DRYER3	Dryer #3	107028	Acrolein	2.08E-03	3.00E-08	2.09E-06	2.63E-07
Capped Point	DRYER3	Dryer #3	7664417	Ammonia	2.47E+00	3.55E-05	2.47E-03	3.12E-04
Capped Point	DRYER3	Dryer #3	100414	Ethyl Benzene	7.33E-03	1.05E-07	7.35E-06	9.26E-07
Capped Point	DRYER3	Dryer #3	110543	Hexane	4.86E-03	6.99E-08	4.87E-06	6.14E-07
Capped Point	DRYER3	Dryer #3	115071	Propylene	5.64E-01	8.12E-06	5.65E-04	7.12E-05
Capped Point	DRYER3	Dryer #3	108883	Toluene	2.83E-02	4.06E-07	2.83E-05	3.57E-06
Capped Point	DRYER3	Dryer #3	1330207	Xylene	2.10E-02	3.02E-07	2.10E-05	2.65E-06
Capped Point	DRYER4	Dryer #4	71432	Benzene	6.18E-03	8.88E-08	6.19E-06	7.79E-07
Capped Point	DRYER4	Dryer #4	50000	Formaldehyde	1.31E-02	1.89E-07	1.31E-05	1.66E-06
Capped Point	DRYER4	Dryer #4	1151	РАН	7.72E-05	1.11E-09	7.73E-08	9.74E-09
Capped Point	DRYER4	Dryer #4	91203	Naphthalene	2.32E-04	3.33E-09	2.32E-07	2.92E-08
Capped Point	DRYER4	Dryer #4	75070	Acetaldehyde	3.32E-03	4.77E-08	3.32E-06	4.19E-07
Capped Point	DRYER4	Dryer #4	107028	Acrolein	2.08E-03	3.00E-08	2.09E-06	2.63E-07
Capped Point	DRYER4	Dryer #4	7664417	Ammonia	2.47E+00	3.55E-05	2.47E-03	3.12E-04
Capped Point	DRYER4	Dryer #4	100414	Ethyl Benzene	7.33E-03	1.05E-07	7.35E-06	9.26E-07
Capped Point	DRYER4	Dryer #4	110543	Hexane	4.86E-03	6.99E-08	4.87E-06	6.14E-07
Capped Point	DRYER4	Dryer #4	115071	Propylene	5.64E-01	8.12E-06	5.65E-04	7.12E-05
Capped Point	DRYER4	Dryer #4	108883	Toluene	2.83E-02	4.06E-07	2.83E-05	3.57E-06
Capped Point	DRYER4	Dryer #4	1330207	Xylene	2.10E-02	3.02E-07	2.10E-05	2.65E-06
Volume	ABRBLST	Abrasive Blasting	7429905	Aluminum	5.56E-02	8.00E-07	3.05E-05	3.85E-06
Volume	ABRBLST	Abrasive Blasting	7440417	Beryllium & Compounds	7.15E-05	1.03E-09	3.93E-08	4.95E-09
Volume	ABRBLST	Abrasive Blasting	7440439	Cadmium & Compounds	3.97E-05	5.71E-10	2.18E-08	2.75E-09
Volume	ABRBLST	Abrasive Blasting	7440484	Cobalt & Compounds	1.75E-04	2.51E-09	9.60E-08	1.21E-08
Volume	ABRBLST	Abrasive Blasting	7440473	Chromium & Compounds (Other Than Hexavalent)	6.75E-03	9.71E-08	3.71E-06	4.67E-07
Volume	ABRBLST	Abrasive Blasting	7440508	Copper & Compounds	2.22E-02	3.20E-07	1.22E-05	1.54E-06
Volume	ABRBLST	Abrasive Blasting	18540299	Hexavalent Chromium Compounds (Other)	1.43E-03	2.06E-08	7.85E-07	9.90E-08
Volume	ABRBLST	Abrasive Blasting	7439965	Manganese & Compounds	2.22E-03	3.20E-08	1.22E-06	1.54E-07

#### Table 1. TAC Emissions Rates by Source

Anaplex Corporation Facility ID 016951 Paramount, California

Source Type	Modeled Source ID	Source Description	CAS Number	Chemical Name	Annual Emissions (lbs/yr)	Annual Emissions (g/s)	Maximum Hourly Emissions (lbs/hr)	Maximum Hourly Emissions (g/s)
Volume	ABRBLST	Abrasive Blasting	7440020	Nickel & Compounds	4.77E-03	6.85E-08	2.62E-06	3.30E-07
Volume	ABRBLST	Abrasive Blasting	7439921	Lead	3.97E-05	5.71E-10	2.18E-08	2.75E-09
Volume	ABRBLST	Abrasive Blasting	7782492	Selenium & Compounds	5.96E-04	8.57E-09	3.27E-07	4.12E-08
Volume	ABRBLST	Abrasive Blasting	7440622	Vanadium (Fume or Dust)	2.98E-04	4.28E-09	1.64E-07	2.06E-08

#### Abbreviations:

g/s = grams per second lbs/hr = pounds per hour lbs/yr = pounds per year TAC = toxic air contaminant

#### Table 2. Exposure Pathway and Target Organ by TAC

					Factor	Factor				Pathways		5	Та	Ac	ute Ora	ans			1	Ci Targe	hron et Oi		IS		C	-Hou hron 'arge	ic	
	CAS	Annual Emissions	Maximum Hourly Emissions	Multi-pathway	Inhalation Cancer Slope Fa	Oral Cancer Slope Fa	Acute REL	Inhalation Chronic REL	Oral Chronic REL	Inhalation	_	Home grown	_	Π	REPRO_DEVEL			BLOOD	NS			DEVEL		EETH	LOOD		RESP	
Chemical Name	Number	(lbs/yr)	1	2	HO	00	٩	HO	00	X	n N	I	Συ		= ∝	∝ v	<u>, m</u>	<u> </u>	10	E P	<u>× 0</u>	~	<u>~ </u>		<u>u m</u>		<u> </u>	-
1,2,4-Trimethylbenzene	95636 80057	8.45E+00 2.46E+00	4.22E-03 1.23E-03	+						x	+	+	+	++	+	$\vdash$	+	$\rightarrow$	+	$\vdash$	+	₩	+	++	+	++	+	H
4,4'-Isopropylidenediphenol		2.46E+00 2.49E-02	2.49E-05	+	1.00E-02		4.70E+02	1.40E+02		x	+	+	+	++	+	x	- v	+	+	$\vdash$	+	++	<b>_</b>	++	+	++	+	H
Acetaldehyde Acrolein	75070			+	1.002-02		2.50E+02	3.50E-01		x	+	+	+	++	+	x	Ŷ	+	+	H	+	H	Ŷ	++	+	++	÷	H
	107028	1.56E-02 1.93E-01	1.57E-05 9.93E-05	+			2.002100	5.562 01		x	+	+	+	++	+	^	^	+	+	$\vdash$	+	++	^	++	+	++	+^	H
Aluminum	7429905			+			3.20E+03	2.00E+02		x	+	+	+	++	+	x	Y	+	+	$\vdash$	+	++	x	++	+	++	+	H
Ammonia	7664417	1.85E+01	1.86E-02	+			3.200403	2.000002		x	+	+	+	++	+	^	^	$\rightarrow$	+	$\vdash$	+	₩	^	++	+	++	+	⊢
Ammonium Nitrate	6484522	7.40E-03	3.70E-05	+						x	+	+	+	++	+	$\vdash$	+	+	+	⊢┤	+	╀┦	+	+	+	++	+	H
Antimony Trioxide	1309644	9.86E-02	4.93E-05	+						~	+	+	+	++	+	$\vdash$	+	+	+	$\vdash$	+	++	+	++	+	++	+	H
Barium & Compounds	7440393	2.35E-01	1.18E-04	-	5.10E+02	5.00E-01		2.00E-01	2.00E-02	XX		x	+	++	+	$\vdash$	+	+	+	$\mathbb{H}$	+	⊢	x	++	×	+	+	H
Barium Chromate	10294403	2.64E-01	1.32E-04	^	1.00E-01	3.00E-01	2.70E+01	3.00E+01	2.002-02	÷.	1	^	-	+	~ ~	$\vdash$	+	~	+	$\vdash$	+	++	^	++	x	·	+	╘
Benzene	71432	4.63E-02	4.64E-05				2.702701		2.00E-03	x			+	++	^ ^	$\vdash$	+	^	+		×	॑	x	++	-	++	+	Ĥ
Beryllium & Compounds	7440417	7.15E-05	3.93E-08	+ +	8.40E+00 1.50E+01			7.00E-03 2.00E-02	5.00E-04		-	X	-	++	+	$\vdash$	+	+	+	×	x		x	++	+	++	+	++
Cadmium & Compounds	7440439	3.55E-02	1.28E-03	^	1.306+01			2.00E-02	5.00E-04	~ /	-	~	+	++	+	$\vdash$	+	+	+	⊢	<u> </u>	++	^	++	+	++	+	⊢
Chromium Compound	7440473	6.84E-02	3.84E-05			5 005 04				X			-	++	+	$\vdash$	+	+	+	⊢	+	++		++	+	++	+	++
Chromium Trioxide	1333820	7.78E-02	4.72E-04	×	5.10E+02	5.00E-01		2.00E-03	2.00E-02	XX	X	×	-	++	+	$\vdash$	+	+	+	⊢	+	⊢	x	++	X	⊢	+	H
Cobalt & Compounds	7440484	1.86E-02	9.30E-06	+						х	_	+		++	_		+	+	+	$\vdash$	+	++	+	++	+	++	+	++
Copper & Compounds	7440508	1.67E+00	1.42E-03	+			1.00E+02			x	+	++	-	++	+	х	+	+	+	$\vdash$	+	++	+	++	+	++	+	++
Cumene	98828	1.92E-01	9.58E-05	+							+	++	-		+	$\vdash$	+	+	_	$\vdash$	+	++	+	++	+	++	+	++
Cyanide Compounds	57125	2.70E+00	9.78E-03	++			3.40E+02	9.00E+00		х	+	+	-	X	+	$\vdash$	+		хх	$\vdash$	+	++	+	+	x	++	+	++
Diethylene Glycol Monobutyl Ether	112345	8.03E-01	1.38E-04	$\square$						х	_	$\square$		++	_		+	+	+	$\vdash$	+	++	_	++	+	++	+	$\square$
Dipropylene Glycol Monomethyl Ether	34590948	2.56E-03	1.28E-06	$\square$						х	_	$\square$		++	_		+	+	+	$\vdash$	+	++	_	++	+	++	+	$\square$
Epoxy Resins	1091	1.31E+01	6.57E-03	$\square$						х	+	$\left  \right $		++	_	$\square$	+	$\vdash$	+	$\square$	+	$\square$	+	++	+	$\square$	+	$\square$
Ethyl Benzene	100414	1.22E+02	6.09E-02	$\square$	8.70E-03			2.00E+03		х	_	$\square$		++	_		$\square$	$\vdash$	+	$\square$	хх	X	+		x	$\downarrow \downarrow$	+	Щ
Ethylene Glycol Monobutyl Ether	111762	1.64E+02	8.17E-02				1.40E+04			х	_			$\square$		х	X	$ \rightarrow$	$\perp$	$\square$	$\perp$	$\square$			$\perp$	Щ	$\perp$	Ш
Ethylene Glycol Monopropyl Ether	2807309	2.17E+00	1.08E-03	$\square$						х	_	$\square$		++	_		$\square$	$\vdash$	$\perp$	$\square$	+	$\square$	+	$\square$	+	$\downarrow \downarrow$	+	$\square$
Fluorides and Compounds	1101	5.32E+00	4.09E-03	х			2.40E+02	1.30E+01	4.00E-02	х	_	$\square$		++	_	х	X	$\vdash$	+	$\square$	+	+ +	х	х	+	$\downarrow \downarrow$	+	$\square$
Formaldehyde	50000	1.15E+01	5.79E-03	$\square$	2.10E-02		5.50E+01	9.00E+00		х		$\square$		$\square$			х	$\vdash$	$\perp$	$\square$	$\perp$	$\square$	х	$\downarrow$	$\perp$	$\square$	X	Ш
Hexamethylene Diisocyanate Monomer	822060	4.94E-01	2.47E-04	$\square$						х	_	$\square$		$\square$			$\square$	$ \rightarrow$	$\perp$	$\square$	$\perp$	$\square$	$\perp$	$\square$	$\perp$	$\square$	+	Ш
Hexane	110543	3.65E-02	3.65E-05					7.00E+03		х								$\square$	X						$\perp$	$\square$	$\perp$	Ш
Hexavalent Chromium Compounds (Other)	18540299	3.56E-02	1.86E-05	х	5.10E+02	5.00E-01		2.00E-01	2.00E-02	xx	< X	х						$\square$	$\perp$				х		Х		$\perp$	Ш
Hydrochloric Acid	7647010	1.70E+02	1.98E-02				2.10E+03	9.00E+00		х						х	Х						х					Ш
Hydrofluoric Acid	7664393	5.92E+01	6.77E-03	x			2.40E+02	1.40E+01	4.00E-02	х		$\square$		$\square$		х	X		$\perp$	Ц	$\perp$	$\square$	х	х	$\perp$	Щ	$\perp$	Ц
Hydroquinone	123319	1.17E+00	5.87E-04	$\square$						х		$\square$		$\square$						Ш		Ш		$\square$		Ш		Ц
IPA	67630	3.86E+02	1.93E-01				3.20E+03	7.00E+03		х						х	х				х	х		$\square$		$\square$		$\square$
Isocyanates	1125	7.76E+01	3.88E-02	$\square$						х										$\square$		Ш		$\square$		$\square$		Ш
Lead	7439921	1.08E-04	1.39E-07	х	4.20E-02	8.50E-03				x	( X	X	х							$\Box$								LI
Lead Compounds	1128	5.51E-02	2.78E-05	х	4.20E-02	8.50E-03				x	( X	x	х															$\Box$
Manganese & Compounds	7439965	5.57E-03	3.97E-05	I T				9.00E-02			T	I T		I T			T		×	I T		IT		I T	T-	× 1	T_	T

#### Table 2. Exposure Pathway and Target Organ by TAC

Anaplex Corporation Facility ID 016951

Paramount, California

					Factor	Factor									Acu							ironi			Τ	Chr	lour	
				≥	La.	Fac				Pa		way			get (	orga	ans	+				t Or	gans		++	ar	rget	+
Chemical Name	CAS Number	Annual Emissions (Ibs/yr)	Maximum Hourly Emissions (lbs/hr)	Multi-pathwa	Inhalation Cancer Slope	Oral Cancer Slope	Acute REL	Inhalation Chronic REL	Oral Chronic REL	Inhalation	Soil indestion	Home grown	Mother's milk CV	CNS	REPRO_DEVEL	SKIN	EYE	BLOOD	CNS	IMMUN	STLV	REPRO_DEVEL	EYE	BONE_TEETH ENDO	BLOOD	IMMUN	RESP	BLOOD
MEK	78933	3.58E+04	1.79E+01				1.30E+04			x			-			X	X	_								-		4
Methanol	67561	1.02E+02	5.12E-02	H			2.80E+04	4.00E+03		х	+	+	+	x	++	+		+	Н	+	+	х	$\top$		++	+	Ħ	+
Methylene Chloride	75092	5.35E+02	2.67E-01	Ħ	3.50E-03		1.40E+04	4.00E+02		х		$\square$	x	x	++	+	+	X	( X			$\square$			++	+	Ħ	1
Methylene Diphenyl Diisocyanate	101688	1.25E+00	6.27E-04				1.20E+01	8.00E-02		х		$\square$				х			Π			)	(				х	1
мівк	108101	4.30E+02	2.15E-01	H						х		$\square$		$\square$					Π							+	Ħ	1
Naphthalene	91203	1.69E+01	8.44E-03		1.20E-01			9.00E+00		х		$\square$							Π			)	(			$\top$	Ħ	1
n-Butanol	71363	3.30E+01	1.65E-02	H						х		$\square$		$\square$					Π							+	Ħ	1
Nickel & Compounds	7440020	3.82E-01	9.82E-04	х	9.10E-01		2.00E-01	1.40E-02	1.10E-02	x )	хx	x		)	(				Π			x )	(		x	x	х	1
Nickel Acetate	373024	1.64E-02	1.03E-05	х	9.10E-01		2.00E-01	1.40E-02	1.10E-02	x )	хx	x		)	(				Π			x )	(		x	X	х	1
Nitric Acid	7697372	2.24E+02	2.73E-02				8.60E+01			х		$\square$			$\square$	х			Π						$\square$		Π	1
PAH	1151	5.79E-04	5.80E-07	х	3.90E+00	1.20E+01				x )	хх	X	х						Π						$\square$	$\top$	П	1
Phenol	108952	1.19E+02	5.94E-02				5.80E+03	2.00E+02		х		$\square$			$\square$	х	х	X	( X	)	( X				$\square$		Π	1
Phosphoric Acid	7664382	8.01E+01	7.02E-02					7.00E+00		х		Π					Π					)	<				Π	Τ
Propylene	115071	4.23E+00	4.24E-03					3.00E+03		х												)	<					
Propylene Glycol Monomethyl Ether	107982	3.47E+02	1.74E-01					7.00E+03		х		Π									x						Π	Τ
Propylene Glycol Monomethyl Ether Acetate	108656	2.24E+01	1.12E-02							х																	$\square$	
Propylene Oxide	75569	1.52E+01	7.61E-03		1.30E-02		3.10E+03	3.00E+01		х		Π			х	х	х					)	<				Π	Τ
Sec-Butyl Alcohol	78922	3.92E+01	1.96E-02							х																	$\square$	
Selenium & Compounds	7782492	5.96E-04	3.27E-07					2.00E+01	5.00E-03	х								X	( X		х							Τ
Silica	1175	1.29E+01	6.43E-03					3.00E+00		х												)	<ul> <li>Image: A main and a</li></ul>					Τ
Silver & Compounds	7440224	6.67E-03	3.32E-05							х																		
Sodium Dichromate	10588019	4.53E-01	8.62E-04	х	5.10E+02	5.00E-01		2.00E-01	2.00E-02	x	хх	x										)	<		х			
Sodium Hydroxide	1310732	4.91E+00	6.26E-03				8.00E+00			х						хх	( X											
Strontium Chromate	7789062	2.49E+01	1.25E-02	х	5.10E+02	5.00E-01		2.00E-01	2.00E-02	x	хх	x										)	<		х			
Sulfuric Acid	7664939	1.36E+02	1.38E-01				1.20E+02	1.00E+00		х						х						)	<					
Tert-Butyl Acetate	540885	5.13E+00	2.57E-03																									
Tetrachloroethylene	127184	1.26E+01	1.44E-03		2.10E-02		2.00E+04	3.50E+01		х				х		x	х			>	( X							
Toluene	108883	1.37E+03	6.83E-01				3.70E+04	3.00E+02		х				х	х	x	х		х			x)	<					
Trichloroethylene	79016	5.44E-01	2.72E-04		7.00E-03			6.00E+02		х									х				х					
Vanadium (Fume or Dust)	7440622	2.98E-04	1.64E-07				3.00E+01			х		$\square$				x	х											
Xylene	1330207	5.80E+02	2.90E-01				2.20E+04	7.00E+02		х				х		x	х		х			)	×					
Zinc & Compounds	7440666	1.67E-01	2.58E-04							х																		
Zinc Oxide	1314132	3.35E-03	2.69E-05							х		$\square$		$\square$								$\square$			$\square$		Ц	

Table 3. Modeled Source Description Anaplex Corporation Facility ID 016951 Paramount, California

Source	Source ID	Description
		A total of 31 tanks in the anodizing area contained toxic chemicals in 2016. Emissions resulted from evaporation, plating, sparging, and heating operations, and were released through roof vents and rollup doors on the east and west sides of the building. Emissions from these tanks were modeled as multiple volume sources representing the east building where the anodizing tanks are located. It was assumed that evaporation emissions occurred continuously (24 hours per day, 7 days per week) while plating, sparging, and heating emissions occurred only during AQMD operating hours.
Anodizing Tanks	ANODZPSH, ANODZEVP	
		Emissions were calculated using a methodology provided by SCAQMD. Data used in the emission calculations included metal plating efficiencies, material densities and toxic chemical weight fractions (taken from manufacturer safety data sheets), toxic chemical vapor pressures, and tank operational data such as tank dimensions, solution temperature, number of heating cycles, air sparge rates, air sparge hours, rectifier amp ratings, and rectifier amp hours. Emissions from the anodizing tanks in 2016 were generally uncontrolled, with the exception of one of the tanks (Anodizing Tank 19) which used a fume suppressant that controlled particulate emissions at an estimated efficiency of 96.8%. Emission were revised in the Amended HRA to incorporate the SCAQMD's comments on the ATIR.
Plating Tanks	PLATEPSH, PLATEEVP	A total of 47 tanks in the plating area contained toxic chemicals in 2016. Similar to the anodizing tanks, emissions resulted from evaporation on a continuous basis and from plating, sparging, and heating during operating hours. Emissions from the plating tanks were released through roof vents and rollup doors on the east and west sides of the building and were modeled as volume sources representing the east building where the plating tanks are located. Evaporation emissions (Source ID = PLATEEVP) were modeled separately from plating, sparging, and heating emissions (Source ID = PLATEPSH) based on operating schedule.
		Emission from plating tanks were calculated as described above for anodizing tanks. No emission controls were assumed for the plating tanks in 2016. Emission for certain tanks were revised in the Amended HRA to incorporate the SCAQMD's comments on the ATIR.
		Three spray booths ( $\neq$ 2, $\neq$ 3, and $\neq$ 4) were used to apply paint in 2016. All three booths are located in the east building, and emissions from each booth were directed to stacks on the building roof. Each stack was affixed with a raincap.
Paint Spray Booths	SPRYBTH2, SPRYBTH3, SPRYBTH4	Paint booth particulate emissions were calculated by multiplying the paint purchases by the toxic chemical weight fraction, applying an AQND AER default 65% solids transfer efficiency, and applying a 90% PM control efficiency. The 90% PM control efficiency is the default value for the standard filter per SCAQMD's comment on the ATIR. VOC emissions were calculated by multiplying the paint usage by the toxic chemical weight fraction. In the sensitivity run, 95% PM control efficiency was assumed from Spray Booth #2 as described in Section 6.
		Emissions were assumed to occur during SCAQMD operating hours. In the sensitivity run, $1/3^{rd}$ of the purchased chromate-containing paint was assumed from Spray Booth #2 as described in Section 6.
		Three boilers (Boiler 1, Boiler 2, and the vapor degreaser boiler) were used at Anaplex in 2016. Boilers 1 and 2 are located outdoors adjacent to the west side of the east building; the degreaser boiler is located inside the west building. Combustion emissions from each boiler were vented to stacks with raincaps.
Bollers	222BLR1, 222BLR2, DGRBLR	Emissions were calculated by multiplying the natural gas usage by the SCAQMD toxic chemical emission factor for natural gas-fired external combustion equipment[1]. For annual emissions, natural gas usage was taken from natural gas invoices and divided among the combustion units based on equipment heat rating (MMBtu/hr). Hourly emissions assumed maximum hourly fuel usage based on equipment rating.
		Emissions from each boiler were assumed to occur during AQMD operating hours.

Table 3. Modeled Source Description Anaplex Corporation Facility ID 016951 Paramount, California

Source	Source ID	Description
		The vapor degreaser is located at the east side of the west building near a large rollup door. The degreaser vents to a carbon canister and was modeled as a stack with a horizontal release.
Vapor Degreaser	DGRSR	Emissions were based on 2016 purchase records and toxic chemical quantities per manufacturer safety data sheets. The carbon canister was assumed to provide 95% control efficiency. Emissions were assumed to occur during SCAQMD operating hours.
		Two drying ovens (Dryer 3 and Dryer 4) were used at Anaplex in 2016. Dryer 3 is located inside the east building in the southwest corner and Dryer 4 is located in the central portion of the west building. Combustion emissions from each drying oven were vented to stacks with raincaps.
Drying Ovens	DRYER3, DRYER4	Emissions were calculated as described above for the boilers. Emissions from each oven were assumed to occur during AQMD operating hours.
		Two solvent cleaning stations located outdoors and adjacent to each other next to the northwest corner of the east building were modeled as a single fugitive area source.
Solvent Baths	SLVNTBTH	Emissions were based on 2016 purchase records and toxic chemical quantities per manufacturer safety data sheets. Emissions were uncontrolled and assumed to occur continuously.
		Emissions from hand applied paints and solvents occurred in several masking areas located throughout the east building. Emissions occurred through roof vents and rollup doors. These emissions were modeled as volume sources encompassing the entire east building.
Masking Areas	MASKING	Emissions were based on 2016 purchase records and toxic chemical quantities per manufacturer safety data sheets. Hand-applied coating and solvent usages were assumed to have a solids transfer efficiency of 100% (only VOCs were emitted). Emissions were uncontrolled and assumed to occur during AQMD operating hours.
		Abrasive blasting took place in three blasting cabinets located roughly in the center of the west building. Emissions occurred through roof vents and rollup doors. These emissions were modeled volume sources encompassing the entire west building.
Abrasive blasting	ABRBLST	Emissions were calculated based on abrasive material throughput, the AQMD PM emission factor for indoor grit blasting assuming 99% control efficiency from a baghouse, and the weight fraction of each toxic chemical based on analytical sample results.
		Abrasive material throughput was estimated from an equation in the AP-42 Section 13.2.6 Background Documentation using nozzle size and pressure. Operating time was estimated by Anaplex to be 7 hours per day, 5 days per week, 52 weeks per year.
Netes		Emissions from abrasive blasting were assumed to occur during AQMD operating hours.

Note: <sup>1</sup>SCAQMD Supplemental Instructions: Reporting Procedures for AB2588 Facilities for Reporting Quadrennial Air Toxics Emissions Inventory, Appendix B, Table B-1, December 2016.

#### Table 4. Modeled Source Parameters

Anaplex Corporation Facility ID 016951 Paramount, California

Source Type	Source Description	Location	Modeled Source Group	Number of Sources	Building Height (m)	Release Height <sup>1</sup> (m)	(m)	(m)	Initial Lateral Dimension <sup>3</sup> (m)	Exclusion Zone <sup>4</sup> (m)	X/Q Emission Rate (g/s)
	Anodizing Tank	East Building	ANODZPSH	8	4.88	2.44	8.38	2.27	1.95	5.19	0.125
	Anodizing Tank Evaporation	East Building	ANODZEVP	8	4.88	2.44	8.38	2.27	1.95	5.19	0.13
Volume	Plating Tank	East Building	PLATEPSH	8	4.88	2.44	8.38	2.27	1.95	5.19	0.125
, or a marked	Plating Tank Evaporation	East Building	PLATEEVP	8	4.88	2.44	8.38	2.27	1.95	5.19	0.13
	Masking Area - Paint and Solvent Use	East Building	MASKING	32	4.88	2.44	8.38	2.27	1.95	5.19	0.03125
	Abrasive Blasting	West Building	ABRBLST	20	5.79	2.90	8.38	2.69	1.95	5.19	0.05
											-

									Initial	X/Q	
					Release				Lateral	Emission	
Source			Modeled Source	Number of	Height	X Length	Y Length		Dimension	Rate	
Туре	Source Description	Location	Group	Sources	(m)	(m)	(m)	Angle	(m)	(g/s-m <sup>2</sup> )	
Area 5	Solvent Degreaser (Manual)	Outside	SLVNTBTH	1	0.91	7.62	3.66	0.00	0.00	0.036	

Source Type	Source Description	Location	Modeled Source Group	Number of Sources	Stack Height (m)	Stack Temperature (K)	Stack Velocity (m/s)	Stack Diameter (m)	X/Q Emission Rate (g/s)
	Boiler 1	East Building	222BLR1	1	5.72	477.59	2.01	0.41	1.00
	Boiler 2	East Building	222BLR2	1	5.72	477.59	2.01	0.41	1.00
	Degreaser Boiler	West Building	DGRBLR	1	6.96	466.48	0.69	0.30	1.00
Capped	Dryer #3	East Building	DRYER3	1	5.18	458.15	3.09	0.20	1.00
Point 5	Dryer #4	West Building	DRYER4	1	7.24	458.15	3.09	0.20	1.00
	Paint Booth #2	East Building	SPRYBTH2	1	6.83	0.00	9.20	0.91	1.00
[	Paint Booth #3	East Building	SPRYBTH3	1	6.71	0.00	18.74	0.66	1.00
	Paint Booth #4	East Building	SPRYBTH4	1	6.71	0.00	17.64	0.66	1.00
Horizontal Point <sup>5</sup>	Vapor Degreaser	West Building	DGRSR	1	0.30	0.00	0.01	0.06	1.00

Notes:

<sup>1</sup> Release height is assumed to be half of the building height for volume sources

<sup>2</sup> Sigma Z: calculated as building height divided by 2.15

<sup>3</sup> Sigma Y: calculated as volume source width divided by 4.3

<sup>4</sup> (2.15 x Sigma Y) + 1 meter from the center of the volume source.

Conversion

0.3048 m/ft

<sup>5</sup> Modeled Source Parameters for area and point source types have not changed from HRA received by the SCAQMD on June 13, 2017.

Abbreviations:

g = gram m = meters

K = Kelvin s = seconds

Description	Address	Receptor	UTM Coordinates (m) (m)		
Schools					
Mark Twain Elementary School	5021 E Centralia St, Long Beach, CA 90808	6507	395044 3745024		
Hoover Middle School	3501 Country Club Dr, Lakewood, CA 90712	6508	393464 3745074		
Bethany Lutheran School	5100 E Arbor Rd, Long Beach, CA 90808	6509	395172 3745288		
St Cyprian's School	5133 E Arbor Rd, Long Beach, CA 90808	6510	395226 3745397		
Riley Elementary School	3319 Sandwood St, Lakewood, CA 90712	6511	393360 3745486		
Cleveland Elementary School	4760 Hackett Ave, Lakewood, CA 90713	6512	397668 3745499		
Barton Elementary School	1100 E Del Amo Blvd, Long Beach, CA 90807	6513	390978 3745709		
Perry Lindsey Middle School	5075 Daisy Ave, Long Beach, CA 90805	6514	389048 3745899		
Holmes Elementary School	5020 Barlin Ave, Lakewood, CA 90712	6515	393788 3746042		
Gomper's K-8 School	5206 Briercrest Ave, Lakewood, CA 90713	6516	396179 3746325		
Addams Elementary School	256 E Plymouth St, Long Beach, CA 90805	6517	389818 3746478		
St Athanasius Catholic School	5377 Linden Ave, Long Beach, CA 90805	6518	390271 3746568		
Lindbergh Elementary School	1022 E Market St, Long Beach, CA 90805	6519	390730 3746577		
Intensive Learning Center School	4718 Michelson St, Lakewood, CA 90712	6520	394866 3746893		
Buena Vista High School	3717 Michelson St, Lakewood, CA 90712	6521	393824 3746966		
Stephen Foster Elementary School	5223 Bigelow St, Lakewood, CA 90712	6522	395437 3746968		
Educare Preschool and Kindergarten School	5730 South St, Lakewood, CA 90713	6523	396320 3747121		
Harte Elementary School	1671 E Phillips St, Long Beach, CA 90805	6524	391606 3747185		
St Josephs High School	5825 Woodruff Ave, Lakewood, CA 90713	6525	396566 3747398		
Esther Lindstrom Elementary School	5900 Canehill Ave, Lakewood, CA 90713	6526	397279 3747390		
Mayfair High School	6000 Woodruff Ave, Lakewood, CA 90713	6527	396813 3747657		
Captain Raymond Collins School	6125 Coke Ave, Long Beach, CA 90805	6528	393831 3747927		
Craig Williams Elementary School	6144 Clark Ave, Lakewood, CA 90712	6529	395153 3747956		
Valley Christian Middle School	18100 Dumont Ave, Cerritos, CA 90703	6530	397938 3748038		
Thomas Jefferson Elementary School	10027 Rose St, Bellflower, CA 90706	6531	396403 3748340		
Jordan Plus High School	171 W Bort St, Long Beach, CA 90805	6532	388508 3748539		
Valley Christian High School	17700 Dumont Ave, Cerritos, CA 90703	6533	397979 3748433		
Grant Elementary School	1225 E 64th St, Long Beach, CA 90805	6534	391239 3748530		
Jordan High School	6500 Atlantic Ave, Long Beach, CA 90805	6535	390441 3748582		
Gahr High School	11111 Artesia Blvd, Cerritos, CA 90703	6536	398787 3748711		
Valley Christian Elementary School	17408 Grand Ave, Bellflower, CA 90706	6537	397126 3748868		
Las Flores School	10039 Palm St, Bellflower, CA 90706	6538	396466 3749074		
St Bernard School	9626 Park Street Bellflower, CA 90706	6539	395732 3749110		
McKinley Elementary School	6822 Paramount Blvd., Long Beach, CA, 90805	6540	392799 3749321		
Hamilton Middle School	1060 70th St, Long Beach, CA 90805	6541	390925 3749595		
Somerset Continuation High School	9242 Laurel St, Bellflower, CA 90706	6542	394874 3749702		
Beliflower Alternative Education Center School	16703 South Clark Ave., Bellflower, CA 90706-5203	6543	395084 3749707		
Major Lynn Mokler School	8571 Flower St, Paramount, CA 90723	6544	393792 3749726		
Robert F. Kennedy Elementary School	1305 S Oleander Ave, Compton, CA 90220	6545	386350 3749910		
Ramona Elementary School	9351 Laurel St, Bellflower, CA 90706	6546	395099 3749834		
Leona Jackson School	7220 Jackson St, Paramount, CA 90723	6547	391603 3750024		
Wesley Gaines School	7340 Jackson St, Paramount, CA 90723	6548	391817 3750027		
Emerson Elementary School	1011 E Caldwell St, Compton, CA 90221	6549	387995 3750082		
Southlands Christian Academy School	16400 Woodruff Ave, Bellflower, CA 90706	6550	396709 3749983		
Alondra Middle School	16200 Downey Ave, Paramount, CA 90723	6551	393695 3750170		
Kelly Elementary School	2320 E Alondra Blvd, Compton, CA 90221	6552	389279 3750329		
Roosevelt Middle School	1200 E Alondra Blvd, Compton, CA 90221	6553	388069 3750369		
Frank J. Zamboni School	15733 Orange Ave, Paramount, CA 90723	6554	391060 3750653		
Compton Early College High School	601 S Acacia Ave, Compton, CA 90220	6555	386524 3750757		
Compton High School	601 S Acacia Ave, Compton, CA 90220	6556	386524 3750757		
Adventists Union School	15548 Santa Ana Ave, Bellflower, CA 90706	6557	395026 3750753		
Jefferson Elementary School	8600 Jefferson St, Paramount, CA 90723	6558	393789 3750832		
Dominguez High School	15301 S San Jose Ave, Compton, CA 90221	6559	390647 3750924		
Washington Elementary School	9725 Jefferson St, Bellflower, CA 90706	6560	395805 3750910		
Abraham Lincoln School	15324 California, Paramount, CA, 90723	6561	392915 3750969		
Mark Keppel School	6630 Mark Keppel St, Paramount, CA 90723	6562	390853 3751014		
Anna M. Glazier Elementary School	10932 East Excelsior Dr, Norwalk, CA 90650	6563	398131 3750940		
Nazarene Christian School	15014 Studebaker Rd, Norwalk, CA 90650	6564	398332 3750963		
Frank E. Woodruff Elementary School	15332 Eucalyptus Ave, Bellflower, CA 90706	6565	396293 3750995		
Beliflower High School	15301 McNab Ave, Bellflower, CA 90706	6566	396984 3750992		
First Christian New Life Academy School	225 Santa Fe Ave, Compton, CA 90221	6567	387554 3751148		
Clinton Elementary School	6500 E Compton Blvd, Compton, CA 90221	6568	390627 3751173		
Loretta Lampton Elementary School	14716 Elmcroft Ave, Norwalk, CA 90650	6569	398752 3751158		

Description	Address	Receptor Number	UTM Coo	
Progressive Achievement Center School	302 N Long Beach Blvd, Compton, CA 90221	6570	(m) 388334	(m) 3751477
Albert Baxter Elementary School	14929 Cerritos Ave, Bellflower, CA 90706	6571	394526	3751418
Lifeline Education Charter School	357 E Palmer St, Compton, CA 90221	6572	387254	3751577
Our Lady of Victory School	601 E Palmer St, Compton, CA 90221	6573	387483	3751581
Our Lady of the Rosary School	14813 Paramount Blvd, Paramount, CA 90723	6574	392666	3751551
Bellflower United Methodist School	14527 Bellflower Blvd, Bellflower, CA 90706	6575	395916	3751618
Emie Pyle School	14500 Woodruff Ave, Bellflower, CA 90706	6576	396909	3751619
Compton Unified ROP School	700 N Bullis Rd, Compton, CA 90221	6577	388465	3751803
Los Cerritos School	14626 Gundry Ave, Paramount, CA 90723	6578	391395	3751772
Roosevelt Elementary School	700 N Bradfield Ave, Compton, CA 90221	6579	388823	3751809
Paramount Park Middle School	14608 Paramount Blvd, Paramount, CA 90723	6580	392890	3751762
Paramount High School	14429 Downey Ave, Paramount, CA 90723	6581	393459	3751819
Paramount Adult School	14507 Paramount Blvd, Paramount, CA 90723	6582	392689	3751835
Paramount Unified Community Day School	14507 Paramount Blvd, Paramount, CA 90723	6583	392682	3751837
Harry Wirtz Elementary School	8535 Contreras St, Paramount, CA 90723	6584	393613	3751872
Whaley Middle School	14401 S Gibson Ave, Compton, CA 90221	6585	389955	3751959
Mayo Elementary School	915 N Mayo Ave, Compton, CA 90221	6586	387817	3752015
Howard Tanner School	7210 Rosecrans Ave, Paramount, CA 90723	6587	391637	3752036
Today's Fresh Start-Compton School	2301 E Rosecrans Ave, Compton, CA 90221	6588	389135	3752144
Rosecrans Elementary School	1301 N Acacia Ave, Compton, CA 90222	6589	386387	3752191
Lynn Pace Elementary School	9625 Van Ruiten St, Bellflower, CA 90222	6590	395779	3752088
Corvallis Middle School	11032 Leffingwell Rd, Norwalk, CA 90500	6591	398476	3752237
Foster Elementary School	1620 N Pannes Ave, Compton, CA 90221	6592	388879	3752433
Sea Compton High School	1705 N Culver Ave, Compton, CA 90222	6593	386432	3752498
St John Bosco High School	13640 Beliflower Blvd, Beliflower, CA 90222	6593	396115	3752396
St Phillip Neri School	12522 N Stoneacre Ave, Lynwood, CA 90262	6595	389602	3752725
New River Elementary School	13432 Halcourt Ave, Norwalk, CA 90650	6596	398159	3752633
D. D. Johnston Elementary School	13421 Fairford Ave, Norwalk, CA 90650	6597	398692	3752634
Janie P. Abbott Elementary School	5260 Clark St, Lynwood, CA 90262	6598	390242	3752750
Norwalk Christian Academy School	11005 Foster Rd, Norwalk, CA 90262	6599	398428	3752770
Carpenter Elementary School	9439 Foster Rd, Downey, CA 90242	6600	395428	3752815
		6601	395274	3752941
Jefferson Elementary School Lewis Elementary School	2508 E 133rd St, Compton, CA 90222 13220 Bellflower Blvd, Downey, CA 90242	6602	396058	3752941
Theodore Roosevelt School	13451 Merkel Ave, Paramount, CA 90723	6603	393061	3752892
Mark Twain Elementary School	12315 Thorson Ave, Lynwood, CA 90/25	6604	389211	3753146
Kid Town USA School	13500 Paramount Blvd, South Gate, CA 90280	6605	392857	3753105
Anderson Elementary School	2210 E 130th St, Compton, CA 90222	6606	386068	3753291
Helen Keller Elementary School	3521 Palm Ave, Lynwood, CA 90262	6607	388308	3753312
Ward Elementary School	8851 Adoree St, Downey, CA 90242	6608	394522	3753324
Celerity Achernar Charter School	310 E El Segundo Blvd, Compton, CA 90222	6609	386988	3753494
Lynwood Middle School	12124 Bullis Rd, Lynwood, CA 90262	6610	388727	3753503
Rosa Parks Elementary School	3900 Agnes Ave, Lynwood, CA 90262	6611	388876	3753578
Hollydale Elementary School	5511 Century Blvd, South Gate, CA 90280	6612	391553	3753660
	12340 Woodruff Ave, Downey, CA 90241	6613	396910	3753681
Downey Adult School Downey Community Day School			396910	3753681
Lindbergh Elementary School	12340 Woodruff Ave, Downey, CA 90241 3300 Cedar Ave, Lynwood, CA 90262	6614 6615	396910	3753681
	5246 Martin Luther King Jr Blvd, Lynwood, CA 90262	6616	390661	3753818
Marco Antonio Firebaugh High School St Pius X- St Matthias Academy School	7851 Gardendale St, Downey, CA 90242			
		6617	392774 396898	3753826 3753797
Columbus Continuation School Gauldin Elementary School	12330 Woodruff Ave, Downey, CA 90241 9724 Spry St, Downey, CA 90242	6618 6619	396898	3753862
Sussman Middle School		6620	396465	
Dr. Ralph Bunche Middle School	12500 Birchdale Ave, Downey, CA 90242 12338 S Mona Bivd, Compton, CA 90222	6621	394759	3754091
Martin Luther King Elementary School Wilson Elementary School	2270 E 122nd St, Compton, CA 90222	6622	386266	3754102
Pathway Independent Study School	11700 School St, Lynwood, CA 90262	6623	388511	3754093
	11300 Wright Rd, Lynwood, CA 90262	6624	390947	3754066
Vista High School	11300 Wright Rd, Lynwood, CA 90262	6625	390941	3754073
Imperial Elementary School	8133 Imperial Hwy, Downey, CA 90242	6626	393924	3754245
Lynwood Adult School	11277 Atlantic Ave, Lynwood, CA 90262	6627	390306	3754326
Will Rogers Elementary School	11220 Duncan Ave, Lynwood, CA 90262	6628	390709	3754338
Washington Elementary School	4225 Sanborn Ave, Lynwood, CA 90262	6629	390025	3754457
Studebaker Elementary School	11800 Halcourt Ave, Norwalk, CA 90650	6630	398257	3754386
Lynwood Alternative School	11387 Bullis Road Lynwood, CA 90262	6631	389013	3754543
Alameda Elementary School	8613 Alameda St, Downey, CA 90242	6632	395074	3754494
Hosler Middle School	11300 Spruce St, Lynwood, CA 90262	6633	388885	3754684
St Raymond School	12320 Paramount Blvd, Downey, CA 90242	6634	393881	3754688

Description	Address	Receptor	UTM Coo	
		Number	(m) 398597	(m)
Lakeside Middle School Lynwood High School	11000 Kenney St, Norwalk, CA 90650 4050 E Imperial Hwy, Lynwood, CA 90262	6635 6636	398597	3754642 3755036
Kirkwood Christian School	11115 Pangborn Ave, Downey, CA 90262	6637	397054	3755103
Lincoln Elementary School	11031 State St, Lynwood, CA 90262	6638	387529	3755368
Lugo Elementary School	4345 Pendleton Ave, Lynwood, CA 90262	6639	390539	3755368
St Emydius Catholic School	10990 California Ave, Lynwood, CA 90262	6640	388358	3755404
Ritter Elementary School	11108 Watts Ave, Los Angeles, CA 90059	6641	386590	3755509
Roosevelt Elementary School	10835 Mallison Ave, Lynwood, CA 90262	6642	389045	3755564
Thurgood Marshall Elementary School	3593 Martin Luther King Jr Blvd, Lynwood, CA 90262	6643	388712	3755632
Cesar Chavez Middle School	3898 Abbott Rd, Lynwood, CA 90262	6644	388632	3755640
Warren High School	8141 De Palma St, Downey, CA 90241	6645	394625	3755674
San Miguel Catholic School	2270 E 108th St, Los Angeles, CA 90059	6646	386186	3755860
Old River Elementary School	11995 Old River School Rd, Downey, CA 90242	6647	393096	3755844
Rio San Gabriel Elementary School	9338 Gotham St, Downey, CA 90241	6648	397202	3755873
Downey High School	11040 Brookshire Ave, Downey, CA 90241	6649	395774	3755950
Stauffer Middle School	11985 Old River School Rd, Downey, CA 90242	6650	393060	3756008
Weigand Avenue Elementary School	10401 Weigand Ave, Los Angeles, CA 90002	6651	386318	3756364
Legacy High School	5225 Tweedy Blvd, South Gate, CA 90280	6652	391092	3756337
Simon Rodia Continuation School	2701 Seguola Dr, South Gate, CA 90280	6653	386978	3756446
Doty Middle School	10301 Woodruff Ave, Downey, CA 90241	6654	397210	3756344
Tweedy Elementary School	9724 Pinehurst Ave, South Gate, CA 90280	6655	390772	3756507
Williams Elementary School	7530 Arnett St, Downey, CA 90241	6656 6657	393866 389773	3756602
Bryson Elementary School Jordan High School	4470 Missouri Ave, South Gate, CA 90280 2265 E 103rd St, Los Angeles, CA 90002	6658	386257	3756651
Montara Avenue Elementary School	10018 Montara Ave, South Gate, CA 90002	6659	380237	3756660
Southeast High School	2720 Tweedy Blvd, South Gate, CA 90280	6660	387017	3756723
San Miguel Avenue Elementary School	9801 San Miguel Ave, South Gate, CA 90280	6661	389006	3756750
Southeast Middle School	2560 Tweedy Blvd, South Gate, CA 90280	6662	386776	3756796
Madison Elementary School	9820 Madison Ave, South Gate, CA 90280	6663	387796	3756819
Soledad Charter School	3616 Missouri Ave, South Gate, CA 90280	6664	388577	3756847
Victoria Elementary School	3320 Missouri Ave, South Gate, CA 90280	6665	388087	3756881
Hospitals				
Bellflower Health Center	10005 Flower St, Bellflower, CA 90706	6666	396337	3749729
Los Angeles Community Hospital at Beliflower	9542 Artesia Blvd, Bellflower, CA 90706	6667	395508	3748797
College Hospital	10802 College PI, Cerritos, CA 90703	6668	398006	3749881
PIH Hospital - Downey	11500 Brookshire Ave, Downey, CA 90241	6669	395479	3755451
Kaiser Foundation Hospital - Downey	9333 Imperial Hwy, Downey, CA 90242	6670	395639	3753789
Los Angeles County/Rancho Los Amigos National Rehab Center	7601 Imperial Hwy, Downey, CA 90242	6671	392947	3754975
Lakewood Regional Medical Center	3700 E South St, Lakewood, CA 90805	6672	393771	3747191
La Casa Psychiatric Health Fadility	6060 Paramount Boulevard	6673	392982	3747803
St. Francis Medical Center	3630 E Imperial Hwy #104, Lynwood, CA 90262	6674	388784	3755044
Coast Plaza Hospital	13100 Studebaker Rd, Norwalk, CA 90650	6675	398450	3753009
Promise Hospital of East Los Angeles-Suburban Campus	16453 Colorado Ave, Paramount, CA 90723	6676	392517	3749932
Physician's Surgery Center	8200 Firestone Blvd, Downey, CA 90241	6677	395126	3756156
Daycare Centers				
Abbott Preschool	5260 E. Clark Street, Lynwood, CA 90262	6678	390261	3752752
Abundance of Life Day Care Center	6100 Long Beach Blvd., Long Beach, CA 90805	6679	389009	3747928
Addams CDC	256 E. Plymouth St., Long Beach, CA 90805	6680	389855	3746531
Alondra Preschool	16200 S. Downey Avenue, Paramount, CA 90723	6681	393593	3750179
Anderson State Preschool	2210 E. 130th Street, Compton, CA 90220	6682	386065	
Around The World Learning Center	10441 Lakewood Blvd., Downey, CA 90241	6683	396538	3756475
Barton Child Development Center	1100 East Del Amo Blvd., Long Beach, CA 90807	6684	390931	3745717
Bellflower Child Development Center	9447 Flower St., Bellflower, CA 90706	6685	395285	3749681
Beliflower II Child Development Center	14523 Beliflower Blvd., Beliflower, CA 90706	6686	395917	3751669
Beliflower III Child Development Center Beliflower Unified School DistLas Flores School	14527 Beliflower Blvd, Beliflower, CA 90706	6687	395916	3751618
Belifiower Unified School DistLas Flores School Belifiower Unified School District-Woodruff School	10039 E. Palm Street, Bellflower, CA 90706 15332 S. Eucalyptus, Bellflower, CA 90706	6688 6689	396474 396329	3749073 3750940
Bellflower United School District-woodrum School Bellflower United Methodist Preschool	14527 Beliflower Blvd., Beliflower, CA 90706	6690	396329	3751618
Beliflower USD-Williams Child Care Center	6144 Clark Ave, Lakewood, CA 90712	6691	395916	3748001
Bethany Lutheran Church Preschool	4644 Clark Ave, Lakewood, CA 90/12 4644 Clark Ave, Long Beach, CA 90808	6692	395197	3745001
Bundle of Joy Daycare #3	4835 Long Beach Blvd., Long Beach, CA 90805	6693	395146	3745286
Calvary Chapel Christian Preschool	12808 Woodruff Avenue, Downey, CA 90242	6694	396893	3753391
Canaan Preschool	17200 Clark Avenue, Bellflower, CA 90242	6695	395160	3753391 3748981
Carmelitos Head Start	5250 Via Pasillo, Long Beach, CA 90805	6696	390486	3746295
Cerritos College Child Development Center	11110 Alondra Blvd, Norwalk, CA 90650	6697	398528	3750136
services conege child perception Conto	asaas Assista bita, no Hait, CA 20030	0031	330320	3130130

Description	Address	Receptor	UTM Coordinates		
Children R Us Child Development Center Inc.	4611 E. Compton Blvd., E. Rancho Dominguez, CA 90	Number 6698	(m) 389791	(m) 3751313	
Children's Academy of Success	10839 La Reina Avenue, Downey, CA 90241	6699	395303	3756525	
The Children's Collective - Casa Dominguez	15711 S. Atlantic Ave, E. Rancho Dominguez, CA 902	6700	389662	3750632	
Collins State Preschool	6125 Coke Street, Long Beach, CA 90805	6701	393852	3747914	
Columbia Plaza Early Childhood Education Center	12830 Columbia Way, Downey, CA 90242	6702	395304	3753313	
Compton College Child Dev. Day Care Ctr.	1111 E. Artesia Blvd., Compton, CA 90221	6703	388054	3749390	
Creative Beginnings Infant Center	10910 Paramount Blvd., Downey, CA 90241	6704	395031	3756609	
Creative Beginnings Preschool	10819 New Street, Downey, CA 90241	6705	395413	3756508	
Creative Beginnings Preschool	10910 Paramount Blvd., Downey, CA 90241	6706	395031	3756609	
Creative Day Academy	8740 Ramona Street, Bellflower, CA 90706	6707	394057	3748610	
Creative Minds Christian Academy	6380 Orange Avenue, Long Beach, CA 90805	6708	391135	3748423	
Crystal Stairs Inc- Wonderland	1223 South Willowbrook Avenue, Compton, CA 90220	6709	386821	3750025	
Crystal Stairs IncWillowbrook	1215 North Willowbrook Avenue, Compton, CA 90222	6710	386678	3752231	
Crystal Stairs-Dollarhide	1108 N. Oleander Ave., Compton, CA 90222	6711	386313	3752167	
The Cultural Caboose	1037 South Street, Long Beach, CA 90805	6712	390816	3747271	
Curtis Care Infant Development Program	12114 Paramount Boulevard, Downey, CA 90242	6713	394077	3755109	
David's Heart Enrichment Center	2244 N. Bullis Rd, Compton, CA 90221	6714	388504	3752927	
Dorothy Ahrens Nursery School	4960 Long Beach Blvd, Long Beach, CA 90805	6715	389602	3745713	
Downey United Methodist Church Nursery School	10801 S Downey Ave, Downey, CA 90241	6716	395512	3756474	
The Easter's Nest	11815 Long Beach Blvd., Lynwood, CA 90262	6717	388154	3754025	
Educare Preschool	5730 South St., Lakewood, CA 90713	6718	396343	3747151	
Ella Fitzgerald CDC/Drew Child Development Corpora	2590 Industry Way, Lynwood, CA 90262	6719	386616	3754320	
Emerson State Preschool	1011 E. Caldwell Street, Compton, CA 90221	6720	387965	3750056	
Emmanuel Preschool	15941 Virginia Ave., Paramount, CA 90723	6721	393187	3750336	
Ernie Pyle School-Bellflower U.S.D.	14500 S. Woodruff Ave., Bellflower, CA 90706	6722	396834	3751624	
First Baptist Church of Lakewood Preschool	5336 Arbor Road, Long Beach, CA 90808	6723	395681	3745305	
First Christian Church	17003 S. Clark Ave, Bellflower, CA 90706	6724	395101	3749422	
First Evangelical Church of Cerritos	11330 E. 166th St., Cerritos, CA 90703	6725	398944	3749425	
Foster State Preschool	1620 N. Pannes Street, Compton, CA 90221	6726	388808	3752425	
Fun 2 Learn Pre-School	5942 Orange Ave, Long Beach, CA 90805	6727	391120	3747631	
Gaines Elementary School CDC	7340 E. Jackson Street, Paramount, CA 90723	6728	391823	3750031	
Gaines State Preschool	7340 E. Jackson Street, Paramount, CA 90723	6729	391823	3750031	
Giant Steps Childrens Center	6951 Obispo Ave., Long Beach, CA 90805	6730	393097	3749531	
Glazier Elementary School	10932 E. Excelsior Dr., Norwalk, CA 90650	6731	398079	3751016	
Golden West Preschool	10248 Alondra Blvd., Bellflower, CA 90706	6732	396829	3750408	
Grant Child Development Center	6405 Walnut Ave, Long Beach, CA 90805	6733	391488	3748503	
Hart Head Start	1671 E. Phillips Street, Long Beach, CA 90805	6734	391606	3747192	
Hellen Keller Pre-School	3521 Palm Avenue, Lynwood, CA 90262	6735	388296	3753298	
Hollydale Preschool	5511 Century Blvd., South Gate, CA 90280	6736	391533	3753588	
Holmes Child Development Center	5020 Barlin Avenue, Lakewood, CA 90712	6737	393755	3746053	
Honey's Little Angels Child Development Center	5600 N. Paramount Blvd., Long Beach, CA 90805	6738	392728	3747031	
HSA Pasitos Head Start Champion PS	13431 Paramount Blvd, South Gate, CA 90280	6739	392798	3753189	
HSA Pasitos Head Start Legend Pre School	10125 California Avenue, South Gate, CA 90280	6740	388356 387479	3756432	
Immanuel Drew Child Development Corporation	506 E. Laurel Street, Compton, CA 90221	6741	38/4/9	3751039	
Independent Steps After School Program Jackson Child Development Center	3581 E. Imperial Hwy, Lynwood, CA 90262 8535 Contreras St., Paramount, CA 90723	6742 6743	388544	3755127 3751856	
Jackson Child Development Center Jefferson State Preschool	2508 E. 133rd Street, Compton, CA 90220	6744	393549	3753010	
Johnston Elementary School	13421 S. Fairford Ave., Norwalk, CA 90220	6745	398705	3752558	
Keppel State Preschool	6630 Mark Keppel Street, Paramount, CA 90050	6746	390852	3751042	
Kid Town Usa Preschool-Montessori Academy	13500 Paramount Blvd., South Gate, CA 90725	6747	392859	37531042	
Kidazzles Learning Center	6424 Long Beach Blvd, Long Beach, CA 90805	6748	388875	3748506	
Kiddie Crest Academy	13067 Paramount Boulevard, South Gate, CA 90280	6749	392988	3753547	
Kids First Learning Center - Downey	13200 Columbia Avenue, Downey, CA 90242	6750	395193	3752957	
Kids Forum Preschool	4523 Tweedy Blvd., South Gate, CA 90280	6751	389859	3756470	
Kidz R Us Community Child Care Center Inc.	1115 E. Market, Long Beach, CA 90805	6752	390964	3746660	
Kinder Prep Preschool Center	3208 Flower Street, Lynwood, CA 90262	6753	387761	3754525	
King State Preschool	2270 E. 122nd St, Compton, CA 90222	6754	386149	3754094	
		6755	395893	3756218	
Kirkwood Christian Schools	10822 Brookshire Avenue, Downey, CA 90241				
Kirkwood Christian Schools Lakewood Child Development Center	10822 Brookshire Avenue, Downey, CA 90241 5225 Hayter Ave., Lakewood, CA 90712	6756	393940	3746407	
	5225 Hayter Ave., Lakewood, CA 90712		393940 390407	3746407 3747069	
Lakewood Child Development Center	5225 Hayter Ave., Lakewood, CA 90712 5600 Atlantic Ave., Long Beach, CA 90805	6756			
Lakewood Child Development Center The Laughter N Learning Center	5225 Hayter Ave., Lakewood, CA 90712	6756 6757	390407	3747069	
Lakewood Child Development Center The Laughter N Learning Center LBUSD Starr King Head Start	5225 Hayter Ave., Lakewood, CA 90712 5600 Atlantic Ave., Long Beach, CA 90805 145 E. Artesia, Long Beach, CA 90805	6756 6757 6758	390407 388851	3747069 3748945	
Lakewood Child Development Center The Laughter N Learning Center LBUSD Starr King Head Start LBUSD-Riley CDC-California State Ps Program	5225 Hayter Ave., Lakewood, CA 90712 5600 Atlantic Ave., Long Beach, CA 90805 145 E. Artesia, Long Beach, CA 90805 3319 Sandwood Street, Lakewood, CA 90712	6756 6757 6758 6759	390407 388851 393356	3747069 3748945 3745477	

Description	Address	Receptor	UTM Coo	dinates (m)	
Lindbergh Pre-School	3300 Cedar Ave, Lynwood, CA 90262	Number 6763	(m) 387830	(m) 3753841	
Long Beach City College CDC	4630 Clark Ave, Long Beach, CA 90808	6764	395130	3745191	
Los Angeles Speech And Language Therapy Center	4764 Tweedy Boulevard, South Gate, CA 90280	6765	390263	3756355	
Lugo Preschool	4345 Pendleton Street, Lynwood, CA 90262	6766	390529	3755347	
M A W Children's Ctr	5510 Clark Ave, Lakewood, CA 90712	6767	395170	3746757	
M.A.W. Children's Centers	5510 N. Clark Ave., Lakewood, CA 90712	6768	395170	3746757	
Maria Montessori House of Children	9036 East Imperial Highway, Downey, CA 90242	6769	394958	3753508	
Mark Twain Pre-School	12315 Thorson Avenue, Lynwood, CA 90262	6770	389272	3753137	
Mckinley Child Development Center	6822 Paramount Blvd., Long Beach, CA 90805	6771	392768	3749324	
Mckinley Head Start	6822 Paramount Blvd., Long Beach, CA 90805	6772	392768	3749324	
Mokler Children's Center	8571 East Flower, Paramount, CA 90723	6773	393771	3749702	
Montessori Children's Academy	7515 Firestone Boulevard, Downey, CA 90241	6774	394121	3756914	
Montessori House of South Gate	10108 California Avenue, South Gate, CA 90280	6775	388428	3756447	
Montessori School-Eureka	5306 E. Arbor Rd, Long Beach, CA 90808	6776	395457	3745285	
NLMUSD Head Start/State PS-New River Elementary	13432 S. Halcourt Avenue, Norwalk, CA 90650	6777	398106	3752576	
Optimal Child Development Center	1300 East Palmer Avenue, Compton, CA 90221	6778	388184	3751516	
Park Place Early Education Campus/CA Childrens Ac.	12227 Atlantic Ave, Lynwood, CA 90262	6779	389783	3752964	
Pasitos Hollydale Early Head Start	12221 Industrial Avenue, South Gate, CA 90280	6780	392377	3753377	
Pasitos San Miguel Pre-Kindergarten Academy	9801 San Miguel Avenue, South Gate, CA 90280	6781	389024	3756742	
Plymouth Head Start	495 E. Plymouth Street, Long Beach, CA 90805	6782	390270	3746547	
Powell CDC CA State Preschool Program	150 Victoria St., Long Beach, CA 90805	6783	388705	3747825	
Rainbow Drew Child Development Corporation	12611 S. Willowbrook Ave, Compton, CA 90222	6784	386032	3753707	
Rancho Los Amigos Children's Center Roosevelt Preschool	7755 Golondrinas Street, Downey, CA 90242	6785	392903	3754389	
	10835 Mallison Avenue, Lynwood, CA 90262	6786	389084	3755498	
Roosevelts State Preschool	700 N Bradfield Ave, Compton, CA 90221	6787	388673	3751746	
Rosa Parks Pre-School Rosecrans State Preschool	3900 Agnes Avenue, Lynwood, CA 90262 1301 N. Acada Street, Compton, CA 90220	6788 6789	388905	3753605 3752208	
SAGA Child Development Learning Academy Inc.	3801 Cortland Street, Lynwood, CA 90220	6789	388974	3754218	
San Miguel Elementary School Cspp	9801 San Miguel Avenue, South Gate, CA 90280	6791	389023	3756740	
Southland Christian Preschool	16400 Woodruff Ave, Bellflower, CA 90280	6792	396704	3749983	
St Timothy Episcopal Church/Bundle of Joy Infant	312 Oleander Avenue, Compton, CA 90220	6793	386448	3751007	
St. Bernard School	9626 Park Street, Bellflower, CA 90706	6794	395656	3749225	
St. Dominic Savio Pre K	9750 Foster Road, Beliflower, CA 90706	6795	396067	3752680	
St. Timothy Lutheran Infant Center	4645 Woodruff Avenue, Lakewood, CA 90713	6796	396632	3745274	
St. Timothy Lutheran Preschool Day Care	4645 Woodruff Ave, Lakewood, CA 90713	6797	396632	3745274	
St. Timothy's Episcopal Church And Day School	312 S. Oleander Ave., Compton, CA 90220	6798	386448	3751007	
Sunlite Preschool	9020 Imperial Hwy, Downey, CA 90242	6799	394940	3753501	
Sunshine Day Care	2038 E. Compton Blvd., Compton, CA 90221	6800	388969	3751251	
Sunshine Day Care Center	12070 Santa Fe Avenue, Lynwood, CA 90262	6801	387471	3753646	
Team Pinnacle Sports	2270 East 122nd Street, Compton, CA 90222	6802	386149	3754094	
Thomas Jefferson C.C.C-Beliflower U.S.D.	9980 E. Cedar, Beliflower, CA 90706	6803	396337	3748408	
Thurgood Marshall Pre-School	3593 Martin L. King Jr. Blvd., Lynwood, CA 90262	6804	388630	3755640	
Trinity Child Development Center	1806-1810 E. Compton, Compton, CA 90221	6805	388745	3751283	
Trinity Lutheran Preschool & Day Nursery	11609 S. Studebaker Road, Norwalk, CA 90650	6806	398361	3754587	
Trinity Unlimited Child Care Center	825 S. Chester Avenue, Compton, CA 90221	6807	387686	3750495	
Tutor Time Child Care Learning Center	6504 E. South Street, Lakewood, CA 90713	6808	397646	3746907	
Twain Child Development Center	4666 Sunfield Ave., Long Beach, CA 90808	6809	395003	3745268	
Tweedy Pasitos School Readiness Program	9724 Pinehurst, South Gate, CA 90280	6810	390735	3756475	
Twigs To Trees Child Development Center	15108 Studebaker Road, Norwalk, CA 90650	6811	398329	3750897	
United Faith Community Day Care Center	6934 Long Beach Blvd., Long Beach, CA 90805	6812	388640		
Valley Christian Infant Center	10012 Ramona Ave., Beliflower, CA 90706	6813	396398		
Valley Christian Preschool	10012 Ramona Street, Bellflower, CA 90706	6814	396398	3748613	
Valley Christian Preschool-Grand	17408 Grand Avenue, Bellflower, CA 90706	6815	397107		
Volunteers of America of Los Angeles	15509 Paramount Boulevard, Paramount, CA 90723	6816	392703	3750856	
Volunteers of America - Abbot Head Start	5260 E. Clark Avenue, Lynwood, CA 90262	6817	390261	3752752	
Volunteers of America - Bright Stars Head Start	3340 Sanborn Avenue, Lynwood, CA 90262	6818	388200	3754850	
Volunteers of America - Chester Head Start Volunteers of America - Greater Emmanuel Head Start	804 E. Rosecrans Avenue, Compton, CA 90221 3740 Imperial Hwy, Lynwood, CA 90262	6819 6820	387675 389274	3752073 3755258	
Volunteers of America - Greater Emmanuel Head Start Volunteers of America - Happy Days Head Start	4207 Carlin Avenue, Lynwood, CA 90262	6820	389274	3755258	
Volunteers of America - Happy Days Head Start Volunteers of America - Mona House Head Start	13124 Mona Boulevard, Compton, CA 90262	6821	389375	3753062	
Volunteers of America - Mona House Head Start Volunteers of America - Paramount Head Start	6719 Somerset Boulevard, Paramount, CA 90222	6822	390863	3751303	
Volunteers of America - Small World Head Start		6823	390863	3751303	
Washington Preschool	502 N. Bowen Avenue, Compton, CA 90221 4225 Sanborn Avenue, Lynwood, CA 90262	6825	390024	3754448	
Washington School-Beliflower USD	9725 E. Jefferson St., Bellflower, CA 90262	6825	390024	3750896	
Whitewood Child Development Center	5511 Whitewood Ave, Lakewood, CA 90705	6820	395/98	3746835	
militariood child Development center	3311 WINDOWOOD AVE, LEKEWOOD, CA 90/12	0027	399920	3740835	

Description	Address	Receptor	UTM Coor	dinates
Description	Address	Number	(m)	(m)
Will Rogers Children's Center	11250 Duncan, Lynwood, CA 90262	6828	390608	3754265
Will Rogers Preschool	11220 Duncan Avenue, Lynwood, CA 90262	6829	390700	3754360
Wilson Preschool	11700 School Street, Lynwood, CA 90262	6830	388461	3754127
Wiz Child Center	225 W. Alondra Blvd, Compton, CA 90220	6831	386642	3750501
Wonderland Preschool	10440 Artesia Blvd., Bellflower, CA 90706	6832	397178	3748553
YMCA GLB - Weingart-Lakewood - Gompers Site	5206 Briercrest, Lakewood, CA 90713	6833	396133	3746339
YMCA GLB 70th St State Preschool	700 East 70th St., Long Beach, CA 90805	6834	390541	3749641
YMCA GLB Creative Beginnings Preschool	5610 Linden Avenue, Long Beach, CA 90805	6835	390294	3747120
YMCA GLB Fairfield Family Site	4949 Atlantic Avenue, Long Beach, CA 90805	6836	390323	3745680
YMCA GLB First Friendships State Preschool	6650 Orange Avenue, Long Beach, CA 90805	6837	391155	3749006
YMCA GLB Intensive Learning Center Site	4718 Michelson Street, Lakewood, CA 90712	6838	394825	3746901
YMCA GLB Lindstrom Site	5900 Canehill Avenue, Lakewood, CA 90713	6839	397312	3747409
YMCA GLB Mayne St State Preschool	9630 Mayne Street, Bellflower, CA 90706	6840	395691	3750011
YMCA GLB Stephen Foster State SA Site	5223 Bigelow, Lakewood, CA 90712	6841	395403	3746949
YMCA of GLB Los Cerritos Branch	15530 Woodruff Avenue, Bellflower, CA 90706	6842	396719	3750746
YMCA of Metropolitan L.A. Downey - Imperial	8133 E. Imperial Hwy, Downey, CA 90242	6843	393893	3754225
YMCA of Metropolitan L.A. Downey - Rio San Gabriel	9338 Gotham Street, Downey, CA 90241	6844	397212	3755805
Young Horizons-Grisham Site	11 W. 49th Street, Long Beach, CA 90805	6845	389478	3745617
YWCA of Greater Los Angeles - Compton C.D.C.	1600 E. Compton Blvd., Compton, CA 90221	6846	388553	3751255
Zamboni Preschool	15733 Orange Avenue, Paramount, CA 90723	6847	391086	3750584

#### Table 6. PMI, MEIR, MEIW, and MEISR Annual Average Concentrations

				Annual Ave	age Concentration (mg/m <sup>2</sup> )				
		P	MI	ME	IW	ME	IR	MEISR	
		Cancer Risk		Cancer			Cancer	Cancer Chronic HI	
		8-hr Chronic		8-hr Chronic			8-hr Chronic	8-hr Chronic	
Pollutant	CAS Number	HI Rec #6	Chronic HI Rec #3	HI Rec #1391	Chronic HI Rec #1659	Chronic HI Rec #2115	HI Rec #1567	HI Rec #6728	
1,2,4-Trimethylbenzene	95636	3.02E-01	1.35E-01	6.60E-02	3.85E-02	1.69E-03	2.24E-03	2.57E-04	
4,4'-Isopropylidenediphenol	80057	9.67E-02	3.61E-02	2.10E-02	1.05E-02	4.82E-04	6.43E-04	7.53E-05	
Acetaldehyde	75070	4.56E-05	4.94E-05	3.22E-05	4.97E-05	3.84E-06	3.08E-06	6.98E-07	
Acrolein	107028	2.86E-05	3.10E-05	2.02E-05	3.12E-05	2.41E-06	1.94E-06	4.38E-07	
Aluminum	7429905	5.08E-03	2.32E-03	1.18E-03	7.64E-04	3.55E-05	4.26E-05	5.85E-06	
Ammonia Ammonium Nitrate	6484522	3.39E-02 8.25E-05	3.67E-02 2.44E-04	2.40E-02 1.89E-05	3.70E-02 2.95E-05	2.86E-03 1.33E-06	2.30E-03 1.07E-06	5.19E-04 2.19E-07	
Antimony Trioxide	1309644	3.72E-03	1.03E-03	8.02E-04	3.12E-04	1.57E-05	2.12E-05	2.55E-06	
Barlum & Compounds	7440393	1.05E-02	3.01E-03	2.25E-03	9.09E-04	4.518-05	6.06E-05	7.29E-06	
Barlum Chromate	10294403	2.45E-03	6.76E-04	5.27E-04	2.05E-04	1.03E-05	1.39E-05	1.68E-06	
Benzene	71432	8.48E-05	9.18E-05	5.99E-05	9.24E-05	7.14E-06	5.74E-06	1.30E-06	
Beryllium & Compounds	7440417	2.09E-07	1.42E-07	1.42E-07	1.74E-07	1.04E-08	7.93E-09	2.14E-09	
Cadmium & Compounds Chromium & Compounds (Other Than Hexavalent	7440439	3.95E-04 2.08E-03	1.17E-03 1.08E-03	9.07E-05 4.64E-04	1.41E-04 3.17E-04	6.35E-06 1.34E-05	5.13E-06 1.68E-05	1.05E-06 2.07E-06	
Chromium Trioxide	1333820	1.84E-04	1.38E-03	6.46E-05	3.64E-04	8.00E-06	5.80E-06	1.15E-06	
Cobalt & Compounds	7440484	6.42E-04	3.03E-04	1.40E-04	8.61E-05	3.72E-06	4.92E-06	5.65E-07	
Copper & Compounds	7440508	3.12E-02	4.68E-02	6.96E-03	6.56E-03	3.03E-04	2.83E-04	5.01E-05	
Cumene	98828	8.66E-03	2.39E-03	1.87E-03	7.26E-04	3.65E-05	4.92E-05	5.94E-06	
Cyanide Compounds	57125	3.00E-02	8.87E-02	6.89E-03	1.07E-02	4.83E-04	3.90E-04	7.98E-05	
Diethylene Glycol Monobutyl Ether	112345 34590948	4.56E-03 1.16E-04	2.98E-02 3.20E-05	1.55E-03 2.50E-05	7.78E-03 9.71E-06	1.88E-04 4.88E-07	1.33E-04	2.85E-05 7.94E-08	
Dipropylene Glycol Monomethyl Ether Epoxy Resins	34590948	1.16E-04 5.94E-01	3.20E-05 1.64E-01	2.50E-05 1.28E-01	9.71E-06 4.98E-02	4.88E-07 2.51E-03	6.58E-07 3.37E-03	7.94E-08 4.07E-04	
Ethyl Benzene	100414	5.20E+00	1.63E+00	1.12E+00	4.86E-01	2.35E-02	3.16E-02	3.76E-03	
Ethylene Glycol Monobutyl Ether	111762	7.36E+00	2.07E+00	1.59E+00	6.24E-01	3.13E-02	4.21E-02	5.09E-03	
Ethylene Glycol Monopropyl Ether	2807309	9.80E-02	2.70E-02	2.11E-02	8.21E-03	4.13E-04	5.56E-04	6.72E-05	
Fluorides and Compounds	1101	2.19E-01	7.55E-02	4.75E-02	2.23E-02	1.03E-03	1.36E-03	1.64E-04	
Formaldehyde	50000	5.14E-01	1.42E-01	1.11E-01	4.33E-02	2.18E-03	2.93E-03	3.55E-04	
Hexamethylene Dilsocyanate Monomer Hexane	822060 110543	1.81E-02 6.68E-05	7.79E-03 7.23E-05	3.94E-03 4.72E-05	2.23E-03 7.28E-05	9.85E-05 5.62E-06	1.31E-04 4.52E-06	1.51E-05 1.02E-06	
Hexavalent Chromium Compounds (Other)	18540299	1.36E-03	5.27E-04	2.99E-04	1.57E-04	6.75E-06	8.42E-06	1.02E-06	
Hydrochloric Acid	7647010	2.13E+00	6.15E+00	5.05E-01	7.77E-01	3.68E-02	2.85E-02	6.35E-03	
Hydrofluoric Acid	7664393	5.20E-01	2.18E+00	1.43E-01	4.39E-01	1.35E-02	9.89E-03	2.16E-03	
Hydroguinone	123319	5.31E-02	1.47E-02	1.14E-02	4.45E-03	2.24E-04	3.02E-04	3.64E-05	
IPA	67630	1.73E+01	4.88E+00	3.72E+00	1.52E+00	7.37E-02	9.86E-02	1.20E-02	
Isocyanates Lead	1125 7439921	2.83E+00 8.72E-07	1.23E+00 2.31E-06	6.15E-01 2.52E-07	3.51E-01 3.66E-07	1.55E-02 1.79E-08	2.05E-02 1.42E-08	2.37E-03 3.20E-09	
Lead Compounds	1128	2,49E-03	6.88E-04	5.37E-04	2.09E-04	1.05E-05	1.41E-05	1.71E-06	
Manganese & Compounds	7439965	4.37E-05	1.15E-04	1.30E-05	1.88E-05	9.22E-07	7.31E-07	1.66E-07	
MEK	78933	1.31E+02	2.33E+02	5.23E+01	2.88E+03	7.28E+00	1.02E+01	1.34E+00	
Methanol	67561	3.02E+00	2.17E+00	7.91E-01	8.02E-01	2.69E-02	4.10E-02	3.14E-03	
Methylene Chloride	75092	1.21E+01	1.06E+01	1.97E+00	6.34E+00	1.02E-01	8.65E-02	1.57E-02	
Methylene Diphenyl Dilsocyanate	101688	5.59E-02	1.60E-02	1.21E-02	4.83E-03	2.40E-04	3.23E-04	3.89E-05	
MIBK Nachthalene	108101 91203	1.83E+01 3.29E-01	5.82E+00 3.50E-01	3.95E+00 4.95E-02	1.73E+00 2.13E-01	8.32E-02 3.22E-03	1.12E-01 2.61E-03	1.33E-02 4.92E-04	
n-Butanol	71363	1.24E+00	5.11E-01	2.69E-01	1.47E-01	6.56E-03	8.72E-03	1.01E-03	
Nickel & Compounds	7440020	3.40E-03	1.26E-02	8.56E-04	2.14E-03	7.06E-05	5.49E-05	1.12E-05	
Nickel Acetate	373024	2.45E-05	1.86E-04	8.65E-06	4.92E-05	1.08E-06	7.80E-07	1.55E-07	
Nitric Acid	7697372	2.72E+00	8.09E+00	6.52E-01	1.08E+00	4.86E-02	3.75E-02	8.32E-03	
PAH	1151	1.06E-06	1.15E-06	7.49E-07	1.15E-06	8.93E-08	7.17E-08	1.62E-08	
Phenol Phenol	108952	2.52E+00	2.40E+00	3.94E-01	1.46E+00 3.92E-01	2.26E-02	1.85E-02	3.48E-03	
Phosphoric Acid Propylene	7664382 115071	9.43E-01 7.75E-03	2.86E+00 8.39E-03	2.26E-01 5.48E-03	3.92E-01 8.44E-03	1.70E-02 6.52E-04	1.31E-02 5.24E-04	2.88E-03 1.19E-04	
Propylene Propylene Glycol Monomethyl Ether	107982	1.32E+01	5.30E+00	2.86E+00	1.53E+00	6.87E-02	9.15E-02	1.06E-02	
Propylene Glycol Monomethyl Ether Acetate	108656	5.25E-01	4.40E-01	9.19E-02	2.39E-01	4.33E-03	4.07E-03	6.60E-04	
Propylene Oxide	75569	2.77E-01	3.22E-01	3.81E-02	2.04E-01	2.89E-03	2.18E-03	4.42E-04	
Sec-Butyl Alcohol	78922	1.77E+00	4.90E-01	3.82E-01	1.49E-01	7.48E-03	1.01E-02	1.22E-03	
Selenium & Compounds	7782492	1.74E-06	1.19E-06	1.18E-06	1.45E-06	8.63E-08	6.61E-08	1.79E-08	
Silica Silver & Compounds	1175	5.59E-01 7.42E-05	1.69E-01	1.21E-01	5.06E-02	2.47E-03	3.32E-03	3.97E-04	
Silver & Compounds Sodium Dichromate	7440224 10588019	7.43E-05 8.71E-04	2.19E-04 6.13E-03	1.71E-05 2.95E-04	2.65E-05 1.58E-03	1.19E-06 3.54E-05	9.64E-07 2.58E-05	1.97E-07 5.12E-06	
Sodium Hydroxide	1310732	5.10E-02	1.62E-01	1.20E-02	2.24E-02	8.91E-04	7.10E-04	1.45E-04	
Strontium Chromate	7789062	2.88E-01	7.94E-02	6.20E-02	2.41E-02	1.21E-03	1.63E-03	1.97E-04	
Sulfuric Acid	7664939	6.35E-01	4.63E+00	2.19E-01	1.21E+00	2.68E-02	1.95E-02	3.87E-03	
Tert-Butyl Acetate	540885	2.01E-01	7.57E-02	4.37E-02	2.20E-02	1.01E-03	1.35E-03	1.57E-04	
Tetrachioroethylene	127184	1.58E-01	4.56E-01	3.74E-02	5.76E-02	2.73E-03	2.12E-03	4.71E-04	
Toluene	108883	4.36E+01	2.30E+01	8.53E+00	1.12E+01	2.62E-01	2.83E-01	4.11E-02	
Trichloroethylene Vanadium (Fume or Dust)	79016 7440622	8.48E-03 8.69E-07	1.57E-02 5.93E-07	3.23E-03 5.90E-07	6.19E-03 7.23E-07	1.77E-04 4.31E-08	2.87E-04 3.30E-08	1.65E-05 8.93E-09	
Xylene	1330207	2.49E+01	7.71E+00	5.38E+00	2.30E+00	4.31E-08 1.12E-01	1.50E-08	1.79E-02	
Zinc & Compounds	7440666	6.95E-03	2.45E-03	1.50E-03	6.37E-04	3.16E-05	4.09E-05	5.15E-06	
	1314132	2.21E-05	9.01E-05	5.74E-06	1.67E-05	5.05E-07	3.88E-07	7.83E-08	

# Table 7. PMI, MEIR, MEIW, and MEISR Hourly Average Concentrations Anaplex Corporation Facility ID 016951 Paramount, California

Pollutant	CAS Number	PMI	MEIR	/m <sup>2</sup> ) MEISR		
Politiant	CAS Number	Rec #17	MEIW Acut Rec #17	Rec #2115	Rec #6728	
1,2,4-Trimethylbenzene	95636	2.52E+00	2.52E+00	1.34E-01	3.30E-03	
4,4'-Isopropylidenediphenol	80057	8.33E-01	8.33E-01	3.71E-02	9.67E-04	
Acetaldehyde	75070	2.55E-03	2.55E-03	1.66E-04	1.85E-05	
Acrolein	107028	1.60E-03	1.60E-03	1.04E-04	1.16E-05	
Aluminum	7429905	4.24E-02 1.90E+00	4.24E-02 1.90E+00	2.31E-03	7.72E-05	
Ammonia Ammonium Nitrate	7664417 6484522	3.35E-03	3.35E-03	1.23E-01 2.37E-04	1.37E-02 2.81E-05	
Antimony Trioxide	1309644	3.38E-02	3.38E-02	1.14E-03	3.28E-05	
Barlum & Compounds	7440393	9.38E-02	9.38E-02	3.29E-03	9.32E-05	
Barlum Chromate	10294403	2.22E-02	2.22E-02	7.51E-04	2.16E-05	
Benzene	71432	4.76E-03	4.76E-03	3.09E-04	3.44E-05	
Beryllium & Compounds	7440417	2.32E-06	2.32E-06	1.57E-07	3.03E-08	
Cadmium & Compounds	7440439	1.16E-01	1.16E-01	8.19E-03	9.72E-04	
Chromium & Compounds (Other Than Hexavalent)	7440473	1.79E-02	1.79E-02	9.99E-04	2.98E-05	
Chromium Trioxide	1333820 7440484	4.55E-02	4.55E-02	1.63E-03	1.79E-04	
Cobait & Compounds Copper & Compounds	7440484	5.23E-03 2.64E-01	5.23E-03 2.64E-01	2.97E-04 1.30E-02	7.26E-06 1.08E-03	
Cumene	98828	7.85E-02	7.85E-02	2.65E-02	7.62E-05	
Cyanide Compounds	57125	8.85E-01	8.85E-01	6.26E-02	7.43E-03	
Diethylene Glycol Monobutyl Ether	112345	2.45E-02	2.45E-02	9.12E-04	1.01E-04	
Dipropylene Glycol Monomethyl Ether	34590948	1.05E-03	1.05E-03	3.55E-05	1.02E-06	
Epoxy Resins	1091	5.38E+00	5.38E+00	1.82E-01	5.23E-03	
Ethyl Benzene	100414	4.64E+01	4.64E+01	1.75E+00	4.83E-02	
Ethylene Glycol Monobutyl Ether	111762	6.66E+01	6.66E+01	2.27E+00	6.50E-02	
Ethylene Glycol Monopropyl Ether	2807309	8.88E-01	8.88E-01	3.00E-02	8.62E-04	
Fluorides and Compounds	1101	2.22E+00	2.22E+00	8.45E-02	3.15E-03	
Formaldehyde Hexamethylene Dilsocyanate Monomer	50000 822060	4.67E+00 1.51E-01	4.67E+00 1.51E-01	1.58E-01 7.76E-03	4.60E-03 1.93E-04	
Hexametriylene Dilsocyanate Honomer Hexane	110543	3.75E-03	3.75E-03	2.43E-04	2.71E-05	
Hexavalent Chromium Compounds (Other)	18540299	1.27E-02	1.27E-02	4.33E-04	1.46E-05	
Hydrochloric Acid	7647010	1.78E+00	1.78E+00	1.26E-01	1.50E-02	
Hydrofluoric Acid	7664393	9.39E-01	9.39E-01	4.42E-02	5.04E-03	
Hydroquinone	123319	4.82E-01	4.82E-01	1.63E-02	4.67E-04	
IPA	67630	1.56E+02	1.56E+02	5.30E+00	1.53E-01	
Isocyanates	1125	2.35E+01	2.35E+01	1.22E+00	3.04E-02	
Lead	7439921	1.19E-05	1.19E-05	8.36E-07	1.06E-07	
Lead Compounds	1128	2.26E-02	2.26E-02	7.63E-04	2.21E-05	
Manganese & Compounds MEK	7439965 78933	3.91E-03 3.04E+05	3.91E-03 3.04E+05	2.52E-04 7.05E+02	3.00E-05 1.53E+02	
Methanol	67561	7.43E+01	7.43E+01	4.85E+00	5.02E-02	
Methylene Chloride	75092	8.18E+01	8.18E+01	2.65E+00	2.01E-01	
Methylene Diphenyl Diisocyanate	101688	5.04E-01	5.04E-01	1.76E-02	4.98E-04	
MIBK	108101	1.62E+02	1.62E+02	6.22E+00	1.70E-01	
Naphthalene	91203	2.01E+00	2.01E+00	7.41E-02	6.32E-03	
n-Butanol	71363	1.04E+01	1.04E+01	5.14E-01	1.30E-02	
Nickel & Compounds	7440020	9.61E-02	9.61E-02	6.29E-03	7.43E-04	
Nickel Acetate	373024	6.36E-04	6.36E-04	2.28E-05	2.50E-06	
Nitric Acid	7697372	2.58E+00	2.58E+00	1.75E-01	2.07E-02	
PAH Phenol	1151 108952	5.93E-05 1.64E+01	5.93E-05 1.64E+01	3.86E-06 5.25E-01	4.29E-07 4.46E-02	
Phenol Phosphoric Acid	7664382	6.48E+00	1.64E+01 6.48E+00	4.50E-01	4.46E-02 5.33E-02	
Propylene	115071	4.34E-01	4.34E-01	2.82E-02	3.14E-03	
Propylene Glycol Monomethyl Ether	107982	1.12E+02	1.12E+02	5.37E+00	1.36E-01	
Propylene Glycol Monomethyl Ether Acetate	108656	3.59E+00	3.59E+00	1.63E-01	8.48E-03	
Propylene Oxide	75569	1.58E+00	1.58E+00	4.93E-02	5.67E-03	
Sec-Butyl Alcohol	78922	1.61E+01	1.61E+01	5.43E-01	1.56E-02	
Selenium & Compounds	7782492	1.93E-05	1.93E-05	1.31E-06	2.52E-07	
Silica	1175	5.00E+00	5.00E+00	1.83E-01	5.10E-03	
Silver & Compounds	7440224	3.00E-03	3.00E-03	2.12E-04	2.52E-05	
Sodium Dichromate	10588019	6.14E-02	6.14E-02	2.27E-03	2.50E-04	
Sodium Hydroxide	1310732	6.09E-01	6.09E-01	4.01E-02	4.74E-03	
Strontium Chromate Sulfuric Acid	7789062 7664939	2.61E+00	2.61E+00 2.39E+01	8.82E-02	2.53E-03	
Surruric Acid Tert-Butyl Acetate	540885	2.39E+01 1.73E+00	2.39E+01 1.73E+00	9.12E-01 7.78E-02	1.01E-01 2.02E-03	
Tetrachloroethylene	127184	1.30E-01	1.30E-01	9.23E-03	1.10E-03	
Toluene	108883	3.52E+02	3.52E+02	1.27E+01	5.27E-01	
Trichloroethylene	79016	5.46E-01	5.46E-01	4.18E-02	3.10E-04	
Vanadium (Fume or Dust)	7440622	9.66E-06	9.66E-06	6.56E-07	1.26E-07	
Xylene	1330207	2.22E+02	2.22E+02	8.30E+00	2.30E-01	
Zinc & Compounds	7440666	7.79E-02	7.79E-02	3.25E-03	1.99E-04	
Zinc Oxide	1314132	2.52E-03	2.52E-03	1.40E-04	1.62E-05	

#### Table 8. HARP2 Calculate Risk Options

Anaplex Corporation Facility ID 016951 Paramount, California

	sk Analyses Option Title	Residential Cancer Risk	Population-wide Cancer Risk	Residential Chronic Risk	Residential 8-Hour Chronic Risk	Worker Cancer Risk	Worker Chronic Risk	Worker 8-Hour Chronic Risk	Acute Risk
	Analysis Type	Cancer Risk	Cancer Risk	Chronic Risk (Non-cancer)	8-Hour Chronic Risk (Non-cancer)	Cancer Risk	Chronic Risk (Non-cancer)	8-Hour Chronic Risk (Non-cancer)	Acute Risk (Non-cancer)
Risk Scenario	Receptor Type	Individual Resident	Population-wide	Individual Resident	Individual Resident	Worker	Worker	Worker	N/A
	Exposure Duration	30 Year	70 Year	N/A	N/A	25 year	N/A	N/A	N/A
	Intake Rate Percentile	RMP using the Derived Method	RMP using the Derived Method	OEHHA Derived Method	OEHHA Derived Method	OEHHA Derived Method	OEHHA Derived Method	N/A	N/A
	Tab "Pathways to Evaluate"	User Defined: Inhalation, Soil ingestion, Dermal, Mother's milk, and Homegrown produce Deposition rate of 0.02 m/s	User Defined: Inhalation, Soil ingestion, Dermal, Mother's milk, and Homegrown produce Deposition rate of 0.02 m/s	User Defined: Inhalation, Soil ingestion, Dermal, Mother's milk, and Homegrown produce Deposition rate of 0.02 m/s	Used Defaults (Inhalation Only)	Worker Pathways Deposition rate of 0.02 m/s	Worker Pathways Deposition rate of 0.02 m/s	Used Defaults (Inhalation Only)	Used Defaults (No Change)
Pathways to Evaluate	Tab "Inh"	Fraction at time at home: check box selected for "Apply fraction of time at residence to age bins greater than or equal to 16 years"		Fraction at time at home: check box selected for "Apply fraction of time at residence to age bins greater than or equal to 16 years"	Fraction at time at home: check box selected for "Apply fraction of time at residence to age bins greater than or equal to 16 years"	Sources operating 24/7: Used Defaults (No Change) Sources operation 8/5/52: Worker Adjustment Factor 4.2	Used Defaults (No Change)	Used Defaults (No Change)	Used Defaults (No Change)
	Tab "Soil"	Used Defaults (No Change)	Used Defaults (No Change)	Used Defaults (No Change)	N/A	Used Defaults (No Change)	N/A	N/A	N/A
	Tab "Derm"	Select a climate: Warm	Select a climate: Warm	Select a climate: Warm	N/A	Select a climate: Warm	Select a climate: Warm	N/A	N/A
	Tab "MMlk"	Used Defaults (No Change)	Used Defaults (No Change)	Used Defaults (No Change)	N/A	N/A	N/A	N/A	N/A
	Tab "HG Produce"	Used Defaults (No Change)	Used Defaults (No Change)	Used Defaults (No Change)	N/A	N/A	N/A	N/A	N/A

Note: 1. Options selected based on SCAQMD's AB 2588 & Rule 1402 Supplemental Guidelines dated November 4, 2016.

# Table 9. Risk and Hazard Index Summary Anaplex Corporation Facility ID 016951 Paramount, California

			UTM Coordina	tes (NAD83)			
Receptor Location	Value	Receptor Number	Easting (m)	Northing (m)			
Cancer Risk (Per Million)	•	• •		•			
Point of maximum impact (PMI)	161,320	6	391889.30	3750691.10			
Maximally Exposed Individual Resident (MEIR)	931	1567	392200.00	3750720.00			
Maximally Exposed Individual Worker (MEIW)	2,836	1391	391880.00	3750660.00			
Maximally Exposed Individual Sensitive Receptor (MEISR)	114	6728	391823.21	3750030.73			
Substances Accounting for 90% of Cancer Risk:	St	trontium chromate (resi	idential and offsite w	orker)			
Processes Accounting for 90% of Cancer Risk:		Spray Booth 2 (St	rontium chromate)				
Cancer Burden	9.7	9.7					
Number of people exposed to >1 per million cancer risk for a 70-yr exposure	2,277,294						
Maximum distance to edge of 70-year, 1 x 10-6 cancer risk isopleth (meters)	17,137						
Chronic Hazard Index							
			UTM Coordina	tes (NAD83)			
Location	Value	Receptor Number	Easting (m)	Northing (m)			
Point of maximum impact (PMI)	8.4	3	391906.30	3750724.70			
Maximally Exposed Individual Resident (MEIR)	0.06	2115	392040.00	3750920.00			
Maximally Exposed Individual Worker (MEIW)	2.02	1659	391880.00	3750760.00			
Maximally Exposed Individual Sensitive Receptor (MEISR)	0.0086	6728	391823.21	3750030.73			
8-Hr Chronic Hazard Index	Strontio	ım Chromate (6%), Hyo	- ·				
			UTM Coordina	tes (NAD83)			
Location	Value	Receptor Number	Easting (m)	North in a (m)			
Point of maximum impact (PMI)	0.51	6	391889.30				
Maximally Exposed Individual Resident (MEIR)	0.0035	1567	392200.00	3750691.10			
Maximally Exposed Individual Worker (MEIW)	0.112	1391		3750691.10 3750720.00			
			391880.00	3750691.10 3750720.00 3750660.00			
Maximally Exposed Individual Sensitive Receptor (MEISR)	0.00050	6728	391880.00 391823.21	3750720.00			
Substances Accounting for 90% of 8-hour Chronic Hazard Index:	Reside		391823.21 el (26%), Formaldel	3750691.10 3750720.00 3750660.00 3750030.73 hyde (9%)			
	Reside	6728 ential: MDI (57%), Nick	391823.21 el (26%), Formaldel	3750691.10 3750720.00 3750660.00 3750030.73 hyde (9%)			
Substances Accounting for 90% of 8-hour Chronic Hazard Index:	Reside	6728 ential: MDI (57%), Nick	391823.21 el (26%), Formaldel	3750691.10 3750720.00 3750660.00 375060.00 3750030.73 hyde (9%) ehyde (11%)			
Substances Accounting for 90% of 8-hour Chronic Hazard Index:	Reside	6728 ential: MDI (57%), Nick	391823.21 el (26%), Formaldel kel (13%), Formalde	3750691.10 3750720.00 3750660.00 3750030.73 hyde (9%) ehyde (11%)			
Substances Accounting for 90% of 8-hour Chronic Hazard Index: Acute Hazard Index Location	Reside Offsite V	6728 ential: MDI (57%), Nick Vorker: MDI (67%), Nic	391823.21 el (26%), Formaldel kel (13%), Formalde UTM Coordina	3750691.10 3750720.00 3750660.00 3750030.73 hyde (9%) ehyde (11%)			
Substances Accounting for 90% of 8-hour Chronic Hazard Index: Acute Hazard Index Location Point of maximum impact (PMI) Maximally Exposed Individual Resident (MEIR)	Reside Offsite V Value	6728 ential: MDI (57%), Nick Vorker: MDI (67%), Nic Receptor Number	391823.21 tel (26%), Formaldel kel (13%), Formalde UTM Coordina Easting (m)	3750691.10 3750720.00 3750660.00 3750030.73 hyde (9%) ehyde (11%) tes (NAD83) Northing (m)			
Substances Accounting for 90% of 8-hour Chronic Hazard Index: Acute Hazard Index Location Point of maximum impact (PMI) Maximally Exposed Individual Resident (MEIR)	Reside Offsite V Value 24	6728 ential: MDI (57%), Nick Vorker: MDI (67%), Nic Receptor Number 17	391823.21 tel (26%), Formaldel kel (13%), Formalde UTM Coordina Easting (m) 391872.70	3750691.10 3750720.00 3750660.00 3750030.73 hyde (9%) ehyde (11%) tes (NAD83) Northing (m) 3750758.40			
Substances Accounting for 90% of 8-hour Chronic Hazard Index: Acute Hazard Index	Reside Offsite V Value 24 0.074	6728 ential: MDI (57%), Nick Vorker: MDI (67%), Nic Receptor Number 17 2115	391823.21 el (26%), Formaldel kel (13%), Formaldel UTM Coordina Easting (m) 391872.70 392040.00	3750691.10 3750720.00 3750660.00 3750030.73 hyde (9%) ehyde (11%) tes (NAD83) Northing (m) 3750758.40 3750920.00			

Table 10. Sensitive Receptors with Cancer Risk Greater Than or Equal to Ten in a Million Anaplex Corporation Facility ID 016951 Paramount, California

Receptor ID	х	Y	Receptor Type	Total Risk	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce
6534	391239	3748530	Sensitive	1.51E-05	9.46E-06	1.67E-07	6.40E-09	3.92E-11	5.46E-06
6535	390441	3748582	Sensitive	1.23E-05	7.71E-06	1.36E-07	5.21E-09	3.23E-11	4.45E-06
6540	392799	3749321	Sensitive	2.52E-05	1.58E-05	2.79E-07	1.07E-08	6.40E-11	9.13E-06
6541	390925	3749595	Sensitive	3.07E-05	1.92E-05	3.39E-07	1.30E-08	7.99E-11	1.11E-05
6544	393792	3749726	Sensitive	1.68E-05	1.05E-05	1.86E-07	7.12E-09	4.30E-11	6.07E-06
6547	391603	3750024	Sensitive	9.80E-05	6.14E-05	1.08E-06	4.15E-08	2.43E-10	3.55E-05
6548	391817	3750027	Sensitive	1.13E-04	7.07E-05	1.25E-06	4.78E-08	2.73E-10	4.08E-05
6551	393695	3750170	Sensitive	2.16E-05	1.35E-05	2.39E-07	9.17E-09	5.52E-11	7.82E-06
6552	389279	3750329	Sensitive	1.17E-05	7.31E-06	1.29E-07	4.95E-09	3.12E-11	4.22E-06
6554	391060	3750653	Sensitive	7.87E-05	4.93E-05	8.71E-07	3.34E-08	2.12E-10	2.85E-05
6557	395026	3750753	Sensitive	1.02E-05	6.39E-06	1.13E-07	4.32E-09	2.76E-11	3.69E-06
6558	393789	3750832	Sensitive	2.33E-05	1.46E-05	2.57E-07	9.87E-09	6.04E-11	8.43E-06
6559	390647	3750924	Sensitive	3.91E-05	2.45E-05	4.33E-07	1.66E-08	1.06E-10	1.42E-05
6561	392915	3750969	Sensitive	6.13E-05	3.84E-05	6.78E-07	2.60E-08	1.57E-10	2.22E-05
6562	390853	3751014	Sensitive	5.05E-05	3.17E-05	5.59E-07	2.14E-08	1.38E-10	1.83E-05
6568	390627	3751173	Sensitive	3.52E-05	2.20E-05	3.89E-07	1.49E-08	9.54E-11	1.27E-05
6571	394526	3751418	Sensitive	1.24E-05	7.75E-06	1.37E-07	5.24E-09	3.63E-11	4.48E-06
6574	392666	3751551	Sensitive	4.74E-05	2.97E-05	5.24E-07		1.23E-10	
6578	391395	3751772	Sensitive	4.46E-05	2.79E-05	4.93E-07	2.01E-08 1.89E-08	1.23E-10 1.21E-10	1.72E-05
									1.61E-05
6580	392890	3751762	Sensitive	3.19E-05	2.00E-05	3.53E-07	1.35E-08	8.34E-11	1.15E-05
6581	393459	3751819	Sensitive	2.03E-05	1.27E-05	2.25E-07	8.61E-09	5.35E-11	7.35E-06
6582	392689	3751835	Sensitive	3.47E-05	2.17E-05	3.83E-07	1.47E-08	9.08E-11	1.25E-05
6583	392682	3751837	Sensitive	3.48E-05	2.18E-05	3.84E-07	1.47E-08	9.11E-11	1.26E-05
6584	393613	3751872	Sensitive	1.79E-05	1.12E-05	1.98E-07	7.59E-09	4.75E-11	6.48E-06
6585	389955	3751959	Sensitive	1.45E-05	9.11E-06	1.61E-07	6.16E-09	3.92E-11	5.26E-06
6587	391637	3752036	Sensitive	3.57E-05	2.24E-05	3.95E-07	1.52E-08	9.64E-11	1.29E-05
6598	390242	3752750	Sensitive	1.18E-05	7.41E-06	1.31E-07	5.01E-09	3.16E-11	4.28E-06
6603	393061	3752892	Sensitive	1.33E-05	8.34E-06	1.47E-07	5.64E-09	3.45E-11	4.81E-06
6605	392857	3753105	Sensitive	1.25E-05	7.82E-06	1.38E-07	5.29E-09	3.25E-11	4.51E-06
6676	392517	3749932	Sensitive	5.92E-05	3.71E-05	6.55E-07	2.51E-08	1.45E-10	2.14E-05
6678	390261	3752752	Sensitive	1.19E-05	7.46E-06	1.32E-07	5.04E-09	3.18E-11	4.31E-06
6681	393593	3750179	Sensitive	2.36E-05	1.48E-05	2.61E-07	1.00E-08	6.02E-11	8.55E-06
6698	389791	3751313	Sensitive	1.59E-05	9.94E-06	1.75E-07	6.73E-09	4.27E-11	5.74E-06
6700	389662	3750632	Sensitive	1.54E-05	9.62E-06	1.70E-07	6.51E-09	4.11E-11	5.56E-06
6708	391135	3748423	Sensitive	1.38E-05	8.62E-06	1.52E-07	5.83E-09	3.58E-11	4.98E-06
6721	393187	3750336	Sensitive	3.83E-05	2.40E-05	4.23E-07	1.62E-08	9.61E-11	1.38E-05
6728	391823	3750031	Sensitive	1.14E-04	7.13E-05	1.26E-06	4.83E-08	2.75E-10	4.12E-05
6729	391823	3750031	Sensitive	1.14E-04	7.13E-05	1.26E-06	4.83E-08	2.75E-10	4.12E-05
6730	393097	3749531	Sensitive	2.46E-05	1.54E-05	2.72E-07	1.04E-08	6.23E-11	8.89E-06
6733	391488	3748503	Sensitive	1.54E-05	9.67E-06	1.71E-07	6.55E-09	4.00E-11	5.59E-06
6736	391533	3753588	Sensitive	1.03E-05	6.46E-06	1.14E-07	4.37E-09	2.75E-11	3.73E-06
6739	392798	3753189	Sensitive	1.21E-05	7.56E-06	1.33E-07	5.11E-09	3.14E-11	4.36E-06
6743	393549	3751856	Sensitive	1.88E-05	1.18E-05	2.08E-07	7.96E-09	4.96E-11	6.79E-06
6746	390852	3751042	Sensitive	4.98E-05	3.12E-05	5.51E-07	2.11E-08	1.36E-10	1.80E-05
6746	392859	37531042	Sensitive	1.24E-05	7.80E-06	1.38E-07	5.27E-09	3.24E-11	4.50E-06
6771	392859	3733109	Sensitive	2.57E-05	1.61E-05	2.85E-07	1.09E-08	6.52E-11	9.31E-06
6772	392768	3749324	Sensitive	2.57E-05	1.61E-05	2.85E-07	1.09E-08	6.52E-11 6.52E-11	9.31E-06
	392/68	3749324	-						
6773 6780			Sensitive	1.69E-05	1.06E-05	1.86E-07	7.15E-09	4.32E-11	6.10E-06
	392377	3753377	Sensitive	1.16E-05	7.27E-06	1.28E-07	4.92E-09	3.05E-11	4.20E-06
6816	392703	3750856	Sensitive	9.52E-05	5.97E-05	1.05E-06	4.04E-08	2.39E-10	3.45E-05
6817	390261	3752752	Sensitive	1.19E-05	7.46E-06	1.32E-07	5.04E-09	3.18E-11	4.31E-06
6823	390863	3751303	Sensitive	4.32E-05	2.71E-05	4.78E-07	1.83E-08	1.18E-10	1.56E-05
6834	390541	3749641	Sensitive	2.37E-05	1.48E-05	2.62E-07	1.00E-08	6.23E-11	8.57E-06
6837	391155	3749006	Sensitive	2.11E-05	1.32E-05	2.33E-07	8.93E-09	5.46E-11	7.62E-06
6847	391086	3750584	Sensitive	8.19E-05	5.13E-05	9.06E-07	3.47E-08	2.20E-10	2.96E-05

Table 11. Population Exposure Cancer Burden SummaryAnaplex CorporationFacility ID 016951Paramount, California

	Population
	70-year
Cancer Risk	Exposure
1 to <10 in a million	2,120,397
10 to <25 in a million	112,798
25 to <100 in a million	37,558
100 to <1000 in a million	6,540
>=1000 in a million	1
Total >= 1 in a million	2,277,294
Can	cer Burden 9.7

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# Table 12. PMI, MEIR, MEIW, MEISR Cancer Risk by SourceAnaplex CorporationFacility ID 016951Paramount, California

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		мі		IR		IW		sitive Receptor
Source ID	Cancer Risk	Contribution						
SPRYBTH2	1.61E-01	99.6%	9.13E-04	98.0%	2.82E-03	99.4%	1.10E-04	96.8%
SPRYBTH3	2.36E-06	0.0%	1.68E-08	0.0%	6.43E-08	0.0%	1.96E-09	0.0%
SPRYBTH4	7.27E-06	0.0%	5.96E-08	0.0%	2.08E-07	0.0%	6.70E-09	0.0%
222BLR1	1.92E-08	0.0%	1.54E-09	0.0%	4.86E-10	0.0%	3.64E-10	0.0%
222BLR2	1.89E-08	0.0%	1.54E-09	0.0%	4.78E-10	0.0%	3.63E-10	0.0%
DGRSR	4.02E-08	0.0%	1.36E-09	0.0%	1.96E-09	0.0%	7.80E-11	0.0%
DGRBLR	5.64E-09	0.0%	4.10E-10	0.0%	1.60E-10	0.0%	7.97E-11	0.0%
DRYER3	2.07E-08	0.0%	7.19E-10	0.0%	6.29E-10	0.0%	1.69E-10	0.0%
DRYER4	9.75E-09	0.0%	8.00E-10	0.0%	2.56E-10	0.0%	1.59E-10	0.0%
ANODZPSH	5.35E-04	0.3%	1.70E-05	1.8%	1.54E-05	0.5%	3.38E-06	3.0%
PLATEPSH	6.35E-05	0.0%	8.23E-07	0.1%	1.25E-06	0.0%	1.69E-07	0.1%
SLVNTBTH	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%
MASKING	4.45E-05	0.0%	3.51E-07	0.0%	7.85E-07	0.0%	7.11E-08	0.1%
ABRBLST	2.31E-06	0.0%	8.78E-08	0.0%	1.28E-07	0.0%	2.37E-08	0.0%
ANODZEVP	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%
PLATEEVP	2.25E-06	0.0%	3.01E-08	0.0%	4.42E-08	0.0%	6.69E-09	0.0%

## Table 13. PMI Cancer Risk by Substance and PathwayAnaplex CorporationFacility ID 016951

Paramount, California

Receptor ID	x	Y	Pollutant CAS number	Pollutant Abbreviation	Total Risk	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce	Contribution
6	391889	3750691	18540299	Cr(VI)	7.52E-04	4.71E-04	8.32E-06	3.19E-07	0.00E+00	2.72E-04	0%
6	391889	3750691	7440020	Nickel	2.10E-06	2.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	1333820	ChromiumTriOxid	1.01E-04	6.35E-05	1.12E-06	4.30E-08	0.00E+00	3.67E-05	0%
6	391889	3750691	373024	Ni Acetate	1.51E-08	1.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	10588019	SodiumDichromat	4.80E-04	3.00E-04	5.31E-06	2.03E-07	0.00E+00	1.74E-04	0%
6	391889	3750691	7440439	Cadmium	4.01E-06	4.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	1128	Lead cmp(inorg)	8.08E-07	4.99E-08	6.10E-07	1.48E-08	1.11E-08	1.22E-07	0%
6	391889	3750691	7439921	Lead	2.83E-10	1.75E-11	2.13E-10	5.19E-12	3.87E-12	4.28E-11	0%
6	391889	3750691	10294403	Barium Chromate	1.35E-03	8.44E-04	1.49E-05	5.72E-07	0.00E+00	4.88E-04	1%
6	391889	3750691	100414	Ethyl Benzene	3.06E-05	3.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	50000	Formaldehyde	7.31E-06	7.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	75092	Methylene Chlor	2.86E-05	2.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	7789062	StrontiumChrom	1.59E-01	9.93E-02	1.75E-03	6.72E-05	0.00E+00	5.74E-02	98%
6	391889	3750691	91203	Naphthalene	2.67E-05	2.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	75569	Propylene Oxide	2.44E-06	2.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	79016	TCE	4.02E-08	4.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	71432	Benzene	5.74E-09	5.74E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	1151	PAHs-w/o	6.47E-08	1.97E-09	7.35E-09	1.83E-09	1.75E-08	3.60E-08	0%
6	391889	3750691	75070	Acetaldehyde	3.08E-10	3.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	7440417	Beryllium	1.19E-09	1.19E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	391889	3750691	127184	Perc	2.25E-06	2.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%

#### Table 14. MEIR Cancer Risk by Substance and Pathway Anaplex Corporation

Anaplex Corporation Facility ID 016951 Paramount, California

Receptor ID	x	Y	Pollutant CAS number	Pollutant Abbreviation	Total Risk	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce	Contribution (%)
1567	392200	3750720	18540299	Cr(VI)	4.64E-06	2.90E-06	5.13E-08	1.97E-09	0.00E+00	1.68E-06	0%
1567	392200	3750720	7440020	Nickel	3.38E-08	3.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	1333820	ChromiumTriOxid	3.20E-06	2.00E-06	3.54E-08	1.36E-09	0.00E+00	1.16E-06	0%
1567	392200	3750720	373024	Ni Acetate	4.80E-10	4.80E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	10588019	SodiumDichromat	1.42E-05	8.91E-06	1.57E-07	6.03E-09	0.00E+00	5.15E-06	2%
1567	392200	3750720	7440439	Cadmium	5.20E-08	5.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	1128	Lead cmp(inorg)	4.59E-09	2.84E-10	3.46E-09	8.43E-11	6.29E-11	6.95E-10	0%
1567	392200	3750720	7439921	Lead	4.61E-12	2.85E-13	3.48E-12	8.47E-14	6.31E-14	6.98E-13	0%
1567	392200	3750720	10294403	Barium Chromate	7.66E-06	4.80E-06	8.47E-08	3.25E-09	0.00E+00	2.77E-06	1%
1567	392200	3750720	100414	Ethyl Benzene	1.86E-07	1.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	50000	Formaldehyde	4.17E-08	4.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	75092	Methylene Chlor	2.05E-07	2.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	7789062	StrontiumChrom	9.01E-04	5.64E-04	9.97E-06	3.82E-07	0.00E+00	3.26E-04	97%
1567	392200	3750720	91203	Naphthalene	2.12E-07	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	75569	Propylene Oxide	1.92E-08	1.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	79016	TCE	1.36E-09	1.36E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	71432	Benzene	3.88E-10	3.88E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	1151	PAHs-w/o	4.38E-09	1.34E-10	4.98E-10	1.24E-10	1.18E-09	2.44E-09	0%
1567	392200	3750720	75070	Acetaldehyde	2.09E-11	2.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	7440417	Beryllium	4.51E-11	4.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	392200	3750720	127184	Perc	3.01E-08	3.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%

# Table 15. MEIW Cancer Risk by Substance and PathwayAnaplex CorporationFacility ID 016951Paramount, California

Receptor ID	x	Y	Pollutant CAS number	Pollutant Abbreviation	Total Risk	Inhalation	Soil	Dermal	Contribution (%)
1391	391880	3750660	127184	Perc	4.42E-08	4.42E-08	0.00E+00	0.00E+00	0%
1391	391880	3750660	18540299	Cr(VI)	1.34E-05	1.32E-05	1.82E-07	1.26E-08	0%
1391	391880	3750660	7440020	Nickel	6.75E-08	6.75E-08	0.00E+00	0.00E+00	0%
1391	391880	3750660	1333820	ChromiumTriOxid	2.90E-06	2.85E-06	3.92E-08	2.72E-09	0%
1391	391880	3750660	373024	Ni Acetate	6.82E-10	6.82E-10	0.00E+00	0.00E+00	0%
1391	391880	3750660	10588019	SodiumDichromat	1.32E-05	1.30E-05	1.79E-07	1.24E-08	0%
1391	391880	3750660	7440439	Cadmium	1.18E-07	1.18E-07	0.00E+00	0.00E+00	0%
1391	391880	3750660	1128	Lead cmp(inorg)	8.07E-09	1.95E-09	5.54E-09	5.77E-10	0%
1391	391880	3750660	7439921	Lead	3.79E-12	9.17E-13	2.60E-12	2.71E-13	0%
1391	391880	3750660	10294403	Barium Chromate	2.36E-05	2.33E-05	3.20E-07	2.22E-08	1%
1391	391880	3750660	100414	Ethyl Benzene	8.48E-07	8.48E-07	0.00E+00	0.00E+00	0%
1391	391880	3750660	50000	Formaldehyde	2.02E-07	2.02E-07	0.00E+00	0.00E+00	0%
1391	391880	3750660	75092	Methylene Chlor	5.96E-07	5.96E-07	0.00E+00	0.00E+00	0%
1391	391880	3750660	7789062	StrontiumChrom	2.78E-03	2.74E-03	3.77E-05	2.61E-06	98%
1391	391880	3750660	91203	Naphthalene	5.15E-07	5.15E-07	0.00E+00	0.00E+00	0%
1391	391880	3750660	75569	Propylene Oxide	4.30E-08	4.30E-08	0.00E+00	0.00E+00	0%
1391	391880	3750660	79016	TCE	1.96E-09	1.96E-09	0.00E+00	0.00E+00	0%
1391	391880	3750660	71432	Benzene	5.19E-10	5.19E-10	0.00E+00	0.00E+00	0%
1391	391880	3750660	1151	PAHs-w/o	1.15E-09	1.87E-10	5.18E-10	4.49E-10	0%
1391	391880	3750660	75070	Acetaldehyde	2.79E-11	2.79E-11	0.00E+00	0.00E+00	0%
1391	391880	3750660	7440417	Beryllium	1.03E-10	1.03E-10	0.00E+00	0.00E+00	0%

## Table 16. MEISR Cancer Risk by Substance and PathwayAnaplex CorporationFacility ID 016951Paramount, California

Receptor ID	x	Y	Pollutant CAS number	Pollutant Abbreviation	Total Risk	Inhalation	Soil	Dermal	Mother's Milk	Homegrown Produce	Contribution (%)
6728	391823.207	3750030.733	18540299	Cr(VI)	6.01E-07	3.76E-07	6.64E-09	2.55E-10	0.00E+00	2.18E-07	1%
6728	391823.207	3750030.733	7440020	Nickel	6.88E-09	6.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	1333820	ChromiumTriOxid	6.34E-07	3.97E-07	7.01E-09	2.69E-10	0.00E+00	2.30E-07	1%
6728	391823.207	3750030.733	373024	Ni Acetate	9.52E-11	9.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	10588019	SodiumDichromat	2.82E-06	1.77E-06	3.12E-08	1.20E-09	0.00E+00	1.02E-06	2%
6728	391823.207	3750030.733	7440439	Cadmium	1.07E-08	1.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	1128	Lead cmp(inorg)	5.54E-10	3.43E-11	4.18E-10	1.02E-11	7.59E-12	8.40E-11	0%
6728	391823.207	3750030.733	7439921	Lead	1.04E-12	6.41E-14	7.83E-13	1.91E-14	1.42E-14	1.57E-13	0%
6728	391823.207	3750030.733	10294403	Barium Chromate	9.25E-07	5.79E-07	1.02E-08	3.92E-10	0.00E+00	3.35E-07	1%
6728	391823.207	3750030.733	100414	Ethyl Benzene	2.21E-08	2.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	50000	Formaldehyde	5.05E-09	5.05E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	75092	Methylene Chlor	3.72E-08	3.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	7789062	StrontiumChrom	1.09E-04	6.81E-05	1.20E-06	4.61E-08	0.00E+00	3.94E-05	96%
6728	391823.207	3750030.733	91203	Naphthalene	4.00E-08	4.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	75569	Propylene Oxide	3.89E-09	3.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	79016	TCE	7.80E-11	7.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	71432	Benzene	8.78E-11	8.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	1151	PAHs-w/o	9.90E-10	3.02E-11	1.13E-10	2.80E-11	2.68E-10	5.51E-10	0%
6728	391823.207	3750030.733	75070	Acetaldehyde	4.72E-12	4.72E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	7440417	Beryllium	1.22E-11	1.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	391823.207	3750030.733	127184	Perc	6.69E-09	6.69E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%

## Table 17. PMI, MEIR, MEIW, MEISR Chronic HI by SourceAnaplex CorporationFacility ID 016951

Paramount, California

							ME	100
Source ID	CHI	MI Contribution	CHI	EIR Contribution	CHI	IW Contribution	CHI	ISR Contribution
SPRYBTH2	7.08E-01	8.4%	1.08E-02	19.3%	2.15E-01	10.6%	1.76E-03	20.5%
SPRYBTH3	2.05E-02	0.2%	2.47E-04	0.4%	5.78E-03	0.3%	3.78E-05	0.4%
SPRYBTH4	2.36E-02	0.3%	2.92E-04	0.5%	6.70E-03	0.3%	4.38E-05	0.5%
222BLR1	9.16E-05	0.0%	7.64E-06	0.0%	1.08E-04	0.0%	1.36E-06	0.0%
222BLR2	9.11E-05	0.0%	7.69E-06	0.0%	1.11E-04	0.0%	1.35E-06	0.0%
DGRSR	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%
DGRBLR	2.41E-05	0.0%	1.74E-06	0.0%	2.01E-05	0.0%	2.97E-07	0.0%
DRYER3	4.96E-05	0.0%	2.91E-06	0.0%	3.13E-05	0.0%	6.29E-07	0.0%
DRYER4	4.29E-05	0.0%	3.29E-06	0.0%	3.10E-05	0.0%	5.91E-07	0.0%
ANODZPSH	5.54E+00	65.9%	3.21E-02	57.3%	1.47E+00	72.6%	4.62E-03	53.9%
PLATEPSH	8.39E-01	10.0%	4.57E-03	8.1%	1.02E-01	5.0%	7.55E-04	8.8%
SLVNTBTH	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%
MASKING	9.02E-02	1.1%	8.09E-04	1.4%	5.72E-02	2.8%	1.24E-04	1.4%
ABRBLST	7.16E-04	0.0%	5.21E-05	0.1%	8.74E-04	0.0%	1.08E-05	0.1%
ANODZEVP	1.12E-01	1.3%	7.16E-04	1.3%	3.06E-02	1.5%	1.08E-04	1.3%
PLATEEVP	1.08E+00	12.8%	6.44E-03	11.5%	1.36E-01	6.7%	1.11E-03	13.0%

Table 18. PMI Chronic HI by Substance Anaplex Corporation Facility ID 016951 Paramount, California

Receptor ID	CAS Number	Chemical Name	cv	CNS	NUMMI	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL	INH_CONC	SOIL_DOSE	DERMAL_DOSE	MMILK_DOSE	CROP_DOSE	Contribution
3	1101	Fluorides&cmpds	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00			0.00E+00			0.00E+00	0.00E+00	0.00E+00	7.55E-02	6.83E-04		0.00E+00	3.85E-04	0%
3	18540299	Cr(VI)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.41E-03	0.00E+00	0.00E+00	5.27E-04	4.76E-06	1.15E-07	0.00E+00	1.23E-04	0%
3	7440020	Nickel	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-02		0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-01	0.00E+00	0.00E+00	1.26E-02	1.14E-04	2.75E-06	0.00E+00	6.80E-05	11%
3	1333820	ChromiumTriOxid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-02	0.00E+00	0.00E+00	1.38E-03	1.25E-05	3.02E-07	0.00E+00	3.23E-04	8%
3	373024	Ni Acetate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-04	1.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-02	0.00E+00	0.00E+00	1.86E-04	1.68E-06	4.05E-08	0.00E+00	1.00E-06	0%
3	7664382	Phosphoric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.08E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5%
3	10588019	SodiumDichromat	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.46E-02	0.00E+00	0.00E+00	6.13E-03	5.54E-05	1.34E-06	0.00E+00	1.44E-03	0%
3	7664939	Sulfuric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	55%
3	108883	Toluene	0.00E+00	7.67E-02	0.00E+00	0.00E+00	0.00E+00	7.67E-02	7.67E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
3	1330207	Xylenes	0.00E+00	1.10E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-02	0.00E+00	1.10E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
3	7440439	Cadmium	0.00E+00	0.00E+00	0.00E+00	1.15E-01	0.00E+00	0.00E+00	5.83E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03	1.05E-05	2.55E-08	0.00E+00	1.79E-05	1%
3	7647010	HCI	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8%
3	7664393	HF	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-01	0.00E+00	0.00E+00	9.43E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E+00	1.97E-02	7.13E-04	0.00E+00	1.11E-02	2%
3	10294403	Barium Chromate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.23E-03	0.00E+00	0.00E+00	6.76E-04	6.11E-06	1.48E-07	0.00E+00	1.58E-04	0%
3	111762	EGBE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
3	50000	Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
3	101688	MeDiphenDiisocy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2%
3	1175	Silica, Crystln	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
3	7789062	StrontiumChrom	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.68E-01	0.00E+00	0.00E+00	7.94E-02	7.18E-04	1.74E-05	0.00E+00	1.86E-02	5%
3	91203	Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.50E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
3	75569	Propylene Oxide	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
3	75070	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
3	107028	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
3	7664417	NH3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.67E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
3	115071	Propylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
3	7440417	Beryllium	0.00E+00	0.00E+00	2.03E-05	0.00E+00	8.62E-07	0.00E+00	2.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-07	1.29E-09	4.67E-11	0.00E+00	3.91E-10	0%

#### Abbreviations:

CV = cardiovascular system HI CNS = central nervous system HI IMMUN = immune system HI KIDNEY = kidneys HI GILV = gastrointestinal System and liver HI REPRO/DEVEL = reproduction and developmental HI RESP = respiratory system HI SKIN = skin HI EYE = eye HI BONE/TEETH = bones and teeth HI

ENDO = endocrine system HI BLOOD = blood HI ODOR = response to odors HI GENERAL = general toxicity HI MAXHI = maximum hazard index INH = inhalation MMILK = Mother's Milk

Note:

Table 19. MEIR Chronic HI by Substance Anaplex Corporation Facility ID 016951 Paramount, California

Receptor ID		Chemical Name	cv	CNS	NUMMI	KIDNEY	BILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL	INH_CONC	SOIL_DOSE	DERMAL_DOSE	MMILK_DOSE	CROP_DOSE	Contribution
2115		Fluorides&cmpds	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.93E-05	0.00E+00	0.00E+00	4.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	9.32E-06	3.38E-07	0.00E+00	5.26E-06	0%
2115	18540299	Cr(VI)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.22E-05	0.00E+00	0.00E+00	6.75E-06	6.10E-08	1.47E-09	0.00E+00	1.58E-06	0%
2115	7440020	Nickel	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.41E-05	5.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-03	0.00E+00	0.00E+00	7.06E-05	6.38E-07	1.54E-08	0.00E+00	3.82E-07	9%
2115	1333820	ChromiumTriOxid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.75E-05	0.00E+00	0.00E+00	8.00E-06	7.23E-08	1.75E-09	0.00E+00	1.88E-06	7%
2115	373024	Ni Acetate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-06	7.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-05	0.00E+00	0.00E+00	1.08E-06	9.73E-09	2.35E-10	0.00E+00	5.82E-09	0%
2115	7664382	Phosphoric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4%
2115	10588019	SodiumDichromat	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-04	0.00E+00	0.00E+00	3.54E-05	3.20E-07	7.74E-09	0.00E+00	8.30E-06	0%
2115	7664939	Sulfuric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	48%
2115	108883	Toluene	0.00E+00	8.72E-04	0.00E+00	0.00E+00	0.00E+00	8.72E-04	8.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2%
2115	1330207	Xylenes	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	7440439	Cadmium	0.00E+00	0.00E+00	0.00E+00	6.27E-04	0.00E+00	0.00E+00	3.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.35E-06	5.74E-08	1.39E-10	0.00E+00	9.74E-08	1%
2115	7647010	HCI	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7%
2115	7664393	HF	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.62E-04	0.00E+00	0.00E+00	5.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-02	1.22E-04	4.41E-06	0.00E+00	6.87E-05	2%
2115	10294403	Barium Chromate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	1.03E-05	9.33E-08	2.25E-09	0.00E+00	2.42E-06	0%
2115	111762	EGBE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
2115	50000	Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	101688	MeDiphenDiisocy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5%
2115	1175	Silica, Crystln	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
2115	7789062	StrontiumChrom	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-02	0.00E+00	0.00E+00	1.21E-03	1.10E-05	2.65E-07	0.00E+00	2.84E-04	11%
2115	91203	Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
2115	75569	Propylene Oxide	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	75070	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	107028	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	7664417	NH3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	115071	Propylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	7440417	Beryllium	0.00E+00	0.00E+00	1.48E-06	0.00E+00	6.27E-08	0.00E+00	1.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-08	9.36E-11	3.39E-12	0.00E+00	2.84E-11	0%

#### Abbreviations:

CV = cardiovascular system HI CNS = central nervous system HI IMMUN = immune system HI KIDNEY = kidneys HI GILV = gastrointestinal System and liver HI

REPRO/DEVEL = reproduction and developmental HI RESP = respiratory system HI SKIN = skin HI EYE = eye HI BONE/TEETH = bones and teeth HI

ENDO = endocrine system HI BLOOD = blood HI ODOR = response to odors HI GENERAL = general toxicity HI MAXHI = maximum hazard index INH = inhalation

MMILK = Mother's Milk

Note:

Table 20. MEIW Chronic HI by Substance Anaplex Corporation Facility ID 016951 Paramount, California

Recepto r ID	CAS Number	Chemical Name	cv	CNS	NUMMI	KIDNEY	BILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL	INH_CONC	SOIL_DOSE	DERMAL_DOSE	MMILK_DOSE	CROP_DOSE	Contribution
1659	1101	Fluorides&cmpds	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03	0.00E+00	0.00E+00	4.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-02	1.11E-04	1.58E-05	0.00E+00	0.00E+00	0%
1659	18540299	Cr(VI)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.26E-05	0.00E+00	0.00E+00	1.57E-04	7.78E-07	7.41E-08	0.00E+00	0.00E+00	0%
1659	7440020	Nickel	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	1.53E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-01	0.00E+00	0.00E+00	2.14E-03	1.06E-05	1.01E-06	0.00E+00	0.00E+00	8%
1659	1333820	ChromiumTriOxid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.91E-05	0.00E+00	0.00E+00	3.64E-04	1.81E-06	1.72E-07	0.00E+00	0.00E+00	9%
1659	373024	Ni Acetate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-05	3.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-03	0.00E+00	0.00E+00	4.92E-05	2.44E-07	2.33E-08	0.00E+00	0.00E+00	0%
1659	7664382	Phosphoric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.60E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3%
1659	10588019	SodiumDichromat	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-04	0.00E+00	0.00E+00	1.58E-03	7.85E-06	7.48E-07	0.00E+00	0.00E+00	0%
1659	7664939	Sulfuric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	60%
1659	108883	Toluene	0.00E+00	3.74E-02	0.00E+00	0.00E+00	0.00E+00	3.74E-02	3.74E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2%
1659	1330207	Xylenes	0.00E+00	3.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-03	0.00E+00	3.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1659	7440439	Cadmium	0.00E+00	0.00E+00	0.00E+00	8.47E-03	0.00E+00	0.00E+00	7.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	7.01E-07	6.68E-09	0.00E+00	0.00E+00	0%
1659	7647010	HCI	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.64E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.77E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4%
1659	7664393	HF	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-02	0.00E+00	0.00E+00	9.37E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-01	2.18E-03	3.12E-04	0.00E+00	0.00E+00	2%
1659	10294403	Barium Chromate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-05	0.00E+00	0.00E+00	2.05E-04	1.02E-06	9.71E-08	0.00E+00	0.00E+00	0%
1659	111762	EGBE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1659	50000	Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1659	101688	MeDiphenDiisocy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3%
1659	1175	Silica, Crystln	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
1659	7789062	StrontiumChrom	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-03	0.00E+00	0.00E+00	2.41E-02	1.20E-04	1.14E-05	0.00E+00	0.00E+00	6%
1659	91203	Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
1659	75569	Propylene Oxide	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1659	75070	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1659	107028	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1659	7664417	NH3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1659	115071	Propylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1659	7440417	Beryllium	0.00E+00	0.00E+00	2.48E-05	0.00E+00	4.93E-07	0.00E+00	2.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-07	8.63E-10	1.23E-10	0.00E+00	0.00E+00	0%

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Note:

Table 21. MEISR Chronic HI by Substance

Anaplex Corporation Facility ID 016951 Paramount, California

Receptor ID	CAS Number	Chemical Name	cv	CNS	NUMMI	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL	INH_CONC	SOIL_DOSE	DERMAL_DOSE	MMILK_DOSE	CROP_DOSE	Contribution
6728	1101	Fluorides&cmpds	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-05	0.00E+00	0.00E+00	7.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-04	1.48E-06	5.37E-08	0.00E+00	8.37E-07	0%
6728	18540299	Cr(VI)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-05	0.00E+00	0.00E+00	1.09E-06	9.85E-09	2.38E-10	0.00E+00	2.55E-07	0%
6728	7440020	Nickel	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-05	7.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-04	0.00E+00	0.00E+00	1.12E-05	1.01E-07	2.44E-09	0.00E+00	6.04E-08	9%
6728	1333820	ChromiumTriOxid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	1.15E-06	1.04E-08	2.51E-10	0.00E+00	2.70E-07	7%
6728	373024	Ni Acetate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-07	1.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-05	0.00E+00	0.00E+00	1.55E-07	1.40E-09	3.38E-11	0.00E+00	8.36E-10	0%
6728	7664382	Phosphoric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5%
6728	10588019	SodiumDichromat	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E-05	0.00E+00	0.00E+00	5.12E-06	4.63E-08	1.12E-09	0.00E+00	1.20E-06	0%
6728	7664939	Sulfuric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	45%
6728	108883	Toluene	0.00E+00	1.37E-04	0.00E+00	0.00E+00	0.00E+00	1.37E-04	1.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2%
6728	1330207	Xylenes	0.00E+00	2.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-05	0.00E+00	2.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	7440439	Cadmium	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	5.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-06	9.48E-09	2.29E-11	0.00E+00	1.61E-08	1%
6728	7647010	HCI	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8%
6728	7664393	HF	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04	0.00E+00	0.00E+00	9.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-03	1.95E-05	7.09E-07	0.00E+00	1.10E-05	2%
6728	10294403	Barium Chromate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-05	0.00E+00	0.00E+00	1.68E-06	1.52E-08	3.67E-10	0.00E+00	3.93E-07	0%
6728	111762	EGBE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
6728	50000	Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	101688	MeDiphenDiisocy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6%
6728	1175	Silica, Crystln	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2%
6728	7789062	StrontiumChrom	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-03	0.00E+00	0.00E+00	1.97E-04	1.78E-06	4.31E-08	0.00E+00	4.62E-05	12%
6728	91203	Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
6728	75569	Propylene Oxide	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	75070	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	107028	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	7664417	NH3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	115071	Propylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	7440417	Beryllium	0.00E+00	0.00E+00	3.06E-07	0.00E+00	1.30E-08	0.00E+00	3.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-09	1.94E-11	7.02E-13	0.00E+00	5.88E-12	0%

#### Abbreviations:

CV = cardiovascular system HI CNS = central nervous system HI IMMUN = immune system HI KIDNEY = kideneys HI GILV = gastrointestinal System and liver HI REPRO/DEVEL = reproduction and developmental HI RESP = respiratory system HI SKIN = skin HI EYE = eye HI BONE/TEETH = bones and teeth HI

ENDO = endocrine system HI BLOOD = blood HI ODOR = response to odors HI GENERAL = general toxicity HI MAXHI = maximum hazard index INH = inhalation MMILK = Mother's Milk

#### Note:

# Table 22. PMI, MEIR, MEIW, MEISR 8-Hour Chronic HI by SourceAnaplex CorporationFacility ID 016951Paramount, California

	P	IMY	м	IEIR	м	EIW	м	EISR
Source ID	8HR CHI	Contribution						
SPRYBTH2	4.34E-01	85.3%	2.46E-03	69.8%	9.35E-02	83.6%	2.98E-04	59.2%
SPRYBTH3	9.30E-03	1.8%	6.63E-05	1.9%	1.98E-03	1.8%	7.71E-06	1.5%
SPRYBTH4	8.35E-03	1.6%	6.85E-05	1.9%	1.87E-03	1.7%	7.70E-06	1.5%
222BLR1	1.58E-05	0.0%	1.27E-06	0.0%	1.04E-05	0.0%	3.00E-07	0.1%
222BLR2	1.55E-05	0.0%	1.27E-06	0.0%	1.03E-05	0.0%	2.99E-07	0.1%
DGRSR	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%
DGRBLR	4.65E-06	0.0%	3.37E-07	0.0%	3.44E-06	0.0%	6.57E-08	0.0%
DRYER3	1.70E-05	0.0%	5.92E-07	0.0%	1.35E-05	0.0%	1.39E-07	0.0%
DRYER4	8.02E-06	0.0%	6.58E-07	0.0%	5.50E-06	0.0%	1.31E-07	0.0%
ANODZPSH	9.64E-03	1.9%	3.07E-04	8.7%	3.40E-03	3.0%	6.08E-05	12.1%
PLATEPSH	4.73E-02	9.3%	6.13E-04	17.4%	1.08E-02	9.7%	1.25E-04	25.0%
SLVNTBTH	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%
MASKING	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%
ABRBLST	2.32E-04	0.0%	8.81E-06	0.2%	1.57E-04	0.1%	2.38E-06	0.5%
ANODZEVP	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%
PLATEEVP	5.52E-05	0.0%	7.38E-07	0.0%	1.31E-05	0.0%	1.64E-07	0.0%

#### Table 23. PMI 8-Hour Chronic HI by Substance

Anaplex Corporation Facility ID 016951

Paramount, California

Receptor	CAS			s	MUN	DNEY	ILV	EPRO/DEVEL	SP	IN	ų.	ONE/TEETH	1DO	000	JOR	ENRAL	ntribution
ID		Chemical Name	5	5	M .	¥	15	R	8	N N	EV	BC	E CONTRACTOR	B	<u>5</u>	U U	ő
6		Nickel	0.00E+00					0.00E+00		0.00E+00							11%
6	373024	Ni Acetate	0.00E+00	0.00E+00	4.08E-04	0.00E+00	0.00E+00	0.00E+00	4.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	111762	EGBE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9%
6	50000	Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.72E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	11%
6	101688	MeDiphenDiisocy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	69%
6	75070	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6	107028	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%

#### Abbreviations:

CV = cardiovascular system HI CNS = central nervous system HI IMMUN = immune system HI KIDNEY = kidneys HI GILV = gastrointestinal System and liver HI REPRO/DEVEL = reproduction and developmental HI RESP = respiratory system HI SKIN = skin HI EYE = eye HI BONE/TEETH = bones and teeth HI ENDO = endocrine system HI BLOOD = blood HI ODOR = response to odors HI GENERAL = general toxicity HI MAXHI = maximum hazard index

#### Note:

#### Table 24. MEIR 8-Hour Chronic HI by Substance

Anaplex Corporation Facility ID 016951

Paramount, California

	cumornia																
Receptor ID	CAS Number	Chemical Name	cv	CNS	NUMUI	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EVE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL	Contribution
1567	7440020	Nickel	0.00E+00	0.00E+00	9.16E-04	0.00E+00	0.00E+00	0.00E+00	9.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	26%
1567	373024	Ni Acetate	0.00E+00	0.00E+00	1.30E-05	0.00E+00	0.00E+00	0.00E+00	1.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	111762	EGBE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7%
1567	50000	Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9%
1567	101688	MeDiphenDiisocy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	57%
1567	75070	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1567	107028	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%

#### Abbreviations:

 CV = cardiovascular system HI

 CNS = central nervous system HI

 IMMUN = immune system HI

 KIDNEY = kidneys HI

 GILV = gastrointestinal System and liver HI

REPRO/DEVEL = reproduction and developmental HI RESP = respiratory system HI SKIN = skin HI EYE = eye HI BONE/TEETH = bones and teeth HI ENDO = endocrine system HI BLOOD = blood HI ODOR = response to odors HI GENERAL = general toxicity HI MAXHI = maximum hazard index

#### Note:

#### Table 25. MEIW 8-Hour Chronic HI by Substance

Anaplex Corporation Facility ID 016951 Paramount, California

Receptor ID	CAS Number	Chemical Name	cv	CNS	NUMMI	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	вгоор	ODOR	GENERAL	Contribution
1391	7440020	Nickel	0.00E+00	0.00E+00	1.43E-02	0.00E+00	0.00E+00	0.00E+00	1.43E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	13%
1391	373024	Ni Acetate	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1391	111762	EGBE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9%
1391	50000	Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	11%
1391	101688	MeDiphenDiisocy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.54E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	67%
1391	75070	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
1391	107028	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%

#### Abbreviations:

CV = cardiovascular system HI CNS = central nervous system HI IMMUN = immune system HI KIDNEY = kidneys HI GILV = gastrointestinal System and liver HI REPRO/DEVEL = reproduction and developmental HI RESP = respiratory system HI SKIN = skin HI EYE = eye HI BONE/TEETH = bones and teeth HI ENDO = endocrine system HI BLOOD = blood HI ODOR = response to odors HI GENERAL = general toxicity HI MAXHI = maximum hazard index

#### Note:

#### Table 26. MEISR 8-Hour Chronic HI by Substance

Anaplex Corporation Facility ID 016951

Paramount, California

	Cumornia																
Receptor ID	CAS Number	Chemical Name	cv	CNS	NUMMI	KIDNEY	61LV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL	Contribution
6728	7440020	Nickel	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	37%
6728	373024	Ni Acetate	0.00E+00	0.00E+00	2.58E-06	0.00E+00	0.00E+00	0.00E+00	2.58E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
6728	111762	EGBE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6%
6728	50000	Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8%
6728	101688	MeDiphenDiisocy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	48%
6728	75070	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	107028	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%

#### Abbreviations:

CV = cardiovascular system HI CNS = central nervous system HI IMMUN = immune system HI KIDNEY = kidneys HI GILV = gastrointestinal System and liver HI REPRO/DEVEL = reproduction and developmental HI RESP = respiratory system HI SKIN = skin HI EYE = eve HI BONE/TEETH = bones and teeth HI

ENDO = endocrine system HI BLOOD = blood HI ODOR = response to odors HI GENERAL = general toxicity HI MAXHI = maximum hazard index

Note:

#### Table 27. PMI, MEIR, MEIW, MEISR Acute HI by Source Anaplex Corporation Facility ID 016951 Paramount, California

	I	PMI	M	IEIR	м	EIW	M	EISR
Source ID	AHI	Contribution	AHI	Contribution	AHI	Contribution	AHI	Contribution
SPRYBTH2	1.45E-01	0.6%	4.90E-03	6.6%	1.45E-01	0.6%	1.41E-04	1.0%
SPRYBTH3	1.02E-02	0.0%	5.66E-04	0.8%	1.02E-02	0.0%	1.39E-05	0.1%
SPRYBTH4	1.03E-02	0.0%	5.98E-04	0.8%	1.03E-02	0.0%	1.43E-05	0.1%
222BLR1	4.12E-04	0.0%	1.56E-05	0.0%	4.12E-04	0.0%	2.70E-06	0.0%
222BLR2	4.24E-04	0.0%	1.55E-05	0.0%	4.24E-04	0.0%	2.69E-06	0.0%
DGRSR	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%	0.00E+00	0.0%
DGRBLR	8.41E-05	0.0%	1.47E-05	0.0%	8.41E-05	0.0%	6.75E-07	0.0%
DRYER3	1.82E-04	0.0%	7.08E-06	0.0%	1.82E-04	0.0%	1.59E-06	0.0%
DRYER4	1.42E-04	0.0%	2.79E-05	0.0%	1.42E-04	0.0%	1.33E-06	0.0%
ANODZPSH	1.97E-01	0.8%	7.06E-03	9.5%	1.97E-01	0.8%	7.75E-04	5.7%
PLATEPSH	8.21E-02	0.3%	5.81E-03	7.8%	8.21E-02	0.3%	6.89E-04	5.0%
SLVNTBTH	2.34E+01	98.0%	5.28E-02	71.2%	2.34E+01	98.0%	1.17E-02	86.0%
MASKING	5.50E-03	0.0%	1.72E-04	0.2%	5.50E-03	0.0%	1.98E-05	0.1%
ABRBLST	7.51E-06	0.0%	5.10E-07	0.0%	7.51E-06	0.0%	9.81E-08	0.0%
ANODZEVP	5.27E-03	0.0%	1.89E-04	0.3%	5.27E-03	0.0%	2.07E-05	0.2%
PLATEEVP	2.77E-02	0.1%	1.96E-03	2.6%	2.77E-02	0.1%	2.32E-04	1.7%

## Table 28. PMI and MEIW Acute HI by Substance Anaplex Corporation

Anaplex Corporation Facility ID 016951 Paramount, California

Receptor ID	CAS Number	Chemical Name	cv	CNS	NMMU	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	ЕҮЕ	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL	Contribution
17	1101	Fluorides&cmpds	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.25E-03	0.00E+00	9.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	1310732	Sodium Hydroxid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-02	7.61E-02	7.61E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	7664939	Sulfuric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
17	108883	Toluene	0.00E+00	9.51E-03	0.00E+00	0.00E+00	0.00E+00	9.51E-03	9.51E-03	0.00E+00	9.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	1330207	Xylenes	0.00E+00	1.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-02	0.00E+00	1.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	7440508	Copper	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	7647010	HCI	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.50E-04	0.00E+00	8.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	7664393	HF	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-03	0.00E+00	3.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	7697372	Nitric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	111762	EGBE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-02	0.00E+00	1.42E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	67630	Isopropyl Alcoh	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-02	0.00E+00	4.89E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	78933	MEK	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E+01	0.00E+00	2.34E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	98%
17	101688	MeDiphenDiisocy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	108952	Phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-03	0.00E+00	2.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	75569	Propylene Oxide	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E-04	5.09E-04	0.00E+00	5.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	75070	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-06	0.00E+00	5.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	107028	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.42E-04	0.00E+00	6.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	7664417	NH3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.94E-04	0.00E+00	5.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	7440622	Vanadium	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-07	0.00E+00	3.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
17	127184	Perc	0.00E+00	6.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-06	0.00E+00	6.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%

#### Abbreviations:

CV = cardiovascular system HI CNS = central nervous system HI IMMUN = immune system HI KIDNEY = kidneys HI GILV = gastrointestinal System and liver HI REPRO/DEVEL = reproduction and developmental HI RESP = respiratory system HI SKIN = skin HI EYE = eye HI BONE/TEETH = bones and teeth HI ENDO = endocrine system HI BLOOD = blood HI ODOR = response to odors HI GENERAL = general toxicity HI MAXHI = maximum hazard index

#### Note:

#### Table 29. MEIR Acute HI by Substance

Anaplex Corporation Facility ID 016951 Paramount, California

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Receptor ID	CAS Number	Chemical Name	cv	CNS	ΝΠΜΜΙ	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	вгоор	ODOR	GENERAL	Contribution
2115	1101	Fluorides&cmpds	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-04	0.00E+00	3.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	1310732	Sodium Hydroxid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-03	5.02E-03	5.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7%
2115	7664939	Sulfuric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	10%
2115	108883	Toluene	0.00E+00	3.44E-04	0.00E+00	0.00E+00	0.00E+00	3.44E-04	3.44E-04	0.00E+00	3.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	1330207	Xylenes	0.00E+00	3.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.77E-04	0.00E+00	3.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
2115	7440508	Copper	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	7647010	HCI	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-05	0.00E+00	6.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	7664393	HF	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	7697372	Nitric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3%
2115	111762	EGBE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-04	0.00E+00	4.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1%
2115	67630	Isopropyl Alcoh	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2%
2115	78933	MEK	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E-02	0.00E+00	5.42E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	73%
2115	101688	MeDiphenDiisocy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2%
2115	108952	Phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.06E-05	0.00E+00	9.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	75569	Propylene Oxide	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-05	1.59E-05	0.00E+00	1.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	75070	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-07	0.00E+00	3.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	107028	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-05	0.00E+00	4.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	7664417	NH3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05	0.00E+00	3.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	7440622	Vanadium	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-08	0.00E+00	2.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
2115	127184	Perc	0.00E+00	4.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E-07	0.00E+00	4.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%

#### Abbreviations:

CV = cardiovascular system HI CNS = central nervous system HI IMMUN = immune system HI KIDNEY = kidneys HI GILV = gastrointestinal System and liver HI REPRO/DEVEL = reproduction and developmental HI RESP = respiratory system HI SKIN = skin HI EYE = eye HI BONE/TETH = bones and teeth HI ENDO = endocrine system HI BLOOD = blood HI ODOR = response to odors HI GENERAL = general toxicity HI MAXHI = maximum hazard index

Note:

#### Table 30. MEISR Acute HI by Substance

Anaplex Corporation Facility ID 016951 Paramount, California

Receptor ID	CAS Number	Chemical Name	cv	CNS	NUMMI	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL	Contribution
6728	1101	Fluorides&cmpds	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-05	0.00E+00	1.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	1310732	Sodium Hydroxid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.92E-04	5.92E-04	5.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4%
6728	7664939	Sulfuric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6%
6728	108883	Toluene	0.00E+00	1.42E-05	0.00E+00	0.00E+00	0.00E+00	1.42E-05	1.42E-05	0.00E+00	1.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	1330207	Xylenes	0.00E+00	1.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-05	0.00E+00	1.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	7440508	Copper	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	7647010	HCI	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.13E-06	0.00E+00	7.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	7664393	HF	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-05	0.00E+00	2.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	7697372	Nitric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2%
6728	111762	EGBE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-05	0.00E+00	1.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	67630	Isopropyl Alcoh	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.80E-05	0.00E+00	4.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	78933	MEK	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-02	0.00E+00	1.18E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	86%
6728	101688	MeDiphenDiisocy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	108952	Phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-06	0.00E+00	7.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	75569	Propylene Oxide	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-06	1.83E-06	0.00E+00	1.83E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	75070	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-08	0.00E+00	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	107028	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-06	0.00E+00	4.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	7664417	NH3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-06	0.00E+00	4.30E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	7440622	Vanadium	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.21E-09	0.00E+00	4.21E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
6728	127184	Perc	0.00E+00	5.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-08	0.00E+00	5.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%

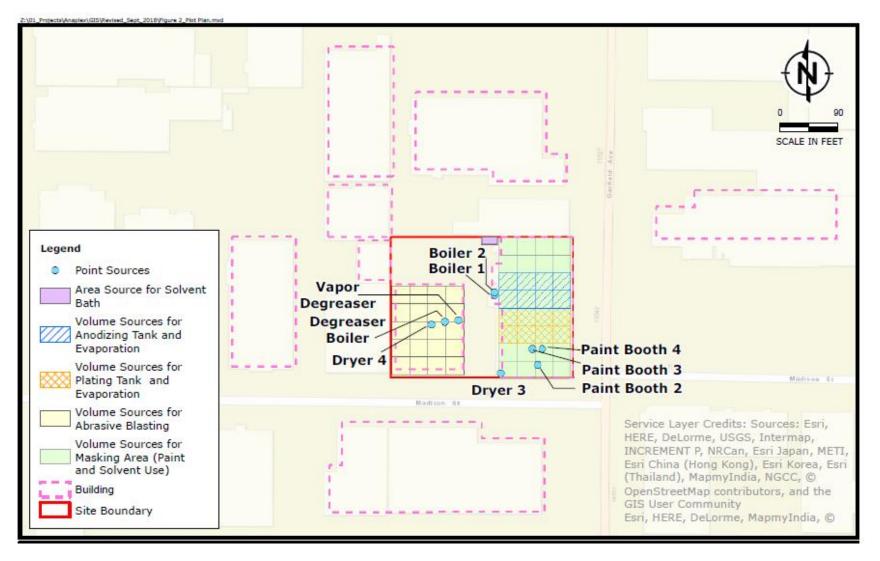
#### Abbreviations:

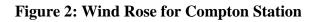
CV = cardiovascular system HI CNS = central nervous system HI IMMUN = immune system HI KIDNEY = kidneys HI GILV = gastrointestinal System and liver HI REPRO/DEVEL = reproduction and developmental HI RESP = respiratory system HI SKIN = skin HI EYE = eye HI BONE/TEETH = bones and teeth HI ENDO = endocrine system HI BLOOD = blood HI ODOR = response to odors HI GENERAL = general toxicity HI MAXHI = maximum hazard index

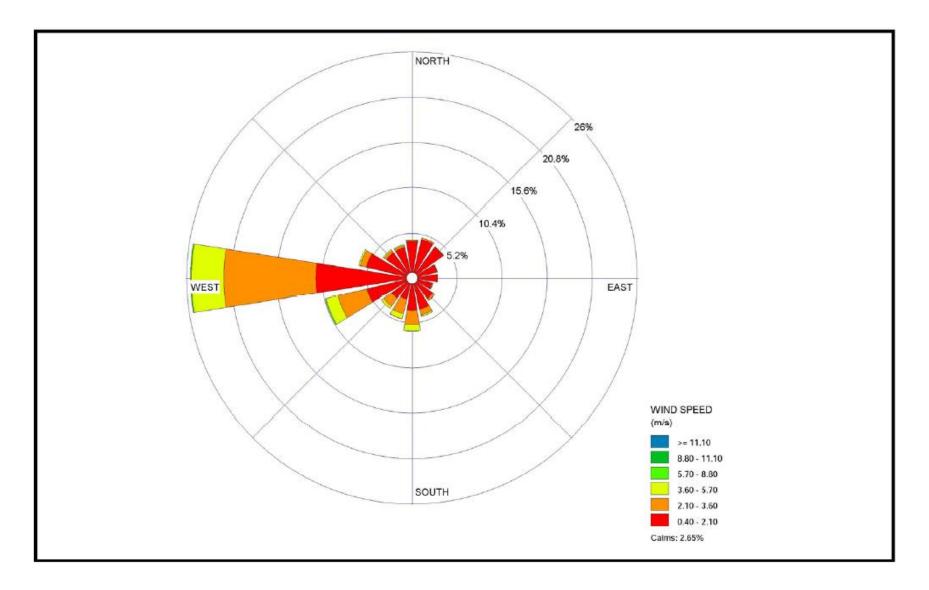
#### Note:

## **Figures**

### Figure 1: Site Plot Plan with Sources and Buildings







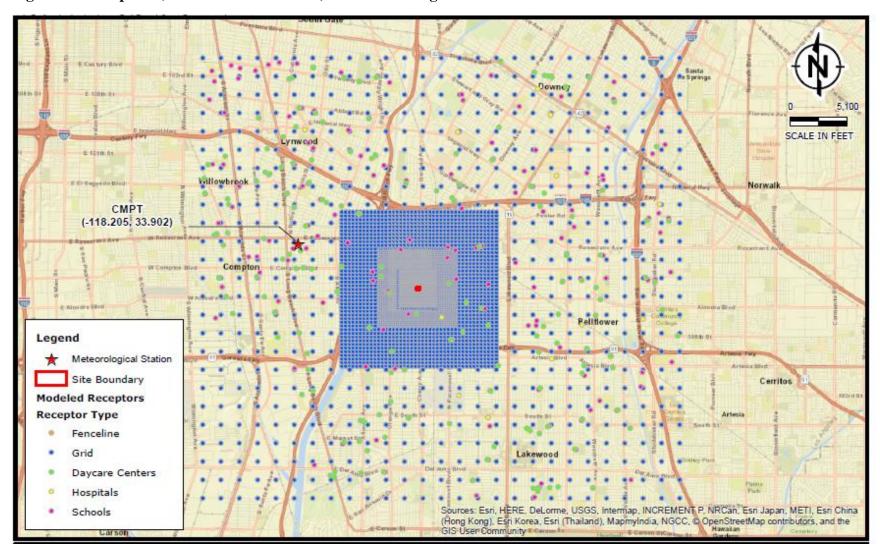


Figure 3a: Receptors (500 Meter Grid Extent) and Meteorological Station

Figure 3b: Receptors (100 Meter Grid Extent)

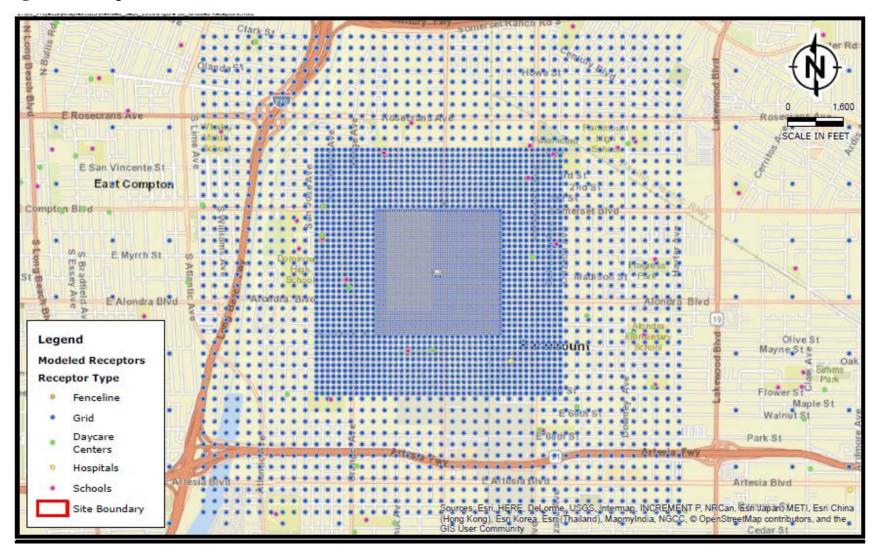
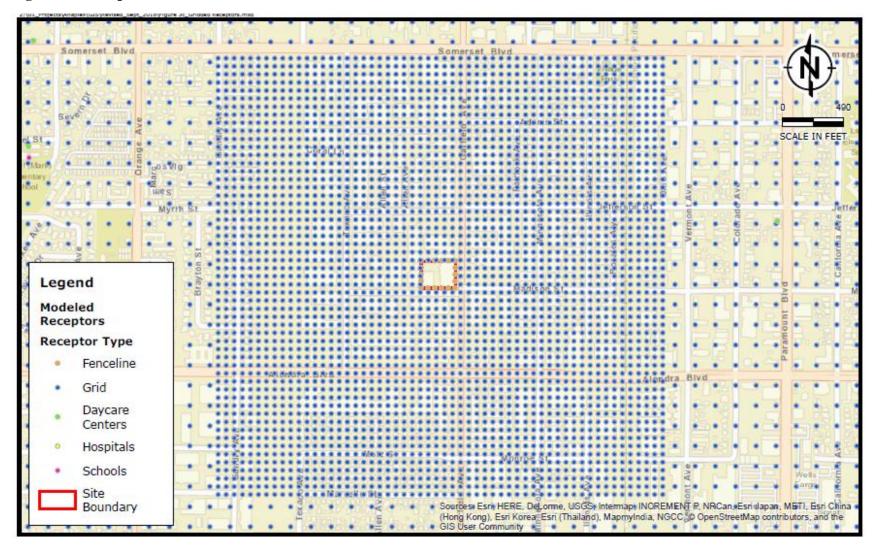


Figure 3c: Receptors (20 Meter Grid Extent)



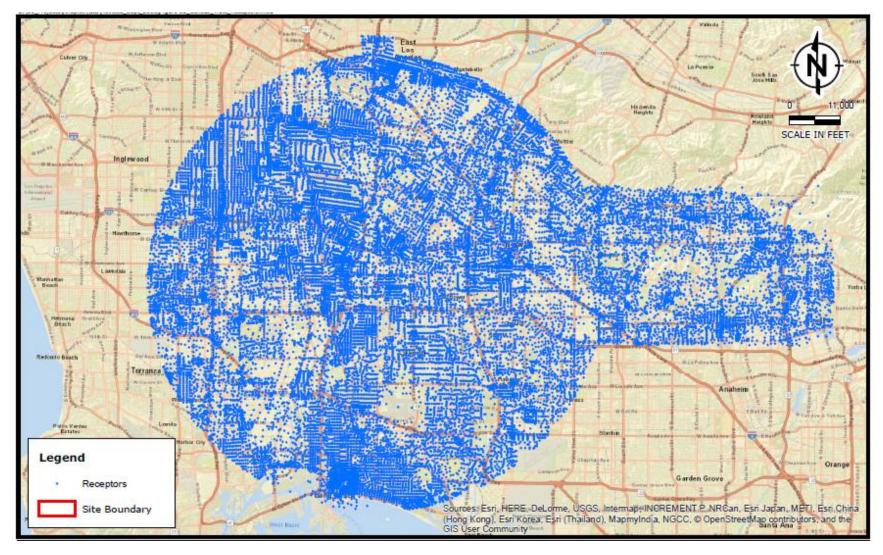


Figure 3d: Census Tract Centroid Receptors

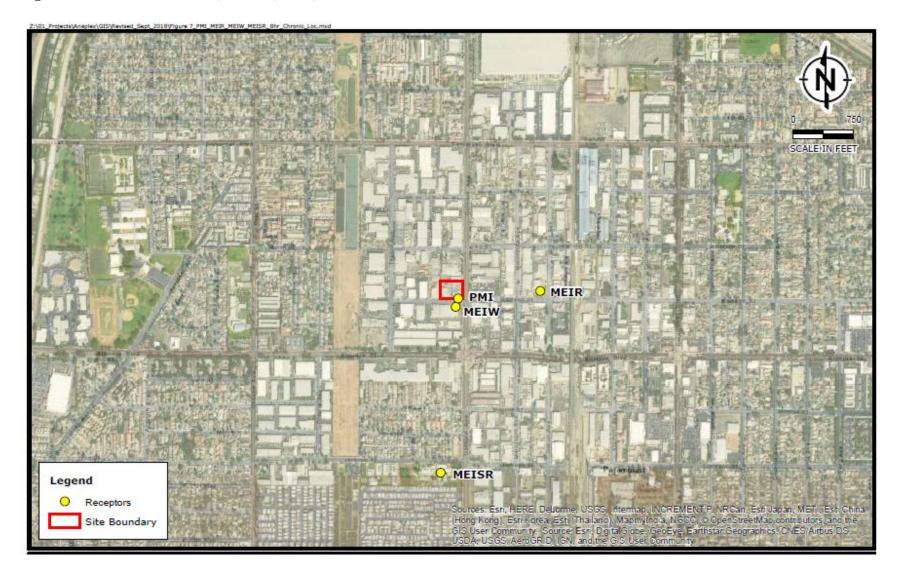
## Figure 4: Locations of MEIR, MEIW, PMI, and MEISR for Cancer Risk

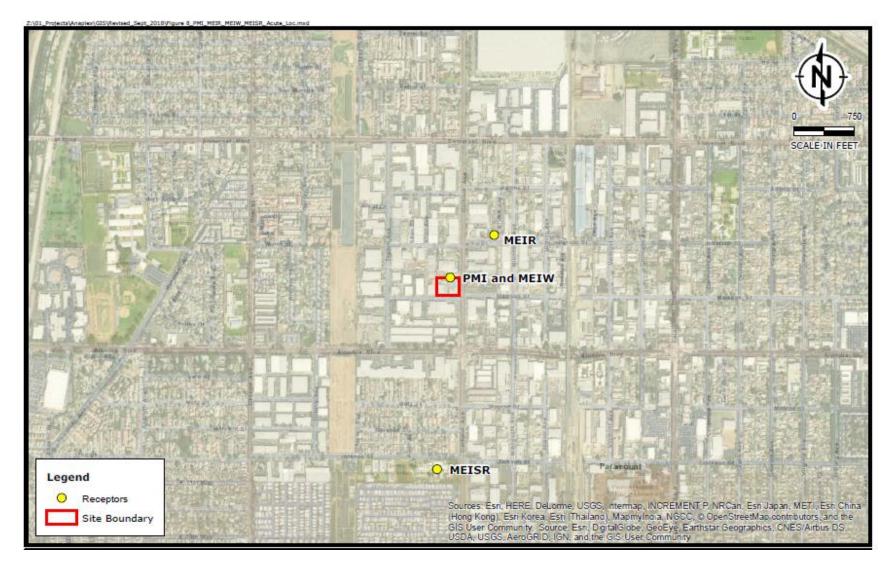




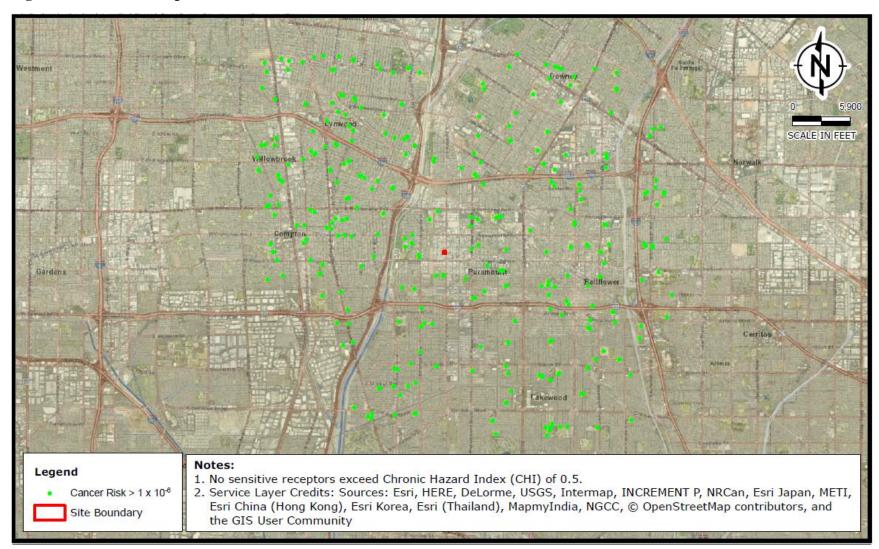
Figure 5: Locations of MEIR, MEIW, PMI, and MEISR for Chronic Hazard Index

Figure 6: Locations of MEIR, MEIW, PMI, and MEISR for 8-hr Chronic Hazard Index

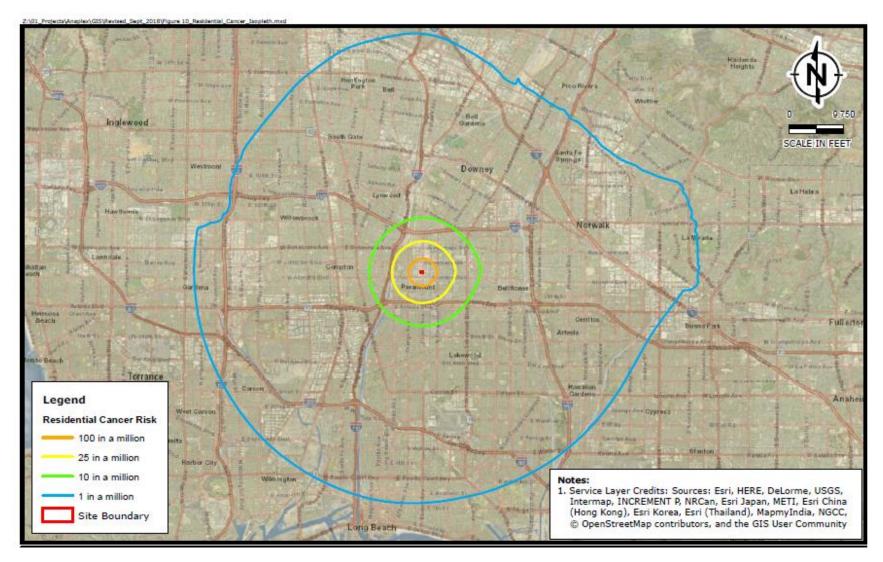




## Figure 7: Locations of MEIR, MEIW, PMI, and MEISR for Acute Hazard Index



### Figure 8: Sensitive Receptors with Cancer Risks > 1 in a Million & CHI > 0.5



### Figure 9: Residential Cancer Risk Isopleths (30-year Exposure)

### Figure 10: Worker Cancer Risk Isopleths



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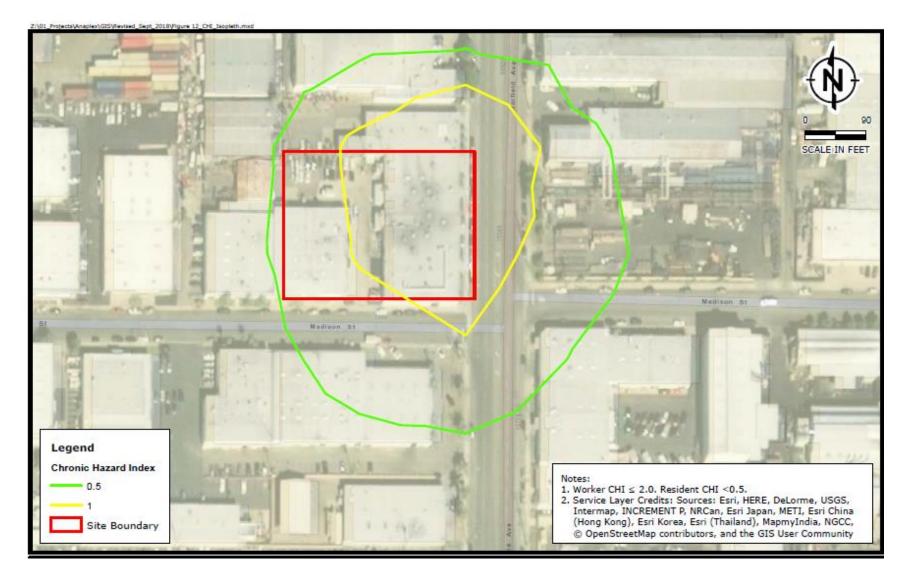
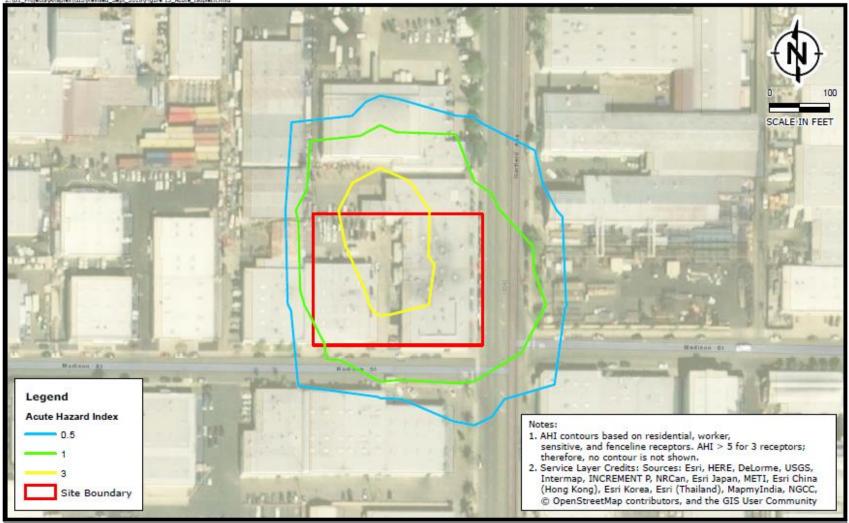
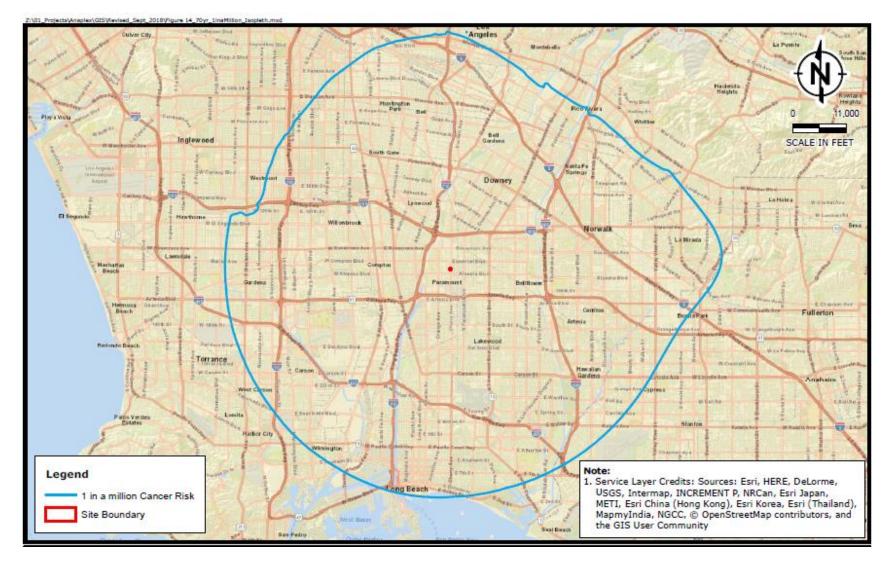


Figure 11: Worker Chronic Hazard Index Isopleths

## **Figure 12: Acute Hazard Index Isopleths**



2:\01\_Projects\Anaplex\GIS\Revised\_Sept\_2018\Rigure 13\_Acute\_Isopleth.mss



## Figure 13: One in a Million Isopleth Based on 70-year Residential Exposure

## Appendix A

## Appendix A: 2016 ATIR Emissions

CAS	Chemical Name	lbs/yr	lbs/hr	MWAF
1091	Epoxy Resins	1.314E+01	6.568E-03	1
1101	Fluorides and Compounds	1.369E+00	6.845E-04	1
1125	lsocyanates	6.551E+01	3.276E-02	1
1128	Lead Compounds	5.509E-02	2.777E-05	1
1151	РАН	1.544E-04	1.546E-07	1
1175	Silica	2.137E+00	1.068E-03	1
50000	Formaldehyde	2.624E-02	2.629E-05	1
57125	Cyanide Compounds	2.696E+00	9.779E-03	1
67561	Methanol	1.025E+02	5.124E-02	1
67630	IPA	6.379E+00	3.190E-03	1
71363	n-Butanol	2.484E+01	1.242E-02	1
71432	Benzene	1.235E-02	1.237E-05	1
75070	Acetaldehyde	6.638E-03	6.650E-06	1
75092	Methylene Chloride	5.349E+02	2.675E-01	1
75569	Propy lene Oxide	1.521E+01	7.606E-03	1
78922	Sec-Buty I Alcohol	3.925E+01	1.962E-02	1
78933	MEK	3.455E+04	1.727E+01	1
79016	Trichloroethylene	5.442E-01	2.721E-04	1
80057	4,4'-Isopropylidenediphenol	1.377E+00	6.884E-04	1
91203	Naphthalene	4.631E-04	4.639E-07	1
95636	1,2,4-Trimethylbenzene	7.488E+00	3.744E-03	1
98828	Cumene	1.916E-01	9.578E-05	1
100414	Ethyl Benzene	1.467E-02	1.469E-05	1
101688	Methylene Diphenyl Diisocyanate	7.850E-02	3.925E-05	1
107028	Acrolein	4.168E-03	4.175E-06	1
107982	Propylene Glycol Monomethyl Ether	2.443E+02	1.221E-01	1
108101	MIBK	1.125E+02	5.626E-02	1
108656	Propy lene Glycol Monomethyl Ether Acetate	1.886E+01	9.432E-03	1
108883	Toluene	5.650E-02	5.660E-05	1
108952	Phenol	1.188E+02	5.940E-02	1
110543	Hexane	9.726E-03	9.742E-06	1
111762	Ethylene Glycol Monobutyl Ether	2.630E+00	1.315E-03	1
112345	Diethylene Glycol Monobutyl Ether	6.190E-02	1.088E-05	1
115071	Propylene	1.128E+00	1.130E-03	1

CAS	Chemical Name	lbs/yr	lbs/hr	MWAF
123319	Hydroquinone	1.175E+00	5.874E-04	
127184	Tetrachloroethylene	1.263 E+01	1.442E-03	
373024	Nickel Acetate	1.638E-02	1.027E-05	0.332
540885	Tert-Butyl Acetate	2.948E+00	1.474E-03	
822060	Hexamethylene Diisocyanate Monomer	4.088E-01	2.044E-04	
1309644	Antimony Triaxide	9.860E-02	4.930E-05	0.835
1310732	Sodium Hydroxide	4.914 E+00	6.257E-03	
1314132	Zinc Oxide	3.352E-03	2.689E-05	0.803
1330207	Xylene	4.199E-02	4.206E-05	
1333820	Chromium Trioxide	7.779E-02	4.721E-04	0.5
2807309	Ethylene Glycol Monopropyl Ether	2.167E+00	1.083E-03	
6484522	Ammonium Nitrate	7.403E-03	3.701E-05	
7429905	Aluminum	1.180E-01	6.175E-05	
7439921	Lead	1.075E-04	1.389E-07	
7439965	Manganese & Compounds	5.553E-03	3.590E-05	
7440020	Nickel & Compounds	2.591E-01	9.047E-04	
7440224	Silver & Compounds	6.667E-03	3.324E-05	
7440393	Barium & Compounds	1.851E-02	9.257E-06	
7440417	Beryllium & Compounds	7.148E-05	3.927E-08	
7440439	Cadmium & Compounds	3.546E-02	1.283E-03	
7440473	Chromium & Compounds (Other Than Hexavalent)	3.607E-02	1.837E-05	
7440484	Cobalt & Compounds	9.371E-03	4.694E-06	
7440508	Copper & Compounds	3.962E-01	1.992E-04	
7440622	Vanadium (Fume or Dust)	2.978E-04	1.636E-07	
7440666	Zinc & Compounds	1.670E-01	2.583E-04	
7647010	Hydrochloric Acid	1.704E+02	1.976E-02	
7664382	Phosphoric Acid	1.266E+01	6.226E-02	
7664393	Hydrofluoric Acid	2.922E+01	3.341E-03	
7664417	Ammonia	4.940E+00	4.949E-03	
7664939	Sulfuric Acid	3.579E+00	1.776E-02	
7697372	Nitric Acid	2.133E+02	2.607E-02	
7782492	Selenium & Compounds	5.956E-04	3.273E-07	
7789062	Strontium Chromate	2.492E+01	1.246E-02	0.255
10294403	Barium Chromate	2.636E-01	1.318E-04	0.205

CAS	Chemical Name	lbs/yr	lbs/hr	MWAF
10588019	Sodium Dichromate	4.532E-01	8.619E-04	0.397
18540299	Hexavalent Chromium Compounds (Other)	3.106E-02	1.560E-05	1
34590948	Dipropy lene Glycol Monomethyl Ether	2.561E-03	1.280E-06	1

Area	Emissions Type	CAS	Chemical Name	lbs/yr	lbs/hr	MWAF	SRC_ID
Anodizing	Evaporation	1101	Fluorides and Compounds	3.653E-02	4.170E-06	1	ANODZEVP
Anodizing	Evaporation	112345	Diethylene Glycol Monobutyl Ether	6.987E-01	7.976E-05	1	ANODZEVP
Anodizing	Evaporation	7664393	Hydrofluoric Acid	3.002E+01	3.427E-03	1	ANODZEVP
Anodizing	Evaporation	7697372	Nitric Acid	1.056E+01	1.205E-03	1	ANODZEVP
Anodizing	Evaporation	7664382	Phosphoric Acid	6.006E+00	6.856E-04	1	ANODZEVP
Anodizing	Evaporation	7664939	Sulfuric Acid	2.799E-04	3.196E-08	1	ANODZEVP
Anodizing	Evaporation	108883	Toluene	4.382E-01	5.002E-05	1	ANODZEVP
Anodizing	Evaporation	1330207	Xylene	2.649E-01	3.024E-05	1	ANODZEVP
Anodizing	Plating, Sparging, & Heating	7440473	Chromium & Compounds (Other Than Hexavalent)	2.995E-03	5.411E-06	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	57125	Cyanide Compounds	3.625E-03	2.417E-06	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	1101	Fluorides and Compounds	1.303E-01	1.514E-03	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	18540299	Hexavalent Chromium Compounds (Other)	4.511E-03	3.007E-06	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	7439965	Manganese & Compounds	1.955E-05	3.756E-06	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	7440020	Nickel & Compounds	1.228E-01	7.703E-05	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	1333820	Chromium Trioxide	7.727E-02	4.714E-04	0.52	ANODZPSH
Anodizing	Plating, Sparging, & Heating	112345	Diethylene Glycol Monobutyl Ether	4.186E-02	4.693E-05	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	373024	Nickel Acetate	1.638E-02	1.027E-05	0.3321	ANODZPSH
Anodizing	Plating, Sparging, & Heating	7664382	Phosphoric Acid	2.359E-02	2.851E-04	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	10588019	Sodium Dichromate	4.303E-01	8.044E-04	0.397	ANODZPSH
Anodizing	Plating, Sparging, & Heating	1310732	Sodium Hydroxide	5.599E-01	4.450E-04	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	7664939	Sulfuric Acid	1.323E+02	1.200E-01	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	108883	Toluene	1.394E-05	6.968E-08	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	1330207	Xylene	2.838E-05	1.419E-07	1	ANODZPSH
Anodizing	Plating, Sparging, & Heating	1314132	Zinc Oxide	1.481E-03	7.403E-06	0.8034	ANODZPSH
Plating	Evaporation	112345	Diethylene Glycol Monobutyl Ether	5.854E-02	6.683E-06	1	PLATEEVP
Plating	Evaporation	111762	Ethylene Glycol Monobutyl Ether	7.228E-01	8.251E-05	1	PLATEEVP
Plating	Evaporation	7647010	Hydrochloric Acid	1.703E+02	1.944E-02	1	PLATEEVP
Plating	Evaporation	7664393	Hydrofluoric Acid	2.922E+01	3.335E-03	1	PLATEEVP
Plating	Evaporation	7697372	Nitric Acid	2.130E+02	2.431E-02	1	PLATEEVP
Plating	Evaporation	7664382	Phosphoric Acid	6.143E+01	7.012E-03	1	PLATEEVP
Plating	Evaporation	7664939	Sulfuric Acid	5.355E-03	6.113E-07	1	PLATEEVP
Plating	Evaporation	127184	Tetrachloroethylene	1.263E+01	1.442E-03	1	PLATEEVP
Plating	Plating, Sparging, & Heating	7440439	Cadmium & Compounds	3.542E-02	1.283E-03	1	PLATEPSH

Plating	Plating, Sparging, & Heating	7440508 Copper & Compounds	1.278E+00	1.217E-03	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	57125 Cyanide Compounds	2.692E+00	9.777E-03	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	1128 Lead Compounds	1.210E-05	2.327E-07	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	7439965 Manganese & Compounds	3.329E-03	3.468E-05	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	7440020 Nickel & Compounds	2.544E-01	9.021E-04	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	7440224 Silver & Compounds	6.667E-03	3.324E-05	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	7440666 Zinc & Compounds	1.762E-02	1.836E-04	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	6484522 Ammonium Nitrate	7.403E-03	3.701E-05	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	1333820 Chromium Trioxide	5.238E-04	7.560E-07	0.52	PLATEPSH	
Plating	Plating, Sparging, & Heating	112345 Diethylene Glycol Monobutyl Ether	3.358E-03	4.198E-06	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	7647010 Hydrochloric Acid	8.400E-02	3.231E-04	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	7664393 Hydrofluoric Acid	5.826E-04	6.069E-06	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	7439921 Lead	6.780E-05	1.171E-07	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	7697372 Nitric Acid	3.199E-01	1.756E-03	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	7664382 Phosphoric Acid	1.258E+01	6.222E-02	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	10588019 Sodium Dichromate	2.298E-02	5.745E-05	0.397	PLATEPSH	
Plating	Plating, Sparging, & Heating	1310732 Sodium Hydroxide	4.354E+00	5.812E-03	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	7664939 Sulfuric Acid	3.573E+00	1.776E-02	1	PLATEPSH	
Plating	Plating, Sparging, & Heating	1314132 Zinc Oxide	1.871E-03	1.949E-05	0.8034	PLATEPSH	
Paint Booth #2	Paints & Solvents Usage	95636 1,2,4-Trimethylbenzene	9.578E-01	4.789E-04	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	80057 4,4'-lsopropylidenediphenol	1.079E+00	5.394E-04	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	7429905 Aluminum	1.260E-02	6.300E-06	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	1309644 Antimony Trioxide	9.860E-02	4.930E-05	0.8353	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	10294403 Barium Chromate	2.636E-01	1.318E-04	0.2053	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	7440393 Barium & Compounds	2.169E-01	1.085E-04	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	18540299 Hexavalent Chromium Compounds (Other)	2.963E-02	1.482E-05	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	7440484 Cobalt & Compounds	1.317E-05	6.586E-09	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	7440508 Copper & Compounds	3.740E-01	1.870E-04	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	98828 Cumene	1.916E-01	9.578E-05	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	34590948 Dipropylene Glycol Monomethyl Ether	2.561E-03	1.280E-06	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	1091 Epoxy Resins	1.314E+01	6.568E-03	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	100414 Ethyl Benzene	9.382E+01	4.691E-02	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	111762 Ethylene Glycol Monobutyl Ether	1.606E+02	8.028E-02	1	SPRYBTH2	
Paint Booth #2	Paints & Solvents Usage	2807309 Ethylene Glycol Monopropyl Ether	2.167E+00	1.083E-03	1	SPRYBTH2	

Paint Booth #2	Paints & Solvents Usage	1101 Fluorides and Compounds	3.782E+00	1.891E-03	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	50000 Formaldehyde	1.137E+01	5.687E-03	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	822060 Hexamethylene Diisocyanate Monomer	8.550E-02	4.275E-05	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	123319 Hydroquinone	1.175E+00	5.874E-04	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	67630 IPA	3.788E+02	1.894E-01	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	1125 Isocyanates	1.204E+01	6.021E-03	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	1128 Lead Compounds	5.508E-02	2.754E-05	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	78933 MEK	5.750E+02	2.875E-01	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	67561 Methanol	4.806E+01	2.403E-02	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	75092 Methylene Chloride	8.629E+01	4.314E-02	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	101688 Methylene Diphenyl Diisocyanate	1.176E+00	5.881E-04	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	108101 MIBK	3.179E+02	1.589E-01	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	71363 n-Butanol	8.202E+00	4.101E-03	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	108952 Phenol	1.324E+01	6.620E-03	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	7664382 Phosphoric Acid	7.927E-02	3.963E-05	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	107982 Propylene Glycol Monomethyl Ether	1.030E+02	5.152E-02	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	108656 Propylene Glycol Monomethyl Ether Acetate	5.122E-02	2.561E-05	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	78922 Sec-Butyl Alcohol	3.925E+01	1.962E-02	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	1175 Silica	1.072E+01	5.360E-03	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	7789062 Strontium Chromate	2.492E+01	1.246E-02	0.2554	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	540885 Tert-Butyl Acetate	2.184E+00	1.092E-03	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	108883 Toluene	5.970E+02	2.985E-01	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	1330207 Xylene	4.604E+02	2.302E-01	1	SPRYBTH2
Paint Booth #2	Paints & Solvents Usage	7440666 Zinc & Compounds	1.494E-01	7.470E-05	1	SPRYBTH2
Paint Booth #3	Paints & Solvents Usage	95636 1,2,4-Trimethylbenzene	3.225E+00	1.612E-03	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	80057 4,4'-Isopropylidenediphenol	6.884E-01	3.442E-04	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	7429905 Aluminum	6.241E-02	3.120E-05	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	7440393 Barium & Compounds	9.257E-03	4.629E-06	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	7440473 Chromium & Compounds (Other Than Hexavalent)	2.932E-02	1.466E-05	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	7440484 Cobalt & Compounds	9.196E-03	4.598E-06	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	100414 Ethyl Benzene	1.091E+01	5.454E-03	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	111762 Ethylene Glycol Monobutyl Ether	1.315E+00	6.576E-04	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	1101 Fluorides and Compounds	6.845E-01	3.422E-04	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	822060 Hexamethylene Diisocyanate Monomer	2.044E-01	1.022E-04	1	SPRYBTH3

Paint Booth #3	Paints & Solvents Usage	67630 IPA	1.101E+00	5.505E-04	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	1125 Isocyanates	3.276E+01	1.638E-02	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	78933 MEK	3.191E+02	1.596E-01	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	101688 Methylene Diphenyl Diisocyanate	3.925E-02	1.963E-05	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	108101 MIBK	5.626E+01	2.813E-02	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	71363 n-Butanol	1.242E+01	6.211E-03	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	107982 Propylene Glycol Monomethyl Ether	1.221E+02	6.107E-02	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	108656 Propylene Glycol Monomethyl Ether Acetate	3.475E+00	1.737E-03	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	1175 Silica	1.068E+00	5.342E-04	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	540885 Tert-Butyl Acetate	1.474E+00	7.370E-04	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	108883 Toluene	7.734E+01	3.867E-02	1	SPRYBTH3
Paint Booth #3	Paints & Solvents Usage	1330207 Xylene	4.733E+01	2.367E-02	1	SPRYBTH3
Paint Booth #4	Paints & Solvents Usage	95636 1,2,4-Trimethylbenzene	4.263E+00	2.132E-03	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	80057 4,4'-Isopropylidenediphenol	6.884E-01	3.442E-04	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	7429905 Aluminum	6.241E-02	3.120E-05	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	7440393 Barium & Compounds	9.257E-03	4.629E-06	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	7440473 Chromium & Compounds (Other Than Hexavalent)	2.932E-02	1.466E-05	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	7440484 Cobalt & Compounds	9.196E-03	4.598E-06	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	100414 Ethyl Benzene	1.699E+01	8.494E-03	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	111762 Ethylene Glycol Monobutyl Ether	1.315E+00	6.576E-04	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	1101 Fluorides and Compounds	6.845E-01	3.422E-04	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	822060 Hexamethylene Diisocyanate Monomer	2.044E-01	1.022E-04	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	67630 IPA	1.101E+00	5.505E-04	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	1125 Isocyanates	3.276E+01	1.638E-02	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	78933 MEK	3.191E+02	1.596E-01	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	101688 Methylene Diphenyl Diisocyanate	3.925E-02	1.963E-05	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	108101 MIBK	5.626E+01	2.813E-02	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	91203 Naphthalene	1.483E+00	7.416E-04	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	71363 n-Butanol	1.242E+01	6.211E-03	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	107982 Propylene Glycol Monomethyl Ether	1.221E+02	6.107E-02	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	108656 Propylene Glycol Monomethyl Ether Acetate	3.475E+00	1.737E-03	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	1175 Silica	1.068E+00	5.342E-04	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	540885 Tert-Butyl Acetate	1.474E+00	7.370E-04	1	SPRYBTH4
Paint Booth #4	Paints & Solvents Usage	108883 Toluene	7.734E+01	3.867E-02	1	SPRYBTH4

Paint Booth #4	Paints & Solvents Usage	1330207 Xylene	7.136E+01	3.568E-02	1	SPRYBTH4
Masking Area - Paint and Solvent Use	Paints & Solvents Usage	67630 IPA	5.278E+00	2.639E-03	1	MASKING
Masking Area - Paint and Solvent Use	Paints & Solvents Usage	78933 MEK	1.521E+02	7.606E-02	1	MASKING
Masking Area - Paint and Solvent Use	Paints & Solvents Usage	75092 Methylene Chloride	4.487E+02	2.243E-01	1	MASKING
Masking Area - Paint and Solvent Use	Paints & Solvents Usage	91203 Naphthalene	1.539E+01	7.695E-03	1	MASKING
Masking Area - Paint and Solvent Use	Paints & Solvents Usage	108952 Phenol	1.056E+02	5.278E-02	1	MASKING
Masking Area - Paint and Solvent Use	Paints & Solvents Usage	108656 Propylene Glycol Monomethyl Ether Acetate	1.539E+01	7.695E-03	1	MASKING
Masking Area - Paint and Solvent Use	Paints & Solvents Usage	75569 Propylene Oxide	1.521E+01	7.606E-03	1	MASKING
Masking Area - Paint and Solvent Use	Paints & Solvents Usage	108883 Toluene	6.144E+02	3.072E-01	1	MASKING
Solvent Degreaser - Manual Operation	Paints & Solvents Usage	78933 MEK	3.440E+04	1.720E+01	1	SLVNTBTH
Vapor Degreaser	Paints & Solvents Usage	67561 Methanol	5.442E+01	2.721E-02	1	DGRSR
Vapor Degreaser	Paints & Solvents Usage	79016 Trichloroethylene	5.442E-01	2.721E-04	1	DGRSR
Boiler 1	Combustion	71432 Benzene	1.544E-02	1.546E-05	1	222BLR1
Boiler 1	Combustion	50000 Formaldehyde	3.281E-02	3.286E-05	1	222BLR1
Boiler 1	Combustion	1151 PAH	1.930E-04	1.933E-07	1	222BLR1
Boiler 1	Combustion	91203 Naphthalene	5.789E-04	5.799E-07	1	222BLR1
Boiler 1	Combustion	75070 Acetaldehyde	8.298E-03	8.312E-06	1	222BLR1
Boiler 1	Combustion	107028 Acrolein	5.210E-03	5.219E-06	1	222BLR1
Boiler 1	Combustion	7664417 Ammonia	6.175E+00	6.186E-03	1	222BLR1
Boiler 1	Combustion	100414 Ethyl Benzene	1.833E-02	1.836E-05	1	222BLR1
Boiler 1	Combustion	110543 Hexane	1.216E-02	1.218E-05	1	222BLR1
Boiler 1	Combustion	115071 Propylene	1.411E+00	1.413E-03	1	222BLR1
Boiler 1	Combustion	108883 Toluene	7.063E-02	7.075E-05	1	222BLR1
Boiler 1	Combustion	1330207 Xylene	5.249E-02	5.258E-05	1	222BLR1
Boiler 2	Combustion	71432 Benzene	1.544E-02	1.546E-05	1	222BLR2
Boiler 2	Combustion	50000 Formaldehyde	3.281E-02	3.286E-05	1	222BLR2
Boiler 2	Combustion	1151 PAH	1.930E-04	1.933E-07	1	222BLR2
Boiler 2	Combustion	91203 Naphthalene	5.789E-04	5.799E-07	1	222BLR2
Boiler 2	Combustion	75070 Acetaldehyde	8.298E-03	8.312E-06	1	222BLR2
Boiler 2	Combustion	107028 Acrolein	5.210E-03	5.219E-06	1	222BLR2
Boiler 2	Combustion	7664417 Ammonia	6.175E+00	6.186E-03	1	222BLR2
Boiler 2	Combustion	100414 Ethyl Benzene	1.833E-02	1.836E-05	1	222BLR2
Boiler 2	Combustion	110543 Hexane	1.216E-02	1.218E-05	1	222BLR2
Boiler 2	Combustion	115071 Propylene	1.411E+00	1.413E-03	1	222BLR2

Boiler 2	Combustion	108883 Toluene	7.063E-02	7.075E-05	1	222BLR2
Boiler 2	Combustion	1330207 Xylene	5.249E-02	5.258E-05	1	222BLR2
Degreaser Boiler	Combustion	71432 Benzene	3.072E-03	3.077E-06	1	DGRBLR
Degreaser Boiler	Combustion	50000 Formaldehyde	6.528E-03	6.539E-06	1	DGRBLR
Degreaser Boiler	Combustion	1151 PAH	3.840E-05	3.847E-08	1	DGRBLR
Degreaser Boiler	Combustion	91203 Naphthalene	1.152E-04	1.154E-07	1	DGRBLR
Degreaser Boiler	Combustion	75070 Acetaldehyde	1.651E-03	1.654E-06	1	DGRBLR
Degreaser Boiler	Combustion	107028 Acrolein	1.037E-03	1.039E-06	1	DGRBLR
Degreaser Boiler	Combustion	7664417 Ammonia	1.229E+00	1.231E-03	1	DGRBLR
Degreaser Boiler	Combustion	100414 Ethyl Benzene	3.648E-03	3.654E-06	1	DGRBLR
Degreaser Boiler	Combustion	110543 Hexane	2.419E-03	2.423E-06	1	DGRBLR
Degreaser Boiler	Combustion	115071 Propylene	2.807E-01	2.812E-04	1	DGRBLR
Degreaser Boiler	Combustion	108883 Toluene	1.405E-02	1.408E-05	1	DGRBLR
Degreaser Boiler	Combustion	1330207 Xylene	1.045E-02	1.046E-05	1	DGRBLR
Dryer #3	Combustion	71432 Benzene	6.175E-03	6.186E-06	1	DRYER3
Dryer #3	Combustion	50000 Formaldehyde	1.312E-02	1.314E-05	1	DRYER3
Dryer #3	Combustion	1151 PAH	7.719E-05	7.732E-08	1	DRYER3
Dryer #3	Combustion	91203 Naphthalene	2.316E-04	2.320E-07	1	DRYER3
Dryer #3	Combustion	75070 Acetaldehyde	3.319E-03	3.325E-06	1	DRYER3
Dryer #3	Combustion	107028 Acrolein	2.084E-03	2.088E-06	1	DRYER3
Dryer #3	Combustion	7664417 Ammonia	2.470E+00	2.474E-03	1	DRYER3
Dryer #3	Combustion	100414 Ethyl Benzene	7.333E-03	7.345E-06	1	DRYER3
Dryer #3	Combustion	110543 Hexane	4.863E-03	4.871E-06	1	DRYER3
Dryer #3	Combustion	115071 Propylene	5.642E-01	5.652E-04	1	DRYER3
Dryer #3	Combustion	108883 Toluene	2.825E-02	2.830E-05	1	DRYER3
Dryer #3	Combustion	1330207 Xylene	2.100E-02	2.103E-05	1	DRYER3
Dryer #4	Combustion	71432 Benzene	6.175E-03	6.186E-06	1	DRYER4
Dryer #4	Combustion	50000 Formaldehyde	1.312E-02	1.314E-05	1	DRYER4
Dryer #4	Combustion	1151 PAH	7.719E-05	7.732E-08	1	DRYER4
Dryer #4	Combustion	91203 Naphthalene	2.316E-04	2.320E-07	1	DRYER4
Dryer #4	Combustion	75070 Acetaldehyde	3.319E-03	3.325E-06	1	DRYER4
Dryer #4	Combustion	107028 Acrolein	2.084E-03	2.088E-06	1	DRYER4
Dryer #4	Combustion	7664417 Ammonia	2.470E+00	2.474E-03	1	DRYER4
Dryer #4	Combustion	100414 Ethyl Benzene	7.333E-03	7.345E-06	1	DRYER4

Dryer #4	Combustion	110543 Hexane	4.863E-03	4.871E-06	1	DRYER4
Dryer #4	Combustion	115071 Propylene	5.642E-01	5.652E-04	1	DRYER4
Dryer #4	Combustion	108883 Toluene	2.825E-02	2.830E-05	1	DRYER4
Dryer #4	Combustion	1330207 Xylene	2.100E-02	2.103E-05	1	DRYER4
Abrasive Blasting	Abrasive Blasting	7429905 Aluminum	5.559E-02	3.055E-05	1	ABRBLST
Abrasive Blasting	Abrasive Blasting	7440417 Beryllium & Compounds	7.148E-05	3.927E-08	1	ABRBLST
Abrasive Blasting	Abrasive Blasting	7440439 Cadmium & Compounds	3.971E-05	2.182E-08	1	ABRBLST
Abrasive Blasting	Abrasive Blasting	7440484 Cobalt & Compounds	1.747E-04	9.600E-08	1	ABRBLST
Abrasive Blasting	Abrasive Blasting	7440473 Chromium & Compounds (Other Than Hexavalent)	6.751E-03	3.709E-06	1	ABRBLST
Abrasive Blasting	Abrasive Blasting	7440508 Copper & Compounds	2.224E-02	1.222E-05	1	ABRBLST
Abrasive Blasting	Abrasive Blasting	18540299 Hexavalent Chromium Compounds (Other)	1.430E-03	7.855E-07	1	ABRBLST
Abrasive Blasting	Abrasive Blasting	7439965 Manganese & Compounds	2.224E-03	1.222E-06	1	ABRBLST
Abrasive Blasting	Abrasive Blasting	7440020 Nickel & Compounds	4.765E-03	2.618E-06	1	ABRBLST
Abrasive Blasting	Abrasive Blasting	7439921 Lead	3.971E-05	2.182E-08	1	ABRBLST
Abrasive Blasting	Abrasive Blasting	7782492 Selenium & Compounds	5.956E-04	3.273E-07	1	ABRBLST
Abrasive Blasting	Abrasive Blasting	7440622 Vanadium (Fume or Dust)	2.978E-04	1.636E-07	1	ABRBLST